

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15 (d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2011

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15 (d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _____ to _____

Commission File No. 1-11596

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

(Exact name of registrant as specified in its charter)

Delaware

State or other jurisdiction
of incorporation or organization

58-1954497

(IRS Employer Identification Number)

8302 Dunwoody Place, #250, Atlanta, GA

(Address of principal executive offices)

30350

(Zip Code)

(770) 587-9898

(Registrant's telephone number)

Securities registered pursuant to Section 12(b)
of the Act:

Title of each class

Name of each exchange on which registered

Common Stock, \$.001 Par Value

NASDAQ Capital Markets

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes No

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

Yes No

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit and post such files).

Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained to the best of the Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definition of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated Filer Non-accelerated Filer Smaller reporting company

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Act).

Yes No

The aggregate market value of the Registrant's voting and non-voting common equity held by nonaffiliates of the Registrant computed by reference to the closing sale price of such stock as reported by NASDAQ as of the last business day of the most recently completed second fiscal quarter (June 30, 2011), was approximately \$70,296,638. For the purposes of this calculation, all executive officers and directors of the Registrant (as indicated in Item 12) are deemed to be affiliates. Such determination should not be deemed an admission that such directors or officers, are, in fact, affiliates of the Registrant. The Company's Common Stock is listed on the NASDAQ Capital Markets.

As of February 25, 2012, there were 56,062,919 shares of the registrant's Common Stock, \$.001 par value, outstanding.

Documents incorporated by reference: none

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

INDEX

	Page No.
PART I	
Item 1. Business	1
Item 1A. Risk Factors	9
Item 1B. Unresolved Staff Comments	18
Item 2. Properties	19
Item 3. Legal Proceedings	19
Item 4. Mine Safety Disclosure	19
Item 4A. Executive Officers of the Registrant	20
PART II	
Item 5. Market for Registrant’s Common Equity and Related Stockholder Matters	21
Item 6. Selected Financial Data	24
Item 7. Management’s Discussion and Analysis of Financial Condition And Results of Operations	25
Item 7A. Quantitative and Qualitative Disclosures About Market Risk	51
Special Note Regarding Forward-Looking Statements	52
Item 8. Financial Statements and Supplementary Data	54
Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	95
Item 9A. Controls and Procedures	95
Item 9B. Other Information	98
PART III	
Item 10. Directors, Executive Officers and Corporate Governance	98
Item 11. Executive Compensation	103
Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	127
Item 13. Certain Relationships and Related Transactions, and Director Independence	130
Item 14. Principal Accountants’ Fees and Services	132
PART IV	
Item 15. Exhibits and Financial Statement Schedules	133

PART I

ITEM 1. BUSINESS

Company Overview and Principal Products and Services

Perma-Fix Environmental Services, Inc. (the Company, which may be referred to as we, us, or our), a Delaware corporation incorporated in December of 1990, is an international environmental and technology know-how company, which provides:

- o Treatment, storage, processing and disposal of mixed waste (which is waste that contains both low-level radioactive and hazardous waste), non-nuclear hazardous waste, nuclear low level, and higher activity radioactive wastes;
- o Research and development activities to identify, develop and implement innovative waste processing techniques for problematic waste streams;
- o On-site waste management services to commercial and government customers;
- o Technical services which includes: (a) health physics and radiological control technician services; (b) safety and industrial hygiene services; (c) staff augmentation services providing consulting, engineering, project management, waste management, environmental, and decontamination and decommissioning field personal, technical personnel, and management and services to commercial and government customers; and (d) consulting engineering services including air, water, and hazardous waste permitting, air, soil, and water sampling, compliance reporting, emission reduction strategies, compliance auditing, and various compliance and training activities;
- o Instrumentation and measurement technologies.

On October 31, 2011, we completed the acquisition of all of the issued and outstanding shares of capital stock of Safety & Ecology Holdings Corporation (“SEHC”) and its subsidiaries, Safety & Ecology Corporation (“SEC”), SEC Federal Services Corporation, Safety & Ecology Corporation Limited (“SECL” - a United Kingdom operation) and SEC Radcon Alliance, LLC (“SECRA”, which we own 75%), (Collectively “SEC”) pursuant to that certain Stock Purchase Agreement, dated July 15, 2011 (“Purchase Agreement”), between the Company, Homeland Capital Security Corporation (“Homeland”) and SEHC. SEC is an international provider of environmental, hazardous and radiological remediation infrastructure upgrades and nuclear energy services. SEC provides remediation of nuclear and mixed waste materials for the U.S. government and other commercial customers.

Pursuant to the terms of the Purchase Agreement, upon closing of the Purchase Agreement, certain security holders of Homeland (“Management Investors”) purchased 813,007 restricted shares of the Company’s Common Stock. The purchase of the Company’s Common Stock was pursuant to a private placement under Section 4(2) of the Securities Act of 1933, as amended (the “Act”) or Rule 506 of Regulation D promulgated under the Act.

We have grown through acquisitions and internal growth. Our goal is to continue focus on the efficient operation of our facilities and on-site activities, continue to evaluate strategic acquisitions, and to continue the research and development of innovative technologies to treat nuclear waste, mixed waste, and industrial waste. Our core business includes services provided by our two segments, Nuclear Treatment and Nuclear Services, as described below.

We service research institutions, commercial companies, public utilities, and governmental agencies nationwide, including the U.S. Department of Energy (“DOE”) and U.S. Department of Defense (“DOD”). The distribution channels for our services are through direct sales to customers or via intermediaries.

Our executive offices are located at 8302 Dunwoody Place, Suite 250, Atlanta, Georgia 30350.

Website access to Company's reports

Our internet website address is www.perma-fix.com. Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to section 13(a) or 15(d) of the Exchange Act are available free of charge through our website as soon as reasonably practicable after they are electronically filed with, or furnished to, the Securities and Exchange Commission (“Commission”). Additionally, we make available free of charge on our internet website:

- our Code of Ethics;
- the charter of our Corporate Governance and Nominating Committee;
- our Anti-Fraud Policy;
- the charter of our Audit Committee.

Segment Information and Foreign and Domestic Operations and Export Sales

The Company has two reportable segments. In accordance with Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) 280, “Segment Reporting”, we define an operating segment as:

- a business activity from which we may earn revenue and incur expenses;
- whose operating results are regularly reviewed by the Chief Operating Officer to make decisions about resources to be allocated and assess its performance; and
- for which discrete financial information is available.

As a result of the acquisition of SEC, the Company made structure and reporting changes to its internal organization and changes to its operating segments to create better consistency, greater coordination and enhanced communication. This restructuring better aligns the internal management and functional support assets based on company service offerings. Such restructuring also provides a functionally supported matrix management approach which better supports resource allocation by our chief operating decision maker and optimizes performance assessment. These changes resulted in the Company’s new reporting segments: Treatment Segment and Services Segment, which are described below. All of the historical segment numbers presented in the Form 10-K have been recast to conform to this change in reportable segments.

TREATMENT SEGMENT reporting includes:

- nuclear, low-level radioactive, mixed (waste containing both hazardous and low-level radioactive constituents), hazardous and non-hazardous waste treatment, processing and disposal services primarily through four uniquely licensed (Nuclear Regulatory Commission or state equivalent) and permitted (Environmental Protection Agency (“EPA”) or state equivalent) treatment and storage facilities: Perma-Fix of Florida, Inc. (“PFF”), Diversified Scientific Services, Inc., (“DSSI”), Perma-Fix Northwest Richland, Inc. (“PFNWR”), and East Tennessee Materials & Energy Corporation (“M&EC”). The presence of nuclear and low-level radioactive constituents within the waste streams processed by this segment creates different and unique operational, processing and permitting/licensing requirements; and
- research and development activities to identify, develop and implement innovative waste processing techniques for problematic waste streams.

For 2011, the Treatment Segment accounted for \$65,838,000 or 55.5% of total revenue from continuing operations, as compared to \$53,363,000 or 54.6% of total revenue from continuing operations for 2010 and \$54,785,000 or 59.3% of total revenue from continuing operations for 2009. See “ – Dependence Upon a Single or Few Customers” and “Financial Statements and Supplementary Data” for further details and a discussion as to our Segments’ contracts with the federal government or with others as a subcontractor to the federal government.

SERVICES SEGMENT reporting includes:

- On-site waste management services to commercial and government customers;
- Technical services which include:
 - o health physic and radiological control technician services providing both field support as well as professional technical support to commercial and government customers;

- o safety and industrial hygiene services providing field support and professional technical support to commercial and government customers;
 - o staff augmentation services providing consulting, engineering, project management, waste management, environmental, and decontamination and decommissioning field personnel, technical personnel, management and services to commercial and government customers; and
 - o consulting engineering services (through our Schreiber, Yonley & Associates subsidiary – “SYA”) providing consulting environmental services to industrial and government customers:
 - § including air, water, and hazardous waste permitting, air, soil and water sampling, compliance reporting, emission reduction strategies, compliance auditing, and various compliance and training activities; and
 - § engineering and compliance support to other segments.
- A company owned equipment calibration and maintenance laboratory that services, maintains and calibrates health physics and industrial hygiene instrumentation.

Our Services Segment includes a foreign operation, Safety & Ecology Corporation Limited (“SECL” - a United Kingdom corporation) located in Blydon On Tyne, England, which we acquired on October 31, 2011. Revenue from this operation was approximately \$30,000 or .03% of our consolidated revenue from continuing operations during 2011.

For 2011, the Services Segment accounted for \$52,774,000 or 44.5% of total revenue from continuing operations, as compared to \$44,427,000 or 45.4% of total revenue from continuing operations for 2010 and \$37,608,000 or 40.7% of total revenue from continuing operations for 2009. Of the total revenues for 2011 in this segment, \$10,669,000 was attributable to the activities of SEHC and its subsidiaries for November and December 2011. See “ – Dependence Upon a Single or Few Customers” and “Financial Statements and Supplementary Data” for further details and a discussion as to our Segments’ contracts with the federal government or with others as a subcontractor to the federal government.

Our segments exclude the Corporate and Operation Headquarters, which do not generate revenue, and our discontinued operations: Perma-Fix of Michigan Inc. (“PFMI”), Perma-Fix of Pittsburgh, Inc. (“PFP”), and Perma-Fix of Memphis, Inc. (“PFM”), three non-operational facilities which were approved as discontinued operations by our Board of Director effective November 8, 2005, October 4, 2004, and March 12, 1998, respectively; Perma-Fix of Maryland, Inc. (“PFMD”), Perma-Fix of Dayton, Inc. (“PFD”), and Perma-Fix Treatment Services, Inc. (“PFTS”), which were divested in January 2008, March 2008, and May 2008, respectively; and Perma-Fix of Fort Lauderdale, Inc. (“PFFL”), Perma-Fix of Orlando, Inc., (“PFO”), and Perma-Fix of South Georgia, Inc. (“PFSG”), which were reclassified as discontinued operations in October 2010. On August 12, 2011, we completed the sale of PFFL pursuant to the terms of a Stock Purchase Agreement, dated June 13, 2011. On October 14, 2011, we completed the sale of substantially all of the assets of PFO, pursuant to the terms of an Asset Purchase Agreement, dated August 12, 2011.

Importance of Patents, Trademarks and Proprietary Technology

We do not believe we are dependent on any particular trademark in order to operate our business or any significant segment thereof. We have received registration to May 2012 and December 2020, for the service marks “Perma-Fix Environmental Services” and “Perma-Fix”, respectively.

We are active in the research and development (“R&D”) of technologies that allow us to address certain of our customers' environmental needs. To date, our R&D efforts have resulted in the granting of ten active patents and the filing of several pending patent applications. These ten active patents have remaining life ranging from approximately eight to thirteen years. Our flagship technology, the Perma-Fix Process, is a proprietary, cost effective, treatment technology that converts hazardous waste into non-hazardous material. Subsequently, we developed the Perma-Fix II process, a multi-step treatment process that converts hazardous organic components into non-hazardous material. The Perma-Fix II process is particularly important to our mixed waste strategy.

The Perma-Fix II process is designed to remove certain types of organic hazardous constituents from soils or other solids and sludges (“Solids”) through a water-based system. Until development of this Perma-Fix II process, we were not aware of a relatively simple and inexpensive process that would remove the organic hazardous constituents from Solids without elaborate and expensive equipment or expensive treating agents. Due to the organic hazardous constituents involved, the disposal options for such materials are limited, resulting in high disposal cost when there is a disposal option available. By reducing the organic hazardous waste constituents in the Solids to a level where the Solids meet Land Disposal Requirements, the generator's disposal options for such waste are substantially increased, allowing the generator to dispose of such waste at a substantially less cost. We began commercial use of the Perma-Fix II process in 2000. However, changes to current environmental laws and regulations could limit the use of the Perma-Fix II process or the disposal options available to the generator. See “—Permits and Licenses” and “—Research and Development.”

Permits and Licenses

Waste management service companies are subject to extensive, evolving and increasingly stringent federal, state, and local environmental laws and regulations. Such federal, state and local environmental laws and regulations govern our activities regarding the treatment, storage, processing, disposal and transportation of hazardous, non-hazardous and radioactive wastes, and require us to obtain and maintain permits, licenses and/or approvals in order to conduct certain of our waste activities. Failure to obtain and maintain our permits or approvals would have a material adverse effect on us, our operations, and financial condition. The permits and licenses have terms ranging from one to ten years, and provided that we maintain a reasonable level of compliance, renew with minimal effort, and cost. Historically, there have been no compelling challenges to the permit and license renewals. We believe that these permit and license requirements represent a potential barrier to entry for possible competitors.

PFF, located in Gainesville, Florida, operates its hazardous, mixed and low-level radioactive waste activities under a RCRA (“Resource Conservation and Recovery Act”) Part B permit, Toxic Substances Control Act (“TSCA”) authorization, Restricted RX Drug Distributor-Destruction license, and a radioactive materials license issued by the State of Florida.

DSSI, located in Kingston, Tennessee, conducts mixed and low-level radioactive waste storage and treatment activities under RCRA Part B permits and a radioactive materials license issued by the State of Tennessee Department of Environment and Conservation. Co-regulated TSCA Polychlorinated Biphenyl (“PCB”) wastes are also managed for PCB destruction under EPA Approval effective June 2008.

M&EC, located in Oak Ridge, Tennessee, performs hazardous, low-level radioactive and mixed waste storage and treatment operations under a RCRA Part B permit and a radioactive materials license issued by the State of Tennessee Department of Environment and Conservation. Co-regulated TSCA PCB wastes are also managed under EPA Approvals applicable to site-specific treatment units.

PFNWR, located in Richland, Washington, operates its mixed and low-level radioactive waste activities under a RCRA Part B permit, TSCA authorization, and a radioactive materials license issued by the State of Washington and the EPA.

The combination of a RCRA Part B hazardous waste permit, TSCA authorization, and a radioactive materials license, as held by PFF, DSSI M&EC, and PFNWR are very difficult to obtain for a single facility and make these facilities unique.

Seasonality

The DOE and DOD represent major customers for our Treatment Segment and Services Segment. For our Treatment Segment, in conjunction with the federal government’s September 30 fiscal year-end, the Treatment Segment historically experienced seasonably large shipments during the third quarter, leading up to the federal government’s fiscal year-end, as a result of incentives and other quota requirements. Correspondingly for a period of approximately three months following September 30, this segment generally slows down, as the government budgets are still being finalized, planning for the new year is occurring, and we enter the holiday season. This trend generally continues into the first quarter of the new year as federal government entities evaluate their spending priorities. Because government spending is contingent upon its annual budget and allocation of funding, we cannot provide assurance that we will not have large fluctuations in the quarters in the near future.

Our Services Segment generally experiences a seasonal slowdown during the winter months as heavy construction projects are typically performed in the early Spring to late Fall months, winter weather conditions delay work at project sites, and our technical services experience reduced activities and related billable hours throughout the November and December holiday period.

Backlog

The Treatment Segment of our Company maintains a backlog of stored waste, which represents waste that has not been processed. The backlog is principally a result of the timing and complexity of the waste being brought into the facilities and the selling price per container. As of December 31, 2011, our Treatment Segment had a backlog of approximately \$14,609,000, as compared to approximately \$6,876,000 as of December 31, 2010. Additionally, the time it takes to process waste from the time it arrives may increase due to the types and complexities of the waste we are currently receiving. We typically process our backlog during periods of low waste receipts, which historically has been in the first or fourth quarter.

Dependence Upon a Single or Few Customers

Our segments have significant relationships with the federal government, and continue to enter into contracts, directly as the prime contractor or indirectly as a subcontractor, with the federal government. The contracts that we are a party to with the federal government or with others as a subcontractor to the federal government generally provide that the government may terminate or renegotiate the contracts on 30 days notice, at the government's election. Our inability to continue under existing contracts that we have with the federal government (directly or indirectly as a subcontractor) could have a material adverse effect on our operations and financial condition.

We performed services relating to waste generated by the federal government, either directly as a prime contractor or indirectly as a subcontractor (including CHPRC as discussed below) to the federal government, representing approximately \$100,165,000 or 84.4% of our total revenue from continuing operations during 2011, as compared to \$80,275,000 or 82.1% of our total revenue from continuing operations during 2010, and \$75,013,000 or 81.2% of our total revenue from continuing operations during 2009.

During the second quarter of 2008, we were awarded a subcontract by CHPRC, a general contractor to the DOE, to participate in the cleanup of the central portion of the Hanford Site located in the state of Washington. This subcontract is a cost plus award fee contract and provides, among other things, a base period from October 1, 2008 through September 30, 2013, and an option period from October 1, 2013 through September 30, 2018. We believe full operations under this subcontract will result in total revenues to us for on-site and off-site work of approximately \$200,000,000 to \$250,000,000 over the five year base period. As provided above, M&EC's subcontract is terminable or subject to renegotiation, at the option of the government, on 30 days notice. Three other subcontracts that our subsidiaries have with CHPRC have been renegotiated and extended through September 30, 2013. Revenues from CHPRC totaled \$59,136,000 or 49.9%, \$51,929,000 or 53.1%, and \$45,169,000 or 48.8%, of our total revenue from continuing operations for twelve months ended December 31, 2011, 2010, and 2009, respectively.

Competitive Conditions

The Treatment Segment's largest competitor is EnergySolutions. At present, EnergySolutions' Clive, Utah facility is one of the few radioactive disposal sites for commercially generated waste in the country in which our Nuclear Treatment Segment can dispose of its nuclear waste. If EnergySolutions should refuse to accept our nuclear and mixed waste or cease operations at its Clive, Utah facility, such would have a material adverse effect on us for commercial wastes. However, with the recent radioactive disposal license granted to Waste Control Specialists ("WCS") located in Andrews, Texas, this risk could be reduced as WCS brings its disposal site online in 2012. The Treatment Segment treats and disposes of DOE generated wastes largely at DOE owned sites. Smaller competitors are also present in the market place; however, they do not present a significant challenge at this time. Our Treatment Segment currently solicits business primarily on a North American basis with both government and commercial clients; however, we are focusing on emerging international markets for future work.

The permitting and licensing requirements, and the cost to obtain such permits, are barriers to the entry of hazardous waste and radioactive and mixed waste activities as presently operated by our waste treatment subsidiaries. If the permit requirements for hazardous waste treatment, storage, and disposal (“TSD”) activities and/or the licensing requirements for the handling of low level radioactive matters are eliminated or if such licenses or permits were made less rigorous to obtain, such would allow companies to enter into these markets and provide greater competition.

Our Services Segment is engaged in highly competitive businesses in which a number of our government contracts and some of our commercial contracts are awarded through competitive bidding processes. The extent of such competition varies according to the industries and markets in which our customers operate as well as the geographic areas in which we operate. The degree and type of competition we face is also often influenced by the type of projects for which our Services Segment competes, especially projects subject to the governmental bid process. For international business, competition among competitors that are not encountered in our domestic business makes work in foreign countries more challenging. Some of the competitors are larger and possess greater resources and technical abilities than we do, which may give them an advantage when bidding for certain projects. Competition also places downward pressure on our contract bid prices and profit margins. Intense competition is expected to continue for government environmental service contracts, which may provide challenge to our ability to maintain strong growth rates and acceptable profit margins. If our Services Segment is unable to meet these competitive challenges, it could lose market share and experience an overall reduction in its profits.

Capital Spending, Certain Environmental Expenditures and Potential Environmental Liabilities

Capital Spending

During 2011, our purchases of capital equipment totaled approximately \$2,303,000. These expenditures were for improvements to operations primarily within the Treatment Segment. These capital expenditures were funded by the cash provided by operating activities. We have budgeted approximately \$2,681,000 for 2012 capital expenditures for our segments to expand our operations into new markets, reduce the cost of waste processing and handling, expand the range of wastes that can be accepted for treatment and processing, and to maintain permit compliance requirements. Certain of these budgeted projects are discretionary and may either be delayed until later in the year or deferred altogether. We have traditionally incurred actual capital spending totals for a given year less than the initial budget amount. The initiation and timing of projects are also determined by financing alternatives or funds available for such capital projects.

Environmental Liabilities

We have four remediation projects, which are currently in progress at certain of our discontinued facilities. These remediation projects principally entail the removal/remediation of contaminated soil and, in some cases, the remediation of surrounding ground water.

In June 1994, we acquired PFD, which we divested in March 2008. Prior to our acquisition of PFD in 1994, the former owners of PFD had merged Environmental Processing Services, Inc. (“EPS”) with PFD. In acquiring PFD in 1994, we were indemnified by the seller for costs associated with remediating the property leased by EPS (“Leased Property”). Such remediation involves soil and/or groundwater restoration. The Leased Property used by EPS to operate its facility was separate and apart from the property on which PFD's facility was located. Upon the sale of substantially all of the assets of PFD in March 2008, we retained the environmental liability of PFD as it related only to the remediation of the EPS site. A Revised Closure Plan, submitted to Ohio Environmental Protection Agency in 2010, was recently approved. Installation of the final remedy will begin in the third quarter of 2012. We have accrued approximately \$359,000, at December 31, 2011, for the estimated, remaining costs of remediating the Leased Property, which will extend approximately over the next six years.

In conjunction with our acquisition of Perma-Fix of Memphis, Inc. (“PFM”), we assumed and recorded certain liabilities to remediate gasoline contaminated groundwater and investigate potential areas of soil contamination on PFM’s property. Prior to our ownership of PFM, the owners installed monitoring and treatment equipment to restore the groundwater to acceptable standards in accordance with federal, state and local authorities. In 2008, we completed all soil remediation with the exception of that associated with the groundwater contamination. In addition, we installed wells and equipment associated with groundwater remediation. In 2011, remediation of the remaining contaminated soil was completed leaving only treatment of the aquifer. We have accrued approximately \$89,000 at December 31, 2011, for closure which we anticipate spending over the next five years.

In conjunction with the acquisition of PFSG, we initially recognized an environmental accrual of \$2,200,000 for estimated long-term costs to remove contaminated soil and to undergo groundwater remediation activities at the acquired facility in Valdosta, Georgia. The remedial activities began in 2003. We have accrued approximately \$1,497,000 at December 31, 2011, to complete remediation of the facility, which we anticipate spending over approximately the next ten years.

As a result of the discontinued operations at the PFMI facility in 2004, we were required to complete certain closure and remediation activities pursuant to our RCRA permit, which were completed in January 2006. During 2006, based on state-mandated criteria, we began implementing a modified methodology to remediate the facility. We have completed the remediation activities. In 2010, as required under a Consent Order, a closure plan was submitted, which is currently under final review, with approval expected in 2012. As of December 31, 2011, we have \$57,000 accrued for minor items. It is anticipated that closure activities, with the exception of post-closure monitoring, will be completed in 2012.

No insurance or third party recovery was taken into account in determining our cost estimates or reserves, nor do our cost estimates or reserves reflect any discount for present value purposes.

The nature of our business exposes us to significant risk of liability for damages. Such potential liability could involve, for example, claims for cleanup costs, personal injury or damage to the environment in cases where we are held responsible for the release of hazardous materials; claims of employees, customers or third parties for personal injury or property damage occurring in the course of our operations; and claims alleging negligence or professional errors or omissions in the planning or performance of our services. In addition, we could be deemed a responsible party for the costs of required cleanup of any property, which may be contaminated by hazardous substances generated or transported by us to a site we selected, including properties owned or leased by us. We could also be subject to fines and civil penalties in connection with violations of regulatory requirements.

Research and Development

Innovation and technical know-how by our operations is very important to the success of our business. Our goal is to discover, develop and bring to market innovative ways to process waste that address unmet environmental needs. We conduct research internally, and also through collaborations with other third parties. The majority of our research activities are performed as we receive new and unique waste to treat. We feel that our investments in research have been rewarded by the discovery of the Perma-Fix Process and the Perma-Fix II process. Our competitors also devote resources to research and development and many such competitors have greater resources at their disposal than we do. We have estimated that during 2011, 2010, and 2009, we spent approximately \$1,502,000, \$921,000, and \$609,000, respectively, in Company-sponsored research and development activities.

Number of Employees

In our service-driven business, our employees are vital to our success. We believe we have good relationships with our employees. As of December 31, 2011, we employed 921 employees, of which 862 are full-time employees, 50 are temporary employees and 9 are part-time employees. Approximately 80 full-time employees are unionized and covered by a collective bargaining agreement which expires on March 31, 2012 and 40 of the temporary employees are unionized and are covered by a collective bargaining agreement which expires on September 30, 2016.

Governmental Regulation

Environmental companies and their customers are subject to extensive and evolving environmental laws and regulations by a number of national, state and local environmental, safety and health agencies, the principal of which being the EPA. These laws and regulations largely contribute to the demand for our services. Although our customers remain responsible by law for their environmental problems, we must also comply with the requirements of those laws applicable to our services. We cannot predict the extent to which our operations may be affected by future enforcement policies as applied to existing laws or by the enactment of new environmental laws and regulations. Moreover, any predictions regarding possible liability are further complicated by the fact that under current environmental laws we could be jointly and severally liable for certain activities of third parties over whom we have little or no control. Although we believe that we are currently in substantial compliance with applicable laws and regulations, we could be subject to fines, penalties or other liabilities or could be adversely affected by existing or subsequently enacted laws or regulations. The principal environmental laws affecting our customers and us are briefly discussed below.

The Resource Conservation and Recovery Act of 1976, as amended (“RCRA”)

RCRA and its associated regulations establish a strict and comprehensive permitting and regulatory program applicable to hazardous waste. The EPA has promulgated regulations under RCRA for new and existing treatment, storage and disposal facilities including incinerators, storage and treatment tanks, storage containers, storage and treatment surface impoundments, waste piles and landfills. Every facility that treats, stores or disposes of hazardous waste must obtain a RCRA permit or must obtain interim status from the EPA, or a state agency, which has been authorized by the EPA to administer its program, and must comply with certain operating, financial responsibility and closure requirements.

The Comprehensive Environmental Response, Compensation and Liability Act of 1980 (“CERCLA,” also referred to as the “Superfund Act”)

CERCLA governs the cleanup of sites at which hazardous substances are located or at which hazardous substances have been released or are threatened to be released into the environment. CERCLA authorizes the EPA to compel responsible parties to clean up sites and provides for punitive damages for noncompliance. CERCLA imposes joint and several liabilities for the costs of clean up and damages to natural resources.

Health and Safety Regulations

The operation of our environmental activities is subject to the requirements of the Occupational Safety and Health Act (“OSHA”) and comparable state laws. Regulations promulgated under OSHA by the Department of Labor require employers of persons in the transportation and environmental industries, including independent contractors, to implement hazard communications, work practices and personnel protection programs in order to protect employees from equipment safety hazards and exposure to hazardous chemicals.

Atomic Energy Act

The Atomic Energy Act of 1954 governs the safe handling and use of Source, Special Nuclear and Byproduct materials in the U.S. and its territories. This act authorized the Atomic Energy Commission (now the Nuclear Regulatory Commission “USNRC”) to enter into “Agreements with States to carry out those regulatory functions in those respective states except for Nuclear Power Plants and federal facilities like the VA hospitals and the DOE operations.” The State of Florida (with the USNRC oversight), Office of Radiation Control, regulates the radiological program of the PFF facility, and the State of Tennessee (with the USNRC oversight), Tennessee Department of Radiological Health, regulates the radiological program of the DSSI and M&EC facilities. The State of Washington (with the USNRC oversight) Department of Health, regulates the radiological operations of the PFNWR facility.

Other Laws

Our activities are subject to other federal environmental protection and similar laws, including, without limitation, the Clean Water Act, the Clean Air Act, the Hazardous Materials Transportation Act and the Toxic Substances Control Act. Many states have also adopted laws for the protection of the environment which may affect us, including laws governing the generation, handling, transportation and disposition of hazardous substances and laws governing the investigation and cleanup of, and liability for, contaminated sites. Some of these state provisions are broader and more stringent than existing federal law and regulations. Our failure to conform our services to the requirements of any of these other applicable federal or state laws could subject us to substantial liabilities which could have a material adverse effect on us, our operations and financial condition. In addition to various federal, state and local environmental regulations, our hazardous waste transportation activities are regulated by the U.S. Department of Transportation, the Interstate Commerce Commission and transportation regulatory bodies in the states in which we operate. We cannot predict the extent to which we may be affected by any law or rule that may be enacted or enforced in the future, or any new or different interpretations of existing laws or rules.

Insurance

We believe we maintain insurance coverage adequate for our needs and similar to, or greater than, the coverage maintained by other companies of our size in the industry. There can be no assurances, however, that liabilities, which we may incur will be covered by our insurance or that the dollar amount of such liabilities, which are covered will not exceed our policy limits. Under our insurance contracts, we usually accept self-insured retentions, which we believe is appropriate for our specific business risks. We are required by EPA regulations to carry environmental impairment liability insurance providing coverage for damages on a claims-made basis in amounts of at least \$1,000,000 per occurrence and \$2,000,000 per year in the aggregate. To meet the requirements of customers, we have exceeded these coverage amounts.

In June 2003, we entered into a 25-year finite risk insurance policy with Chartis, a subsidiary of American International Group, Inc. (“AIG”), which provides financial assurance to the applicable states for our permitted facilities in the event of unforeseen closure. Prior to obtaining or renewing operating permits, we are required to provide financial assurance that guarantees to the states that in the event of closure, our permitted facilities will be closed in accordance with the regulations. The policy provides a maximum \$39,000,000 of financial assurance coverage. As of December 31, 2011, our total financial coverage under our finite risk policy totals approximately \$36,541,000.

In August 2007, we entered into a second finite risk insurance policy for our PFNWR facility, which we acquired in June 2007, with Chartis, a subsidiary of AIG. The policy provides an initial \$7,800,000 of financial assurance coverage with annual growth rate of 1.5% which at the end of the four year term provides a maximum coverage of \$8,200,000. On July 31, 2011, the policy was renewed for an additional year which required a \$46,000 fee. We have the option to renew this policy annually going forward with a similar fee which will be determined at the time of renewal. All other terms of the policy remain substantially unchanged.

ITEM 1A. RISK FACTORS

The following are certain risk factors that could affect our business, financial performance, and results of operations. These risk factors should be considered in connection with evaluating the forward-looking statements contained in this Form 10-K, as the forward-looking statements are based on current expectations, and actual results and conditions could differ materially from the current expectations. Investing in our securities involves a high degree of risk, and before making an investment decision, you should carefully consider these risk factors as well as other information we include or incorporate by reference in the other reports we file with the Securities and Exchange Commission (the “Commission”).

Risks Relating to our Operations

Failure to maintain our financial assurance coverage that we are required to have in order to operate our permitted treatment, storage and disposal facilities could have a material adverse effect on us.

A subsidiary of AIG, Chartis, provides our finite risk insurance policies which provide financial assurance to the applicable states for our permitted facilities in the event of unforeseen closure of those facilities. We are required to provide and to maintain financial assurance that guarantees to the state that in the event of closure, our permitted facilities will be closed in accordance with the regulations. Our initial policy provides a maximum of \$39,000,000 of financial assurance coverage. We also maintain a financial assurance policy for our PFNWR facility, which provides a maximum coverage of \$8,200,000. In the event that we are unable to obtain or maintain our financial assurance coverage for any reason, this could materially impact our operations and our permits which we are required to have in order to operate our treatment, storage, and disposal facilities

If we cannot maintain adequate insurance coverage, we will be unable to continue certain operations.

Our business exposes us to various risks, including claims for causing damage to property and injuries to persons that may involve allegations of negligence or professional errors or omissions in the performance of our services. Such claims could be substantial. We believe that our insurance coverage is presently adequate and similar to, or greater than, the coverage maintained by other companies in the industry of our size. If we are unable to obtain adequate or required insurance coverage in the future, or if our insurance is not available at affordable rates, we would violate our permit conditions and other requirements of the environmental laws, rules, and regulations under which we operate. Such violations would render us unable to continue certain of our operations. These events would have a material adverse effect on our financial condition.

The inability to maintain existing government contracts or win new government contracts over an extended period could have a material adverse effect on our operations and adversely affect our future revenues.

A material amount of our segments' revenues are generated through various U.S. government contracts or subcontracts involving the U.S. government. Our revenues from governmental contracts and subcontracts relating to governmental facilities within our segments were approximately \$100,165,000 or 84.4% and \$80,275,000 or 81.2%, of our consolidated operating revenues from continuing operations for 2011 and 2010, respectively. Most of our government contracts or our subcontracts granted under government contracts are awarded through a regulated competitive bidding process. Some government contracts are awarded to multiple competitors, which increase overall competition and pricing pressure and may require us to make sustained post-award efforts to realize revenues under these government contracts. All contracts with, or subcontracts involving, the federal government are terminable, or subject to renegotiation, by the applicable governmental agency on 30 days notice, at the option of the governmental agency. In addition, when we acquired SEHC, a subsidiary of SEHC was in default or breach under a certain contract with an agency of the federal government as a result of such subsidiary's failure to perform in a timely manner under such contract. After our acquisition of SEHC, we are attempting to correct such default or breach. If we fail to maintain or replace these relationships, or if a material contract is terminated or renegotiated in a manner that is materially adverse to us, or if we are unable to satisfy the government as to the failures of SEHC's subsidiary under its contract, our revenues and future operations could be materially adversely affected.

If our consolidation strategy is not successful, our operations and financial condition could be adversely affected.

One of our strategies is to increase our revenues, the range of products and services that we offer and the markets that we serve through acquisitions. On October 31, 2011, we completed the acquisition of SEHC and its subsidiaries. Although our management endeavors to evaluate the risks inherent in any particular acquisition candidate, we may not properly ascertain all of such risks. Management may not succeed in selecting acquisition candidates that will be profitable or that can be integrated successfully. We will seek to improve the profitability and increase the revenues of acquired businesses by various means, including combining administrative functions, eliminating redundant operations, and implementing system and technology improvements. Our ability to increase revenues will be affected by various factors, including our ability to maintain and win new contracts with the federal government, satisfactorily resolve certain issues involving certain subsidiaries of SEHC under certain contracts, expand the products and services offered to the customers of acquired companies, develop national accounts and attract and retain a sufficient number of employees to perform the Company's services. There can be no assurance that the Company's internal growth strategies will be successful.

Our existing and future customers may reduce or halt their spending on nuclear services with outside vendors, including us.

A variety of factors may cause our existing or future customers (including the federal government) to reduce or halt their spending on nuclear services from outside vendors, including us. These factors include, but are not limited to:

- accidents, terrorism, natural disasters or other incidents occurring at nuclear facilities or involving shipments of nuclear materials;
- failure of the federal government to approve necessary budgets, or to reduce the amount of the budget necessary, to fund remediation of DOE and DOD sites;
- civic opposition to or changes in government policies regarding nuclear operations; or
- a reduction in demand for nuclear generating capacity; or
- failure to perform under existing contracts, directly or indirectly, with the federal government.

These events could result in or cause the federal government to terminate or cancel its existing contracts involving us to treat, store or dispose of contaminated waste and/or to perform remediation projects, at one or more of the federal sites since all contracts with, or subcontracts involving, the federal government are terminable upon or subject to renegotiation at the option of the government on 30 days notice. These events also could adversely affect us to the extent that they result in the reduction or elimination of contractual requirements, lower demand for nuclear services, burdensome regulation, disruptions of shipments or production, increased operational costs or difficulties or increased liability for actual or threatened property damage or personal injury.

Economic downturns and/or reductions in government funding could have a material negative impact on our businesses.

Demand for our services has been, and we expect that demand will continue to be, subject to significant fluctuations due to a variety of factors beyond our control, including economic conditions, inability of the federal government to adopt its budget or reductions in the budget for spending to remediate federal sites due to numerous reasons, including, without limitation, the substantial deficits that the federal government has and is continuing to incur. During economic downturns and large budget deficits that the federal government and many states are experiencing, the ability of private and government entities to spend on nuclear services may decline significantly. Our operations depend, in large part, upon governmental funding, particularly funding levels at the DOE. Significant reductions in the level of governmental funding (for example, the annual budget of the DOE) or specifically mandated levels for different programs that are important to our business could have a material adverse impact on our business, financial position, results of operations and cash flows.

The loss of one or a few customers could have an adverse effect on us.

One or a few governmental customers or governmental related customers have in the past, and may in the future, account for a significant portion of our revenue in any one year or over a period of several consecutive years. Because customers generally contract with us for specific projects, we may lose these significant customers from year to year as their projects with us are completed. Our inability to replace the business with other projects could have an adverse effect on our business and results of operations.

As a government contractor, we are subject to extensive government regulation, and our failure to comply with applicable regulations could subject us to penalties that may restrict our ability to conduct our business.

Our governmental contracts, which are primarily with the DOE or subcontracts relating to DOE sites, are a significant part of our business. Allowable costs under U.S. government contracts are subject to audit by the U.S. government. If these audits result in determinations that costs claimed as reimbursable are not allowed costs or were not allocated in accordance with applicable regulations, we could be required to reimburse the U.S. government for amounts previously received.

Governmental contracts or subcontracts involving governmental facilities are often subject to specific procurement regulations, contract provisions and a variety of other requirements relating to the formation, administration, performance and accounting of these contracts. Many of these contracts include express or implied certifications of compliance with applicable regulations and contractual provisions. If we fail to comply with any regulations, requirements or statutes, our existing governmental contracts or subcontracts involving governmental facilities could be terminated or we could be suspended from government contracting or subcontracting. If one or more of our governmental contracts or subcontracts are terminated for any reason, or if we are suspended or debarred from government work, we could suffer a significant reduction in expected revenues and profits. Furthermore, as a result of our governmental contracts or subcontracts involving governmental facilities, claims for civil or criminal fraud may be brought by the government or violations of these regulations, requirements or statutes.

Loss of certain key personnel could have a material adverse effect on us.

Our success depends on the contributions of our key management, environmental and engineering personnel, especially Dr. Louis F. Centofanti, Chairman, President, and Chief Executive Officer. The loss of Dr. Centofanti could have a material adverse effect on our operations, revenues, prospects, and our ability to raise additional funds. Our future success depends on our ability to retain and expand our staff of qualified personnel, including environmental specialists and technicians, sales personnel, and engineers. Without qualified personnel, we may incur delays in rendering our services or be unable to render certain services. We cannot be certain that we will be successful in our efforts to attract and retain qualified personnel as their availability is limited due to the demand for hazardous waste management services and the highly competitive nature of the hazardous waste management industry. We do not maintain key person insurance on any of our employees, officers, or directors.

Changes in environmental regulations and enforcement policies could subject us to additional liability and adversely affect our ability to continue certain operations.

We cannot predict the extent to which our operations may be affected by future governmental enforcement policies as applied to existing laws, by changes to current environmental laws and regulations, or by the enactment of new environmental laws and regulations. Any predictions regarding possible liability under such laws are complicated further by current environmental laws which provide that we could be liable, jointly and severally, for certain activities of third parties over whom we have limited or no control.

The refusal to accept our waste for disposal by, or a closure of, the end disposal site that our Treatment Segment utilizes to dispose of its waste could subject us to significant risk and limit our operations.

Our Treatment Segment has limited options available for disposal of its waste. There is only one disposal site for our low level radioactive waste we receive from non-governmental sites. If this disposal site ceases to accept waste or closes for any reason or refuses to accept the waste of our Treatment Segment, for any reason, we could have nowhere to dispose of our nuclear waste or have significantly increased costs from disposal alternatives. With nowhere to dispose of our nuclear waste, we would be subject to significant risk from the implications of storing the waste on our site, and we would have to limit our operations to accept only waste that we can dispose of. A second low-level radioactive disposal site is scheduled to be operational in 2012, and when this new disposal site becomes operational, we do not believe that we will be as dependent on the current disposal site.

Our businesses subject us to substantial potential environmental liability.

Our business of rendering services in connection with management of waste, including certain types of hazardous waste, low-level radioactive waste, and mixed waste (waste containing both hazardous and low-level radioactive waste), subjects us to risks of liability for damages. Such liability could involve, without limitation:

- claims for clean-up costs, personal injury or damage to the environment in cases in which we are held responsible for the release of hazardous or radioactive materials; and
- claims of employees, customers, or third parties for personal injury or property damage occurring in the course of our operations; and
- claims alleging negligence or professional errors or omissions in the planning or performance of our services.

Our operations are subject to numerous environmental laws and regulations. We have in the past, and could in the future, be subject to substantial fines, penalties, and sanctions for violations of environmental laws and substantial expenditures as a responsible party for the cost of remediating any property which may be contaminated by hazardous substances generated by us and disposed at such property, or transported by us to a site selected by us, including properties we own or lease.

As our operations expand, we may be subject to increased litigation, which could have a negative impact on our future financial results.

Our operations are highly regulated and we are subject to numerous laws and regulations regarding procedures for waste treatment, storage, recycling, transportation, and disposal activities, all of which may provide the basis for litigation against us. In recent years, the waste treatment industry has experienced a significant increase in so-called “toxic-tort” litigation as those injured by contamination seek to recover for personal injuries or property damage. We believe that, as our operations and activities expand, there will be a similar increase in the potential for litigation alleging that we have violated environmental laws or regulations or are responsible for contamination or pollution caused by our normal operations, negligence or other misconduct, or for accidents, which occur in the course of our business activities. Such litigation, if significant and not adequately insured against, could adversely affect our financial condition and our ability to fund our operations. Protracted litigation would likely cause us to spend significant amounts of our time, effort, and money. This could prevent our management from focusing on our operations and expansion.

Our operations are subject to seasonal factors, which cause our revenues to fluctuate.

We have historically experienced reduced revenues and losses during the first and fourth quarters of our fiscal years due to a seasonal slowdown in operations from poor weather conditions, overall reduced activities during these periods resulting from holiday periods, and finalization of government budgets during the fourth quarter of each year. During our second and third fiscal quarters there has historically been an increase in revenues and operating profits. If we do not continue to have increased revenues and profitability during the second and third fiscal quarters, this could have a material adverse effect on our results of operations and liquidity.

If environmental regulation or enforcement is relaxed, the demand for our services will decrease.

The demand for our services is substantially dependent upon the public's concern with, and the continuation and proliferation of, the laws and regulations governing the treatment, storage, recycling, and disposal of hazardous, non-hazardous, and low-level radioactive waste. A decrease in the level of public concern, the repeal or modification of these laws, or any significant relaxation of regulations relating to the treatment, storage, recycling, and disposal of hazardous waste and low-level radioactive waste would significantly reduce the demand for our services and could have a material adverse effect on our operations and financial condition. We are not aware of any current federal or state government or agency efforts in which a moratorium or limitation has been, or will be, placed upon the creation of new hazardous or radioactive waste regulations that would have a material adverse effect on us; however, no assurance can be made that such a moratorium or limitation will not be implemented in the future.

We and our customers operate in a politically sensitive environment, and the public perception of nuclear power and radioactive materials can affect our customers and us.

We and our customers operate in a politically sensitive environment. Opposition by third parties to particular projects can limit the handling and disposal of radioactive materials. Adverse public reaction to developments in the disposal of radioactive materials, including any high profile incident involving the discharge of radioactive materials, could directly affect our customers and indirectly affect our business. Adverse public reaction also could lead to increased regulation or outright prohibition, limitations on the activities of our customers, more onerous operating requirements or other conditions that could have a material adverse impact on our customers' and our business.

We may be exposed to certain regulatory and financial risks related to climate change.

Climate change is receiving ever increasing attention from scientists and legislators alike. The debate is ongoing as to the extent to which our climate is changing, the potential causes of this change and its potential impacts. Some attribute global warming to increased levels of greenhouse gases, including carbon dioxide, which has led to significant legislative and regulatory efforts to limit greenhouse gas emissions.

Presently there are no federally mandated greenhouse gas reduction requirements in the United States. However, there are a number of legislative and regulatory proposals to address greenhouse gas emissions, which are in various phases of discussion or implementation. The outcome of federal and state actions to address global climate change could result in a variety of regulatory programs including potential new regulations. Any adoption by federal or state governments mandating a substantial reduction in greenhouse gas emissions could increase costs associated with our operations. Until the timing, scope and extent of any future regulation becomes known, we cannot predict the effect on our financial position, operating results and cash flows.

We may not be successful in winning new business mandates from our government and commercial customers.

We must be successful in winning mandates from our government and commercial customers to replace revenues from projects that are nearing completion and to increase our revenues. Our business and operating results can be adversely affected by the size and timing of a single material contract.

The elimination or any modification of the Price-Anderson Acts indemnification authority could have adverse consequences for our business.

The Atomic Energy Act of 1954, as amended, or the AEA, comprehensively regulates the manufacture, use, and storage of radioactive materials. The Price-Anderson Act supports the nuclear services industry by offering broad indemnification to DOE contractors for liabilities arising out of nuclear incidents at DOE nuclear facilities. That indemnification protects DOE prime contractor, but also similar companies that work under contract or subcontract for a DOE prime contract or transporting radioactive material to or from a site. The indemnification authority of the DOE under the Price-Anderson Act was extended through 2025 by the Energy Policy Act of 2005.

Under certain conditions, the Price-Anderson Act's indemnification provisions may not apply to our processing of radioactive waste at governmental facilities, and do not apply to liabilities that we might incur while performing services as a contractor for the DOE and the nuclear energy industry. If an incident or evacuation is not covered under Price-Anderson Act indemnification, we could be held liable for damages, regardless of fault, which could have an adverse effect on our results of operations and financial condition. If such indemnification authority is not applicable in the future, our business could be adversely affected if the owners and operators of new facilities fail to retain our services in the absence of commercial adequate insurance and indemnification.

We are engaged in highly competitive businesses and typically must bid against other competitors to obtain major contracts.

We are engaged in highly competitive business in which most of our government contracts and some of our commercial contracts are awarded through competitive bidding processes. We compete with national and regional firms with nuclear services practices, as well as small or local contractors. Some of our competitors have greater financial and other resources than we do, which can give them a competitive advantage. In addition, even if we are qualified to work on a new government contract, we might not be awarded the contract because of existing government policies designed to protect certain types of businesses and underrepresented minority contractors. Competition also places downward pressure on our contract prices and profit margins. Intense competition is expected to continue for nuclear service contracts. If we are unable to meet these competitive challenges, we could lose market share and experience an overall reduction in our profits.

Our failure to maintain our safety record could have an adverse effect on our business.

Our safety record is critical to our reputation. In addition, many of our government and commercial customers require that we maintain certain specified safety record guidelines to be eligible to bid for contracts with these customers. Furthermore, contract terms may provide for automatic termination in the event that our safety record fails to adhere to agreed-upon guidelines during performance of the contract. As a result, our failure to maintain our safety record could have a material adverse effect on our business, financial condition and results of operations.

We may be unable to utilize loss carryforwards in the future.

We have approximately \$6,091,000 and \$27,718,000 in net operating loss carryforwards which will expire from 2012 to 2021 if not used against future federal and state income tax liabilities, respectively. Our net loss carryforwards are subject to various limitations. Our ability to use the net loss carryforwards depends on whether we are able to generate sufficient income in the future years. Further, our net loss carryforwards have not been audited or approved by the Internal Revenue Service.

If our goodwill or amortizable intangible assets become impaired we may be required to record a significant charge to earnings.

Under accounting principles generally accepted in the United States (“U.S. GAAP”), we review our amortizable intangible assets for impairment when events or changes in circumstances indicate the carrying value may not be recoverable. Goodwill is tested for impairment at least annually. Factors that may be considered a change in circumstances, indicating that the carrying value of our goodwill or amortizable intangible assets may not be recoverable, include a decline in stock price and market capitalization, reduced future cash flow estimates, and slower growth rates in our industry. We may be required to record a significant charge in our financial statements during the period in which any impairment of our goodwill or amortizable intangible assets is determined, negatively impacting our results of operations.

We bear the risk of cost overruns in fixed-price contracts. We may experience reduced profits or, in some cases, losses under these contracts if costs increase above our estimates.

A percentage of our revenues are earned under contracts that are fixed-price in nature. Fixed-price contracts expose us to a number of risks not inherent in cost-reimbursable contracts. Under fixed price and guaranteed maximum-price contracts, contract prices are established in part on cost and scheduling estimates which are based on a number of assumptions, including assumptions about future economic conditions, prices and availability of labor, equipment and materials, and other exigencies. If these estimates prove inaccurate, or if circumstances change such as unanticipated technical problems, difficulties in obtaining permits or approvals, changes in local laws or labor conditions, weather delays, cost of raw materials or our suppliers’ or subcontractors’ inability to perform, cost overruns may occur and we could experience reduced profits or, in some cases, a loss for that project. Errors or ambiguities as to contract specifications can also lead to cost-overruns. Prior to our acquisition of SEHC and its subsidiaries, several subsidiaries of SEHC experienced substantial cost overruns in several of its fixed price contracts, which cost overruns may not be recoverable, in whole or in part.

Adequate bonding is necessary for us to win certain types of new work.

We are often required to provide performance bonds or other financial assurances to customers under fixed-price contracts, primarily within our Nuclear Services Segment. These surety instruments indemnify the customer if we fail to perform our obligations under the contract. If a bond is required for a particular project and we are unable to obtain it due to insufficient liquidity or other reasons, we may not be able to pursue that project. We currently have a bonding facility but, the issuance of bonds under that facility is at the surety’s sole discretion. Moreover, due to events that affect the insurance and bonding markets generally, bonding may be more difficult to obtain in the future or may only be available at significant additional cost. There can be no assurance that bonds will continue to be available to us on reasonable terms. Our inability to obtain adequate bonding and, as a result, to bid on new work could have a material adverse effect on our business, financial condition and results of operations.

We could have material weaknesses in our Internal Control over Financial Reporting (“ICFR”), resulting from our acquisition.

On October 31, 2011, we completed the acquisition of SEHC and its subsidiaries. We have been advised that Homeland determined prior to our acquisition of SEC that SEC had a material weakness in its ICFR because material information was omitted in determining whether contracts were in a loss position and there was a reasonable possibility such missing information would have caused a material misstatement. Additionally, our initial reviews of internal controls for SEC, since its acquisition, have resulted in the identification of certain internal control deficiencies. Management has taken steps to remediate these deficiencies, but there has not been enough time to fully assess the effectiveness of SEC’s ICFR. If we fail to remediate internal control deficiencies identified for SEC and/or fail to remediate future deficiencies identified from our continued assessment, there could be a reasonable possibility that a misstatement of our annual or interim financial statements will not be prevented or detected in a timely manner.

Our financial condition could be harmed if SEHC and its subsidiaries that we recently acquired failed to comply with applicable laws, rules or regulations, default or breach under its contractual obligations or have other undisclosed liabilities.

Any business that we may acquire may be, or have been, subject to many of the same laws and regulations to which our business is subject and possibly to others, including environmental laws and regulations and other laws and regulations impacting companies that do business with federal, state and local governments. If SEHC and its subsidiaries, which we recently acquired, have not conducted their businesses in compliance with applicable laws and regulations or have not complied with their contractual obligations, we may suffer material adverse consequences, such as significant fines, termination of contracts or payment of damages. SEHC and its subsidiaries may have other undisclosed liabilities that we did not discover during the acquisition process that could result in liability to us or other unanticipated problems, which could have a material adverse effect on us.

As a result of our acquisition of SEHC and its subsidiaries, SEHC and its subsidiaries no longer qualify as a small business and are unable to take advantage of opportunities available to a small business.

Having a small business status provides a company with certain competitive advantages in obtaining certain contracts. SEHC and its subsidiaries qualified as a small business prior to our acquisition that it was able to obtain prior to our acquisition. Due to our acquisition, SEHC and its subsidiaries no longer qualify as a small business, which could have a material adverse effect on SEHC's and its subsidiaries' ability to obtain certain contracts that it was able to obtain prior to our acquisition.

Risks Relating to our Intellectual Property

If we cannot maintain our governmental permits or cannot obtain required permits, we may not be able to continue or expand our operations.

We are a waste management company. Our business is subject to extensive, evolving, and increasingly stringent federal, state, and local environmental laws and regulations. Such federal, state, and local environmental laws and regulations govern our activities regarding the treatment, storage, recycling, disposal, and transportation of hazardous and non-hazardous waste and low-level radioactive waste. We must obtain and maintain permits or licenses to conduct these activities in compliance with such laws and regulations. Failure to obtain and maintain the required permits or licenses would have a material adverse effect on our operations and financial condition. If any of our facilities are unable to maintain currently held permits or licenses or obtain any additional permits or licenses which may be required to conduct its operations, we may not be able to continue those operations at these facilities, which could have a material adverse effect on us.

We believe our proprietary technology is important to us.

We believe that it is important that we maintain our proprietary technologies. There can be no assurance that the steps taken by us to protect our proprietary technologies will be adequate to prevent misappropriation of these technologies by third parties. Misappropriation of our proprietary technology could have an adverse effect on our operations and financial condition. Changes to current environmental laws and regulations also could limit the use of our proprietary technology.

Risks Relating to our Financial Position and Need for Financing

Breach of financial covenants in existing credit facility could result in a default, triggering repayment of outstanding debt under the credit facility.

Our credit facility with our bank contains financial covenants. A breach of any of these covenants could result in a default under our credit facility triggering our lender to immediately require the repayment of all outstanding debt under our credit facility and terminate all commitments to extend further credit. In the past, none of our covenants have been restrictive to our operations. If we fail to meet our loan covenants in the future and our lender does not waive the non-compliance or revise our covenant so that we are in compliance, our lender could accelerate the repayment of borrowings under our credit facility. In the event that our lender accelerates the payment of our borrowings, we may not have sufficient liquidity to repay our debt under our credit facility and other indebtedness.

Our amount of debt could adversely affect our operations.

At December 31, 2011, our aggregate consolidated debt was approximately \$19,048,000. Our Amended and Restated Revolving Credit, Term Loan and Security Agreement, dated October 31, 2011 (“Amended Loan Agreement”) provides for an aggregate commitment of \$43,500,000, consisting of a \$25,000,000 revolving line of credit, a term loan of \$16,000,000, and an equipment line of credit up to \$2,500,000. The maximum we can borrow under the revolving part of the Credit Facility is based on a percentage of the amount of our eligible receivables outstanding at any one time. As of December 31, 2011, we had no borrowings under the revolving part of our Credit Facility and borrowing availability of up to an additional \$15,382,000 based on our outstanding eligible receivables. A substantial amount of our outstanding borrowings as of December 31, 2011, was in connection with payment of the cash portion of the consideration in the acquisition of SEHC. A lack of operating results could have material adverse consequences on our ability to operate our business. Our ability to make principal and interest payments, or to refinance indebtedness, will depend on both our and our subsidiaries' future operating performance and cash flow. Prevailing economic conditions, interest rate levels, and financial, competitive, business, and other factors affect us. Many of these factors are beyond our control.

Risks Relating to our Common Stock

Issuance of substantial amounts of our Common Stock could depress our stock price.

Any sales of substantial amounts of our Common Stock in the public market could cause an adverse effect on the market price of our Common Stock and could impair our ability to raise capital through the sale of additional equity securities. The issuance of our Common Stock will result in the dilution in the percentage membership interest of our stockholders and the dilution in ownership value. As of December 31, 2011, we had 56,030,038 shares of Common Stock outstanding (which excludes 38,210 treasury shares).

In addition, as of December 31, 2011, we had outstanding options to purchase 3,039,833 shares of Common Stock at exercise prices from \$1.42 to \$2.98 per share. Further, our preferred share rights plan and the shelf registration statement, if either is triggered, could result in the issuance of a substantial amount of our Common Stock. The existence of this quantity of rights to purchase our Common Stock under the preferred share rights plan and/or the shelf registration could result in a significant dilution in the percentage ownership interest of our stockholders and the dilution in ownership value. Future sales of the shares issuable could also depress the market price of our Common Stock.

We do not intend to pay dividends on our Common Stock in the foreseeable future.

Since our inception, we have not paid cash dividends on our Common Stock, and we do not anticipate paying any cash dividends in the foreseeable future. Our Credit Facility prohibits us from paying cash dividends on our Common Stock.

The price of our Common Stock may fluctuate significantly, which may make it difficult for our stockholders to resell our Common Stock when a stockholder wants or at prices a stockholder finds attractive.

The price of our Common Stock on the Nasdaq Capital Markets constantly changes. We expect that the market price of our Common Stock will continue to fluctuate. This may make it difficult for our stockholders to resell the Common Stock when a stockholder wants or at prices a stockholder finds attractive.

Future issuance or potential issuance of our Common Stock could adversely affect the price of our Common Stock, our ability to raise funds in new stock offerings, and dilute our shareholders percentage interest in our Common Stock.

Future sales of substantial amounts of our Common Stock in the public market, or the perception that such sales could occur, could adversely affect prevailing trading prices of our Common Stock, and impair our ability to raise capital through future offerings of equity. No prediction can be made as to the effect, if any, that future issuances or sales of shares of Common Stock or the availability of shares of Common Stock for future issuance, will have on the trading price of our Common Stock. Such future issuances could also significantly reduce the percentage ownership and dilute the ownership value of our existing common stockholders.

Delaware law, certain of our charter provisions, our stock option plans, outstanding warrants and our Preferred Stock may inhibit a change of control under circumstances that could give you an opportunity to realize a premium over prevailing market prices.

We are a Delaware corporation governed, in part, by the provisions of Section 203 of the General Corporation Law of Delaware, an anti-takeover law. In general, Section 203 prohibits a Delaware public corporation from engaging in a “business combination” with an “interested stockholder” for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner. As a result of Section 203, potential acquirers may be discouraged from attempting to effect acquisition transactions with us, thereby possibly depriving our security holders of certain opportunities to sell, or otherwise dispose of, such securities at above-market prices pursuant to such transactions. Further, certain of our option plans provide for the immediate acceleration of, and removal of restrictions from, options and other awards under such plans upon a “change of control” (as defined in the respective plans). Such provisions may also have the result of discouraging acquisition of us.

We have authorized and unissued 10,780,129 (which include outstanding options to purchase 3,039,833 shares of our Common Stock, outstanding warrants to purchase 150,000 shares of our Common Stock, and up to 5,000,000 shares authorized for resale under the shelf registration statement) shares of Common Stock and 2,000,000 shares of Preferred Stock as of December 31, 2011 (which includes 600,000 shares of our Preferred Stock reserved for issuance under our preferred share rights plan). These unissued shares could be used by our management to make it more difficult, and thereby discourage an attempt to acquire control of us.

Our Preferred Share Rights Plan may adversely affect our stockholders.

In May 2008, we adopted a preferred share rights plan (the “Rights Plan”), designed to ensure that all of our stockholders receive fair and equal treatment in the event of a proposed takeover or abusive tender offer. However, the Rights Plan may also have the effect of deterring, delaying, or preventing a change in control that might otherwise be in the best interests of our stockholders.

In general, under the terms of the Rights Plan, subject to certain limited exceptions, if a person or group acquires 20% or more of our Common Stock or a tender offer or exchange offer for 20% or more of our Common Stock is announced or commenced, our other stockholders may receive upon exercise of the rights (the “Rights”) issued under the Rights Plan the number of shares our Common Stock or of one-one hundredths of a share of our Series A Junior Participating Preferred Stock, par value \$.001 per share, having a value equal to two times the purchase price of the Right. In addition, if we are acquired in a merger or other business combination transaction in which we are not the survivor or more than 50% of our assets or earning power is sold or transferred, then each holder of a Right (other than the acquirer) will thereafter have the right to receive, upon exercise, common stock of the acquiring company having a value equal to two times the purchase price of the Right. The purchase price of each Right is \$13, subject to adjustment.

The Rights will cause substantial dilution to a person or group that attempts to acquire us on terms not approved by our board of directors. The Rights may be redeemed by us at \$0.001 per Right at any time before any person or group acquires 20% or more of our outstanding common stock. The rights should not interfere with any merger or other business combination approved by our board of directors. The Rights expire on May 2, 2018.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None

ITEM 2. PROPERTIES

Our principal executive office is in Atlanta, Georgia. Our Operations Headquarters is located in Oak Ridge, Tennessee. Our Nuclear Treatment Segment facilities are located in Gainesville, Florida; Kingston, Tennessee; Oak Ridge, Tennessee, and Richland, Washington. Our Nuclear Services Segment operates subsidiaries located in Ellisville, Missouri; Knoxville, Tennessee; and Blaydon On Tyne, England, of which we lease all of the properties. We have a facility located in Valdosta, Georgia, which is included within our discontinued operations. We also maintain properties in Brownstown, Michigan and Memphis, Tennessee, which are all non-operational and are included within our discontinued operations.

Three of our facilities are subject to mortgages as granted to our senior lender (Kingston, Tennessee; Gainesville, Florida; and Richland, Washington).

The Company currently leases properties in the following locations:

Location	Square Footage	Expiration of Lease
Knoxville TN (SEC)	20,850	May 31, 2018
Knoxville TN (SEC)	11,000	September 30, 2012
Blaydon On Tyne, England (SECL)	1,000	Monthly
Pittsburgh PA (SEC)	640	Monthly
Oak Ridge TN (M&EC)	150,000	June 7, 2017
Ellisville, MO (SYA)	12,000	May 31, 2016
Oak Ridge TN (OHQ)	10,000	April 30, 2012
Atlanta, GA (Corporate)	5,800	November 30, 2013
Oak Ridge TN (SECRA)	6,300	February 28, 2013

We believe that the above facilities currently provide adequate capacity for our operations and that additional facilities are readily available in the regions in which we operate, which could support and supplement our existing facilities.

ITEM 3. LEGAL PROCEEDINGS*Perma-Fix of Northwest Richland, Inc. (“PFNWR”)*

PFNWR filed suit (PFNWR vs. Philotechnics, Ltd.) in the U.S. District Court, Eastern District of Tennessee, asserting contract breach and seeking specific performance of the “return-of-waste clause” in the brokerage contract between a prior facility owner (now owned by PFNWR and Philotechnics, Ltd. (“Philo”)), as to certain non-conforming waste Philo delivered for treatment from Philo’s customer, El du Pont de Nemours and Company (“DuPont”), to the PFNWR facility, before PFNWR acquired the facility. Our complaint seeks an order that Philo: (A) specifically perform its obligations under the contract’s “return-of-waste” clause by physically taking custody of and by removing the nonconforming waste, (B) pay PFNWR all additional costs of maintaining and managing the waste, and (C) pay PFNWR the cost to treat and dispose of the nonconforming waste so as to allow PFNWR to compliantly dispose of that waste offsite. See “Liquidity and Capital Resources of the Company – Financing Activities” of the “Management’s Discussion and Analysis of Financial Condition and Results of Operations”, discussing an Offset Amount offsetting against the earn-out amount relating to the claims contained in this lawsuit.

Subsidiary of SEHC

The lawsuit styled *First Fidelity Lending Corp. (“First Fidelity”) vs. SEC and Christopher Leichtweis* (“Leichtweis”, who was named our Senior Vice President upon completion of our acquisition of SEHC and its subsidiaries), pending in the Circuit Court for the 15th Judicial District of Palm Beach County, Florida, alleging SEC and Leichtweis breached the General Agreement of Indemnity with the surety, First Fidelity, in connection with SEC’s performance bonds on certain projects, has been dismissed by First Fidelity.

ITEM 4. MINE SAFETY DISCLOSURE

Not Applicable

ITEM 4A. EXECUTIVE OFFICERS OF THE REGISTRANT

The following table sets forth, as of the date hereof, information concerning our executive officers:

<u>NAME</u>	<u>AGE</u>	<u>POSITION</u>
Dr. Louis F. Centofanti	68	Chairman of the Board, President and Chief Executive Officer
Mr. Ben Naccarato	49	Chief Financial Officer, Vice President, and Secretary
Mr. James A. Blankenhorn	47	Chief Operating Officer, Vice President
Mr. Robert Schreiber, Jr.	61	President of SYA, Schreiber, Yonley & Associates, a subsidiary of the Company, and Principal Engineer
Mr. Christopher P. Leichtweis	52	President of Safety and Ecology Corporation ("SEC"), Senior Vice President

Dr. Louis F. Centofanti

Dr. Centofanti has served as Board Chairman since joining the Company in February 1991. Dr. Centofanti also served as Company President and Chief Executive Officer (February 1991 to September 1995) and again in March 1996 was elected Company President and Chief Executive Officer. From 1985 until joining the Company, Dr. Centofanti served as Senior Vice President of USPCI, Inc., a large hazardous waste management company, where he was responsible for managing the treatment, reclamation and technical groups within USPCI. In 1981 he founded PPM, Inc. (later sold to USPCI), a hazardous waste management company specializing in treating PCB contaminated oils. From 1978 to 1981, Dr. Centofanti served as Regional Administrator of the U.S. Department of Energy for the southeastern region of the United States. Dr. Centofanti has a Ph.D. and a M.S. in Chemistry from the University of Michigan, and a B.S. in Chemistry from Youngstown State University.

Mr. Ben Naccarato

Mr. Naccarato has served as the Chief Financial Officer since February 26, 2009. Mr. Naccarato was appointed on October 24, 2008 by the Company's Board of Directors as the Interim Chief Financial Officer, effective November 1, 2008. Mr. Naccarato joined the Company in September 2004 and served as Vice President, Finance of the Company's Industrial Segment until May 2006, when he was named Vice President, Corporate Controller/Treasurer. Prior to joining the Company in September 2004, Mr. Naccarato was the Chief Financial Officer of Culp Petroleum Company, Inc., a privately held company in the fuel distribution and used waste oil industry from December 2002 to September 2004. Mr. Naccarato is a graduate of University of Toronto having received a Bachelor of Commerce and Finance Degree and is a Certified Management Accountant.

Mr. James A. Blankenhorn

Mr. Blankenhorn was appointed by the Company's Board of Directors on February 18, 2011 as the Company's Chief Operating Officer. Mr. Blankenhorn's employment with the Company became effective on June 1, 2011. Mr. Blankenhorn has 24 years experience in the nuclear industry supporting U. S. Department of Defense programs, and the Department of Energy's Environmental Management and National Nuclear Security Administration programs. Prior to joining Perma-Fix, Mr. Blankenhorn served in a variety of senior management positions at URS Corporation, a publicly traded Company which provides engineering, construction, and technical services for public agencies and private sectors. Most recently, he served as the deputy project manager for the West Valley Environmental Services, LLC, in western New York where he directed a staff of 360 in the deactivation, decommissioning and clean up of facilities at West Valley. From 2008 to early 2010, Mr. Blankenhorn was program director with Los Alamos National Security, LLC, responsible for the Waste Disposition Project at the Los Alamos National Laboratory where he supervised 440 people and was responsible for improving performance and achieving cost savings while developing a long term strategy for legacy wastes. Mr. Blankenhorn spent 18 years at the Westinghouse Savannah River Company. Since 1986, Mr. Blankenhorn has been an officer (recently promoted to Colonel) in the U.S. Army and Army Reserve serving in leadership positions within the U.S. Army Nuclear, Biological, Chemical and Radiological program. Mr. Blankenhorn holds a Master of Strategic Studies from the U.S. Army War College, a Master of Science degree – Environmental/Hazardous Waste Management from National Technology University, and a Bachelor of Science degree – Chemistry from the Florida Institute of Technology.

Mr. Robert Schreiber, Jr.

Mr. Schreiber has served as President of SYA since the Company acquired the environmental engineering firm in 1992. Mr. Schreiber co-founded the predecessor of SYA, Lafser & Schreiber in 1985, and held several executive roles in the firm until our acquisition of SYA. From 1978 to 1985, Mr. Schreiber was the Director of Air programs and all environmental programs for the Missouri Department of Natural Resources. Mr. Schreiber provides technical expertise in wide range of areas including the cement industry, environmental regulations and air pollution control. Mr. Schreiber has a B.S. in Chemical Engineering from the University of Missouri – Columbia.

Mr. Christopher P. Leichtweis

Mr. Leichtweis was appointed Senior Vice President of the Company and President of SEC upon the closing of the acquisition of Safety and Ecology Holdings Corporation (“SEHC”) and its subsidiaries (collectively, “SEC”) by the Company on October 31, 2011.

Prior to the acquisition of SEC by the Company, Mr. Leichtweis served as founder, President and CEO of SEC since 1991 and grew the domestic and international operations to more than 530 employees, eight offices, and revenues of approximately \$98,000,000 in SEC’s fiscal year 2011. From 2008 to prior the acquisition, he served as President and Director of SEC’s parent (public) company Homeland Security Capital Corporation, growing the parent’s portfolio of three companies by 43% and expanding operations into many new commercial and federal markets.

Prior to founding SEC, Mr. Leichtweis served in various engineering and management positions at Bechtel National and Bechtel Environmental, Inc., a global Engineering and Construction Company, starting in 1985, and was a key contributor to the environmental clean-up of major federal nuclear legacy programs. He currently serves on many boards including his undergraduate University’s Foundation Board (State University of New York- Brockport) and is a distinguished graduate from the University of Tennessee. Mr. Leichtweis earned a B.S. degree in Physics from SUNY Brockport in 1983, and received his MBA from the University of Tennessee in December 2003. In addition, he is a Certified Industrial Hygienist by the American Board of Industrial Hygiene. Mr. Leichtweis was nationally recognized as the Southeast United States 2005 Ernst & Young Entrepreneur of the Year award winner.

Certain Relationships

There are no family relationships between any of our executive officers.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

Our Common Stock is traded on the NASDAQ Capital Markets (“NASDAQ”) under the symbol “PEST”. The following table sets forth the high and low market trade prices quoted for the Common Stock during the periods shown. The source of such quotations and information is the NASDAQ online trading history reports.

		2011		2010	
		Low	High	Low	High
Common Stock	1 st Quarter	\$ 1.36	\$ 1.82	\$ 1.72	\$ 2.51
	2 nd Quarter	1.28	1.57	1.51	2.38
	3 rd Quarter	1.00	1.68	1.43	1.92
	4 th Quarter	1.15	1.65	1.24	1.86

As of February 22, 2012, there were approximately 257 stockholders of record of our Common Stock, including brokerage firms and/or clearing houses holding shares of our Common Stock for their clientele (with each brokerage house and/or clearing house being considered as one holder). However, the total number of beneficial stockholders as of February 22, 2012, was approximately 4,260.

Since our inception, we have not paid any cash dividends on our Common Stock and have no dividend policy. Our loan agreement prohibits us from paying any cash dividends on our Common Stock without prior approval from the lender. We do not anticipate paying cash dividends on our outstanding Common Stock in the foreseeable future.

No sales of unregistered securities occurred during the first three quarters of 2011. On October 31, 2011, upon the closing of the Purchase Agreement between the Company, Homeland Capital Security Corporation (“Homeland”) and SEHC, pursuant to the terms of the Purchase Agreement, certain security holders of Homeland (“Management Investors”) purchased 813,007 restricted shares of the Company’s Common Stock for a total consideration of approximately \$1,000,000, or \$1.23 a share, which was the average of the closing prices of the Company’s Common Stock as quoted on the Nasdaq during the 30 trading days ending on the trading day immediately prior to the closing of the acquisition. The purchase of the Company’s Common Stock was pursuant to a private placement under Section 4(2) of the Securities Act of 1933, as amended (the “Act”) or Rule 506 of Regulation D promulgated under the Act. There were no purchases made by us or on behalf of us or any of our affiliated members of shares of our Common Stock during 2011.

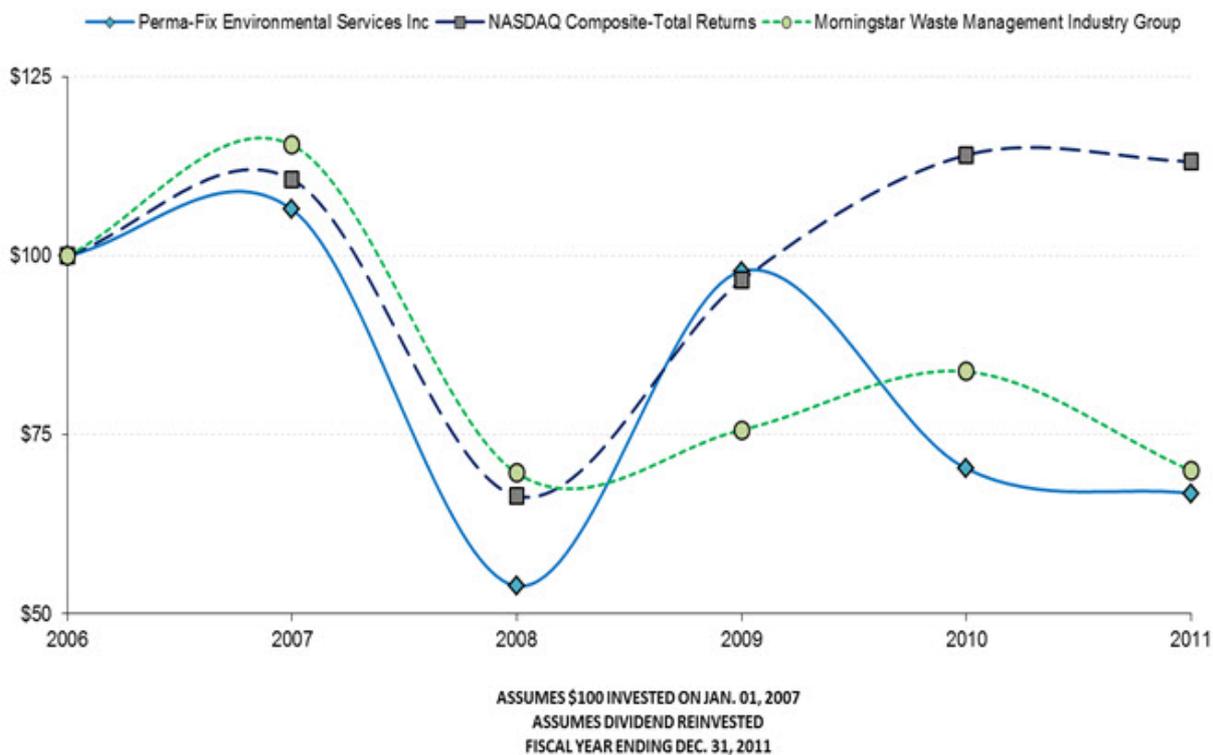
We have adopted a preferred share rights plan, which is designed to protect us against certain creeping acquisitions, open market purchases, and certain mergers and other combinations with acquiring companies. See “Item 1A. - Risk Factors – Our Preferred Share Rights Plan” as to further discussion relating to the terms of our preferred share rights plan.

Common Stock Price Performance Graph

The following Common Stock price performance graph compares the yearly change in the Company’s cumulative total stockholders’ returns on the Common Stock during the years 2007 through 2011, with the cumulative total return of the NASDAQ Market Index and the published industry index prepared by Morningstar and known as Morningstar Waste Management Industry Group (“Industry Index”) assuming the investment of \$100 on January 1, 2007.

The stockholder returns shown on the graph below are not necessarily indicative of future performance, and we will not make or endorse any predications as to future stockholder returns.

COMPARIZON OF CUMULATIVE TOTAL RETURN



Assumes \$100 invested in the Company on January 1, 2007, the Industry Index and the NASDAQ Market Index, and the reinvestment of dividends. The above five-year Cumulative Total Return Graph shall not be deemed to be “soliciting material” or to be filed with the Securities and Exchange Commission, nor shall such information be incorporated by reference by any general statement incorporating by reference this Form 10-K into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934 (collectively, the “Acts”) or be subject to the liabilities under Section 18 of the Securities Exchange Act of 1934, except to the extent that the Company specifically incorporates this information by reference, and shall not be deemed to be soliciting material or to be filed under such Acts.

ITEM 6. SELECTED FINANCIAL DATA

The financial data included in this table has been derived from our audited consolidated financial statements, which have been audited by BDO USA, LLP. Certain prior year amounts have been reclassified to conform with current year presentations. Amounts are in thousands (except for per share amounts). The information set forth below should be read in conjunction with “Management’s Discussion Analysis of Financial Condition and Results of Operations” and the consolidated financial statements of the Company and the notes thereto included elsewhere herein.

Statement of Operations Data:

	2011 ⁽²⁾	2010	2009	2008	2007 ⁽¹⁾
Revenues	\$ 118,610	\$ 97,790	\$ 92,393	\$ 64,553	\$ 54,102
Income (loss) from continuing operations	11,800	3,271	9,687	(818)	517
Income (loss) from discontinued operations, net of taxes	777	(663)	(65)	406	(9,727)
Gain on disposal of discontinued operations, net of taxes	1,509	—	—	2,323	—
Net income attributable to noncontrolling interest	22	—	—	—	—
Net income (loss) attributable to Perma-Fix					
Environmental Services, Inc. common stockholders	14,064	2,608	9,622	1,911	(9,210)
Income (loss) per common share attributable to Perma-Fix					
Environmental Services, Inc. stockholders - basic					
Continuing operations	.21	.06	.18	(.01)	.01
Discontinued operations	.01	(.01)	—	.01	(.19)
Disposal of discontinued operations	.03	—	—	.04	—
Net income (loss) per common share	.25	.05	.18	.04	(.18)
Income (loss) per common share attributable to Perma-Fix					
Environmental Services, Inc. stockholders - diluted					
Continuing operations	.21	.06	.18	(.01)	.01
Discontinued operations	.01	(.01)	—	.01	(.18)
Disposal of discontinued operations	.03	—	—	.04	—
Net income (loss) per common share	.25	.05	.18	.04	(.17)
Number of shares used in computing net income (loss)					
per common share - Basic	55,295	54,947	54,238	53,803	52,549
Number of shares and potential common shares used in computing net income (loss) per common share -					
Diluted	55,317	55,030	54,526	53,803	53,294

Balance Sheet Data:

	2011	2010	December 31, 2009	2008	2007
Working capital (deficit)	\$ 11,549	\$ 2,329	\$ 1,490	\$ (3,886)	\$ (17,154)
Total assets	164,103	125,315	126,000	123,690	126,031
Current and long-term debt	19,048	10,656	12,381	16,203	18,836
Total liabilities	69,555	46,811	51,196	60,769	66,018
Preferred Stock of subsidiary	1,285	1,285	1,285	1,285	1,285
Stockholders' equity	93,263	77,219	73,519	61,636	58,728

(1) Includes financial data of PFNWR acquired during 2007 and accounted for using the purchase method of accounting in which the results of operations are reported from the date of acquisition, June 13, 2007.

(2) Includes financial data of SEC acquired on October 31, 2011 and accounted for using the purchase method of accounting in which the results of operations are reported from the date of acquisition, October 31, 2011.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Certain statements contained within this "Management's Discussion and Analysis of Financial Condition and Results of Operations" may be deemed "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (collectively, the "Private Securities Litigation Reform Act of 1995"). See "Special Note regarding Forward-Looking Statements" contained in this report.

Management's discussion and analysis is based, among other things, upon our audited consolidated financial statements and includes our accounts and the accounts of our wholly-owned subsidiaries, after elimination of all significant intercompany balances and transactions.

The following discussion and analysis should be read in conjunction with our consolidated financial statements and the notes thereto included in Item 8 of this report.

As a result of the acquisition of Safety and Ecology Holdings Corporation ("SEHC") and its subsidiaries (collectively, "SEC") as discussed below, we made structure and reporting changes to our internal organization and changes to our operating segments to create better consistency, greater coordination and enhanced communication. This restructuring aligns the internal management and functional support assets based on company service offerings. Such restructuring also provides a functionally supported matrix management approach which better supports resource allocation by our chief operating decision maker and optimizes performance assessment. These changes resulted in our new reporting segments: Treatment Segment ("Treatment") and the Services Segment ("Services"). The Treatment Segment comprises of treatment, processing, and disposal services of nuclear, low-level radioactive, mixed (waste containing both hazardous and low-level radioactive constituents), hazardous and non-hazardous waste. The Services Segment comprises of on-site waste management, technical, and consulting services. As such, the reporting of financial results and pertinent discussions below are tailored to the two newly re-aligned reportable segments. All of the historical segment numbers presented in the Form 10-K have been recast to conform to this change in reportable segments

Review

We experienced significant improvement to our results in 2011 from 2010. Revenue increased \$20,820,000 or 21.3% from the twelve months ended December 31, 2010 to the corresponding period of 2011. The revenue increase included revenue of \$10,669,000 from the acquisition of SEC. Excluding revenue from this acquisition, revenue increased \$10,151,000 or 10.4% from 2010 to 2011. Treatment Segment revenue increased \$12,473,000 or 23.4% primarily due to higher waste volume. The increase in volume was partly attributed to the economic stimulus package (American Recovery and Reinvestment Act) enacted by Congress in February 2009, which provided additional funding for nuclear waste clean-up throughout the U.S. Department of Energy ("DOE") complex. Services Segment revenue decreased \$2,322,000 or 5.2% primarily due to reduced revenue generated from the CH Plateau Remediation Company ("CHPRC") subcontract ("CHPRC subcontract"). We were awarded the CHPRC subcontract in the second quarter of 2008 by CHPRC, a general contractor to the DOE. This subcontract entails performing a portion of facility operations and waste management activities for the DOE Hanford, Washington Site. The revenue reduction was the result of a reduction in workforce which occurred during September 30, 2011 under the CHPRC subcontract.

Gross profit increased \$8,173,000 or 39.6%, which included gross profit of \$306,000 from the SEC acquisition. Excluding gross profit from SEC, remaining gross profit increased approximately \$7,867,000 or 38.2% primarily due to increased treatment waste volume and cost reductions resulting from the reduction in workforce which occurred in our Services Segment and Treatment Segment in March 2011 and April 2011, respectively. Excluding the Selling, General, and Administrative (SG&A) expenses of SEC of approximately \$1,044,000 as discussed below, remaining SG&A increased \$1,159,000 or 8.7% primarily due to legal expenses incurred resulting from the SEC acquisition and higher incentive expense resulting from higher revenue and operating income.

Our working capital improved by \$9,220,000 to \$11,549,000 (which includes working capital of our discontinued operations and SEC) as of December 31, 2011, from a working capital of \$2,329,000 as of December 31, 2010. The improvement in our working capital was primarily due to the increase in cash and our trade receivables from increased revenue.

On October 31, 2011, we completed the acquisition of SEC pursuant to that certain Stock Purchase Agreement, dated July 15, 2011 (“Purchase Agreement”), between us, Homeland Capital Security Corporation (“Homeland”) and SEHC. SEC is an international provider of environmental, hazardous and radiological remediation infrastructure upgrades and nuclear energy services and is located in Knoxville, Tennessee. SEC provides remediation of nuclear materials for the U.S. government and other commercial customers. We acquired SEC for a total consideration of approximately \$17,885,000 determined as follows:

- (i) cash consideration of approximately \$14,885,000, after certain working capital closing adjustments. This cash consideration was reduced by approximately \$1,000,000 total consideration for our Common Stock purchased from us by certain security holders of Homeland as discussed below;
- (ii) \$2,500,000 unsecured, non-negotiable promissory note (the “Note”), bearing an annual rate of interest of 6%, payable in 36 monthly installments, which Note provides that we have the right to prepay such at any time without interest or penalty. We prepaid \$500,000 of the principal amount of the Note within 10 days of closing of the acquisition. The Note may be subject to offset of amounts Homeland owes us for indemnification for breach of, or failure to perform, certain terms and provisions of the Purchase Agreement if the Escrow Agreement has terminated pursuant to its terms or the amount held in escrow has been exhausted pursuant to the terms of the Purchase Agreement. Under the terms of the Note, in the event of a continuing event of default under the Note, Homeland has the option to convert the unpaid portion of the Note into our restricted shares of Common Stock equal to the quotient determined by dividing the principal amount owing under the Note and all accrued and unpaid interest thereon, plus certain expenses, by the average of the closing prices per share of our Common Stock as reported by the primary national securities exchange or automatic quotation system on which our Common Stock is traded during the 30 consecutive trading day period ending on the trading day immediately prior to receipt by us of Homeland’s written notice of its election to receive our Common Stock as a result of the event of default that is continuing; provided that the number of shares of our Common Stock to be issued to Homeland under the Note in the event of a continuing event of default plus the number of shares of our Common Stock issued to the Management Investors, as discussed below, shall not exceed 19.9% of the voting power of all of our voting securities issued and outstanding as of the date of the Purchase Agreement; and
- (iii) the sum of \$2,000,000 deposited in an escrow account to satisfy any claims that we may have against Homeland for indemnification pursuant to the Purchase Agreement and the Escrow Agreement, dated October 31, 2011 (“Escrow Agreement”). In January, 2012, we received \$1,500,000 of the amount deposited in the escrow account pursuant to the terms of an agreement entered into by Homeland, SEHC and us at closing of the acquisition.

Pursuant to the terms of the Purchase Agreement, upon closing of the Purchase Agreement, certain security holders of Homeland (“Management Investors”) purchased 813,007 restricted shares of our Common Stock for a total consideration of approximately \$1,000,000, or \$1.23 a share, which was the average of the closing prices of our Common Stock as quoted on the Nasdaq during the 30 trading days ending on the trading day immediately prior to the closing of the acquisition. The purchase of the our Common Stock was pursuant to a private placement under Section 4(2) of the Securities Act of 1933, as amended (the “Act”) or Rule 506 of Regulation D promulgated under the Act.

For the twelve months ending June 26, 2011, SEC’s consolidated revenues and net income were \$98,000,000 and \$578,000, respectively.

Outlook

We believe demand for our services will be subject to fluctuations due to a variety of factors beyond our control, including the current economic conditions, and the manner in which the government will be required to spend funding to remediate federal sites. Our operations depend, in large part, upon governmental funding, particularly funding levels at the DOE. In addition, our governmental contracts and subcontracts relating to activities at governmental sites are subject to termination or renegotiation on 30 days notice at the government's option. Significant reductions in the level of governmental funding due to the completion of most stimulus funded projects and federal budgets driven by temporary continuing resolutions could have a material adverse impact on our business, financial position, results of operations and cash flows.

Results of Operations

The reporting of financial results and pertinent discussions are tailored to two reportable segments: The Treatment Segment ("Treatment") and the Services Segment ("Services"):

Below are the results of continuing operations for our years ended December 31, 2011, 2010, and 2009 (amounts in thousands):

(Consolidated)	2011	%	2010	%	2009	%
Net Revenues	\$ 118,610	100.0	\$ 97,790	100.0	\$ 92,393	100.0
Cost of goods sold	89,822	75.7	77,175	78.9	67,912	73.5
Gross Profit	28,788	24.3	20,615	21.1	24,481	26.5
Selling, general and administrative	15,564	13.1	13,361	13.7	14,422	15.6
Research and development	1,502	1.3	921	.9	609	.7
Loss (gain) on disposal of property and equipment	(15)	—	138	.2	(7)	—
Income from operations	11,737	9.9	6,195	6.3	9,457	10.2
Interest income	58	.1	65	.1	145	.2
Interest expense	(657)	(.6)	(755)	(.8)	(1,639)	(1.8)
Interest expense – financing fees	(207)	(.2)	(412)	(.4)	(283)	(.3)
Loss on extinguishment of debt	(91)	(.1)	—	—	—	—
Other	5	—	24	—	21	—
Income from continuing operations before taxes	10,845	9.1	5,117	5.2	7,701	8.3
Income tax (benefit) expense	(955)	(.8)	1,846	1.9	(1,986)	(2.2)
Income from continuing operations	11,800	9.9	3,271	3.3	9,687	10.5

Summary - Years Ended December 31, 2011 and 2010

Net Revenue

Consolidated revenues from continuing operations increased \$20,820,000 for the year ended December 31, 2011, compared to the year ended December 31, 2010, as follows:

(In thousands)	2011	% Revenue	2010	% Revenue	Change	%
Treatment						
Government waste	\$ 30,656	25.8	\$ 28,346	29.0	\$ 2,310	8.1
CHPRC (waste processing)	19,499	16.4	9,960	10.2	9,539	95.8
Hazardous/non-hazardous	3,484	2.9	3,473	3.6	11	0.3
Other nuclear waste	12,197	10.4	11,584	11.8	613	5.3
Total	65,836	55.5	53,363	54.6	12,473	23.4
Services						
CHPRC (on-site)	39,637	33.4	41,969	42.9	(2,332)	(5.6)
Technical services	2,468	2.1	2,458	2.5	10	0.4
Acquisition 10/31/11 (SEC) ⁽¹⁾	10,669	9.0	—	—	10,669	100.0
Total	52,774	44.5	44,427	45.4	8,347	18.8
Total	\$ 118,610	100.0	\$ 97,790	100.0	\$ 20,820	21.3

⁽¹⁾ Includes approximately \$10,373,000 relating to services generated by the federal government, either directly (as prime contractor) or indirectly as a subcontractor to the federal government.

The Treatment Segment realized revenue growth of \$12,473,000 or 23.4% for the twelve months ended December 31, 2011 over the same period in 2010. Revenue from government generators (which includes revenue generated from the three existing waste processing contracts we have with CHPRC) increased by a total of \$11,849,000 or 30.9% primarily due to higher waste volume, which was partially offset by lower averaged priced waste. In the prior year, we generated revenue from the receipt and processing/disposal of higher activity waste streams received in late 2009 and 2010. Revenue from hazardous and non-hazardous waste was up slightly by \$11,000 or 0.3% primarily due to increased field service work, which was partially offset by lower waste volume. Other nuclear waste revenue increased approximately \$613,000 or 5.3% primarily due to increased waste volume which was partially reduced by lower average priced waste. Services revenue increased \$8,347,000 or 18.8% from 2010 to 2011. Total revenue within this segment included \$10,669,000 of revenue from SEC, which was acquired on October 31, 2011. Excluding the revenue of SEC, revenue from the Services Segment decreased \$2,322,000 or 5.2%. Revenue from the CHPRC subcontract, which is a cost plus award fee subcontract, decreased approximately \$2,332,000 or 5.6% primarily due to reduced headcount resulting from a reduction in workforce which occurred in September 2011 under this subcontract. The remaining revenue increase of \$10,000 within the Services Segment resulted from higher average billing rate which was mostly offset by decreased billable hours in our technical services area.

Cost of Goods Sold

Cost of goods sold increased \$12,647,000 for the year ended December 31, 2011, as compared to the year ended December 31, 2010, as follows:

(In thousands)	2011	% Revenue	2010	% Revenue	Change
Treatment	44,537	67.6	40,630	76.1	3,907
Services	\$ 34,922	82.9	\$ 36,545	82.3	\$ (1,623)
Acquisition 10/31/11 (SEC)	10,363	97.1	—	—	10,363
Total	\$ 89,822	75.7	\$ 77,175	78.9	\$ 12,647

Cost of goods sold for the Treatment Segment increased \$3,907,000 or 9.6% primarily due to increased revenue from increased waste volume. We saw increases in material and supplies, disposal costs, and transportation costs, which were reflective of the higher waste volume. We also recognized higher incentive expense resulting from higher revenue and operating income. Salaries, healthcare costs, and payroll related expenses were down resulting from reduction in workforce which occurred in April 2011 in our Diversified and Scientific Services, Inc. (“DSSI”) and East Tennessee Material & Energy Corporation (“M&EC”) operations but were partially reduced by the \$154,000 in severance expense incurred from the reduction in workforce. Excluding the cost of goods sold of SEC (which is under our Services Segment), the Services Segment cost of goods sold decreased \$1,623,000 or 4.4%, which included the cost of goods sold of approximately \$32,784,000 related to the CHPRC subcontract. Cost of goods sold for the CHPRC subcontract was approximately \$34,294,000 for the twelve months ended December 31, 2010. The decrease in cost of goods sold for the CHPRC subcontract of \$1,510,000 or 4.4% was consistent with the decrease in revenue for the CHPRC subcontract. The remaining decrease in Services Segment cost of goods sold of \$113,000 or 5.0% was primarily due to lower salaries, lower payroll related expenses and lower healthcare costs from lower headcount resulting from the reduction in workforce which occurred during March 2011 in our Schreiber, Yonley & Associates (“SYA”) operations. Included within cost of goods sold is depreciation and amortization expense of \$4,785,000 and \$4,438,000 for the years ended December 31, 2011 and 2010, respectively.

[Index](#)*Gross Profit*

Gross profit for the year ended December 31, 2011, was \$8,173,000 higher than 2010, as follows:

(In thousands)	2011	% Revenue	2010	% Revenue	Change
Treatment	21,299	32.4	12,733	23.9	8,566
Services	\$ 7,183	17.1	\$ 7,882	17.7	\$ (699)
Acquisition 10/31/11 (SEC)	306	2.9	—	—	306
Total	<u>\$ 28,788</u>	<u>24.3</u>	<u>\$ 20,615</u>	<u>21.1</u>	<u>\$ 8,173</u>

The Treatment Segment gross profit increased \$8,566,000 or 67.3% and gross margin increased to 32.4% from 23.9% from higher waste volume, revenue mix and the reduction in salaries and payroll related costs resulting from the reduction in workforce which occurred in April 2011. Excluding the gross profit of SEC (which is under our Services Segment), the Services Segment gross profit decreased \$699,000 or 8.9% primarily due to gross profit decrease of \$822,000 or 10.7% for the CHPRC subcontract. Gross profit for the CHPRC subcontract decreased \$822,000 to \$6,853,000 from \$7,675,000 for the twelve months ended December 31, 2011 and 2010, respectively, which was reflective of the revenue decrease under this subcontract. The gross margin of 17.3% and 18.3% for the same period, respectively, was in accordance with the contract fee provisions. The remaining Services Segment gross profit increase of \$123,000 or 59.4% and gross margin increase of 5.0% were primarily due to lower salaries and payroll related expenses from lower headcount resulting from the reduction in workforce which occurred during March 2011.

Selling, General and Administrative

Selling, general and administrative (“SG&A”) expenses increased \$2,203,000 for the year ended December 31, 2011, as compared to the corresponding period for 2010, as follows:

(In thousands)	2011	% Revenue	2010	% Revenue	Change
Administrative	\$ 6,832	—	\$ 6,106	—	\$ 726
Treatment	6,607	10.0	6,278	11.8	329
Services	1,081	2.6	977	2.2	104
Acquisition 10/31/11 (SEC)	1,044	9.8	—	—	1,044
Total	<u>\$ 15,564</u>	<u>13.1</u>	<u>\$ 13,361</u>	<u>13.7</u>	<u>\$ 2,203</u>

Excluding the SG&A of SEC of \$1,044,000, the increase in administrative SG&A was primarily the result of higher incentive costs resulting from the Company’s improved operating results, higher salary and payroll related, and higher legal expense (legal costs incurred 2011 totaled approximately \$594,000) incurred for the acquisition of SEC. The increase was partially offset by lower general and healthcare expenses. Treatment SG&A was higher primarily due to higher incentive expense resulting from higher revenue and operating income. The increase was partially offset by lower bad debt expense, lower outside service expense from fewer business/consulting matters, and lower healthcare and general costs. The increase in Services SG&A was primarily due to higher bad debt expense and higher non-reimbursable costs incurred related to the reduction in workforce under the CHPRC subcontract. Included in SG&A expenses is depreciation and amortization expense of 176,000 and \$92,000 for the years ended December 31, 2011, and 2010, respectively.

Research and Development

Research and development costs increased \$580,000 for the year ended December 31, 2011, as compared to the corresponding period of 2010.

(In thousands)	2011	% Revenue	2010	% Revenue	Change
Research and Development	\$ 1,502	1.3	\$ 921	0.9	\$ 581

Research and development costs consist primarily of employee salaries and benefits, laboratory costs, third party fees, and other related costs associated with the development and enhancement of new potential waste treatment processes. The increase was primarily due to increased payroll and lab costs from more research and development projects.

Interest Income

Interest income decreased approximately \$7,000 for the twelve months ended December 31, 2011, as compared to the corresponding period of 2010, respectively. The decrease was primarily the result of lower interest earned on the finite risk sinking fund due to lower interest rates, partially offset by interest income earned from cash in our money market account.

Interest Expense

Interest expense decreased \$98,000 for the year ended December 31, 2011, as compared to the corresponding period of 2010.

(In thousands)	2011	2010	Change	%
PNC interest	\$ 404	\$ 428	\$ (24)	(5.6)
Other	253	327	(74)	(22.6)
Total	<u>\$ 657</u>	<u>\$ 755</u>	<u>\$ (98)</u>	<u>(13.0)</u>

The decrease in interest expense for the twelve months ended December 31, 2011, as compared to the corresponding period in 2010 was primarily due to payoff of our Revolving Credit line and principal payoff of the Term Loan under our original Loan Agreement with PNC. In addition, interest was lower resulting from the final principal installment payment in June 2011 of the shareholder note in connection with the acquisition of Perma-Fix of Northwest, Inc. (“PFNW”) and its wholly owned subsidiary, PFNWR, and reduced loan balance from continuing

reductions to the principal on the promissory note dated May 8, 2009 entered into with Mr. William Lampson and Mr. Diehl Rettig (which was modified on April 18, 2011). The reduction in interest expense mentioned above was partially offset by higher interest expense from a \$1,322,000 promissory note entered into in September 2010 in connection with an earn-out amount we are required to pay from the acquisition of PFNW and PFNWR, higher Term Loan balance from the Amended Loan Agreement we entered into on October 31, 2011 resulting from the acquisition of SEC and the \$2,500,000 promissory note we entered into with Homeland resulting from the acquisition of SEC.

Interest Expense - Financing Fees

Interest expense-financing fees decreased approximately \$205,000 for the twelve months ended December 31, 2011, as compared to the corresponding period of 2010. The decrease was primarily due to the debt discount which became fully amortized as financing fees on May 8, 2011 in connection with the issuance of 200,000 shares of the Company's Common Stock and two Warrants for purchase up to 150,000 shares of the Company's Common Stock as consideration for the Company receiving a \$3,000,000 loan dated May 8, 2009. This decrease in interest expense-financing fees was partially offset by additional debt discount amortized related to the extension of the two Warrants as consideration for extending the due date of the loan from May 8, 2011 to April 8, 2012.

Loss on Extinguishment of Debt

The \$91,000 recorded was the result of the termination of our original Loan Agreement with PNC. On October 31, 2011, the Company entered into an Amended and Restated Revolving Credit, Term Loan and Security Agreement (“Amended Loan Agreement”) with PNC as a result of the acquisition of SEC.

Income Taxes- Valuation Allowance

We had a tax benefit of \$955,000 for 2011 as compared to a tax expense of \$1,846,000 for 2010. Our effective tax rate was a negative 8.8% in 2011, as compared to 36.1% for 2010. The tax benefit for 2011 was primarily the result of the partial release of our valuation allowance. For 2011 and 2010, we released \$4,687,000 and \$312,000 of valuation allowance, respectively.

Summary - Years Ended December 31, 2010 and 2009

Net Revenue

Consolidated revenues from continuing operations increased \$5,397,000 for the year ended December 31, 2010, compared to the year ended December 31, 2009, as follows:

(In thousands)	2010	% Revenue	2009	% Revenue	Change	% Change
Treatment						
Government waste	\$ 28,346	29.0	\$ 29,844	32.3	\$ (1,498)	(5.0)
CHPRC (waste processing)	9,960	10.2	10,943	11.8	(983)	(9.0)
Hazardous/non-hazardous	3,473	3.6	3,583	3.9	(110)	(3.1)
Other nuclear waste	11,584	11.8	10,415	11.3	1,169	11.2
Total	53,363	54.6	54,785	59.3	(1,422)	(2.6)
Services						
CHPRC (on-site)	41,969	42.9	34,226	37.0	7,743	22.6
Technical services	2,458	2.5	3,382	3.7	(924)	(27.3)
Total	44,427	45.4	37,608	40.7	6,819	18.1
Total	<u>\$ 97,790</u>	<u>100.0</u>	<u>\$ 92,393</u>	<u>100.0</u>	<u>\$ 5,397</u>	5.8

The Treatment Segment realized revenue decrease of \$1,422,000 or 2.6% decrease for the year ended December 31, 2010, over the same period in 2009. Revenue from government generators (which includes revenue generated from the three waste processing contracts from CHPRC) decreased by approximately \$2,481,000 or 6.1% primarily due to reduced waste volume, which was partially offset by higher average priced waste. Revenue from hazardous and non-hazardous waste was down slightly by \$110,000 or 3.1% primarily due to reduced volume of approximately 34.8% which was partially offset by higher average pricing increase of 32.8%. Other nuclear waste revenue increased approximately \$1,169,000 or 11.2% primarily due to increased waste volume from two customers, who accounted for approximately \$900,000 of the \$1,169,000 increase. The Services Segment realized revenue growth of \$6,819,000 or approximately 18.1%. The increase in this segment was primarily due to increase in labor hours from increased headcount under the CHPRC subcontract, which is a cost plus award fee subcontract. Revenue generated from technical services in this segment decreased approximately \$924,000 or 27.3% primarily due to decreased billable hours of 21.4% and decreased average billing rate of 4.3%.

Cost of Goods Sold

Cost of goods sold increased \$9,263,000 for the year ended December 31, 2011, as compared to the year ended December 31, 2010, as follows:

(In thousands)	2010	% Revenue	2009	% Revenue	Change
Treatment	40,630	76.1	38,115	69.6	2,515
Services	\$ 36,545	82.3	\$ 29,797	79.2	\$ 6,748
Total	<u>\$ 77,175</u>	<u>78.9</u>	<u>\$ 67,912</u>	<u>73.5</u>	<u>\$ 9,263</u>

Cost of goods sold for the Treatment Segment increased \$2,515,000 or 6.6% from the twelve months ended December 31, 2009 to the corresponding period of 2010. The cost of goods sold for 2009 included a reduction of approximately \$787,000 recorded in the third quarter of 2009 in disposal/transportation costs resulting from a change in estimate related to accrued costs to dispose of legacy waste that were assumed as part of the acquisition of our PFNWR facility in June 2007. The change in estimate was necessary due to our accumulation of new information that resulted in our identifying more efficient and cost effective ways to dispose of this waste. Excluding this legacy waste adjustment in 2009, the remaining Treatment costs increased approximately \$1,728,000 or 4.4%. We saw increases in transportation/disposal costs, payroll and healthcare related costs, depreciation expense, regulatory costs, and outside service expense. Excluding this legacy waste adjustment, cost as a percentage of revenue increased by 5.1% which reflected revenue mix. The Services cost of goods sold increased \$6,748,000 or 22.6%, which included the cost of goods sold of approximately \$34,294,000 related to the CHPRC subcontract. Cost of goods sold for the CHPRC subcontract for 2009 was approximately \$27,302,000. The increase in cost of goods sold for the CHPRC subcontract of \$6,992,000 or 25.6% was consistent with the increase in revenue for the CHPRC subcontract. The remaining Services cost of goods sold decreased \$244,000 or 9.8% primarily due to lower revenue resulting from reduced billing hours and average billing rate. We saw reduction in material and supplies, general expense, and significant reduction in bonus/commission expense primarily due to reduced revenue. Included within cost of goods sold is depreciation and amortization expense of \$4,438,000 and \$4,181,000 for the years ended December 31, 2010 and 2009, respectively.

Gross Profit

Gross profit for the year ended December 31, 2010, was \$3,866,000 lower than 2009, as follows:

(In thousands)	2010	% Revenue	2009	% Revenue	Change
Treatment	12,733	23.9	16,670	30.4	(3,937)
Services	\$ 7,882	17.7	\$ 7,811	20.8	\$ 71
Total	<u>\$ 20,615</u>	<u>21.1</u>	<u>\$ 24,481</u>	<u>26.5</u>	<u>\$ (3,866)</u>

The Treatment Segment gross profit decreased \$3,937,000 or 23.6%. Excluding the \$787,000 legacy disposal adjustment recorded in the third quarter of 2009 mentioned above, remaining Treatment Segment gross profit decreased \$3,150,000 or 19.8% primarily due to the revenue decrease from reduced treatment waste volume. The decrease in gross margin of 5.1% from 29.0% to 23.9% was primarily due to revenue mix. In the prior year, we saw higher volume of high activity waste. The Services Segment gross profit increased \$71,000, which included gross profit of approximately \$7,675,000 and \$6,924,000 in gross profit for the year 2010 and 2009, respectively, for the CHPRC subcontract, or \$751,000 increase from 2009 to 2010 on this subcontract. Gross margin on the CHPRC subcontract of approximately 18.3% and 20.2% for the twelve months ended December 31, 2010, and the corresponding period of 2009, respectively, was in accordance with the contract fee provisions. The remaining Services gross profit decreased approximately \$680,000 or 76.7% primarily due to reduction in external labor hours in technical/consulting services. The reduction in gross margin throughout the segments was also impacted by certain fixed costs that remain fairly consistent despite changes in revenue and revenue mix.

Selling, General and Administrative

Selling, general and administrative (“SG&A”) expenses decreased \$1,061,000 for the year ended December 31, 2010, as compared to the corresponding period for 2009, as follows:

(In thousands)	2010	%	2009	%	Change
		Revenue		Revenue	
Administrative	\$ 6,106	—	\$ 6,318	—	\$ (212)
Treatment	6,277	11.8	7,227	13.2	(950)
Services	978	2.2	877	2.3	101
Total	<u>\$ 13,361</u>	<u>13.7</u>	<u>\$ 14,422</u>	<u>15.6</u>	<u>\$ (1,061)</u>

Our SG&A for the twelve months ended December 31, 2010, decreased approximately \$1,061,000 or 7.4% over the corresponding period of 2009. The decrease in administrative SG&A was primarily the result of lower Management Incentive Plan (“MIP”) compensation based on year end financial results, lower stock compensation expense as we incurred approximately \$144,000 in stock compensation expense in 2009 from the extension of 270,000 fully vested non-qualified stock options to the former Chief Operating Officer, who resigned effective September 1, 2009, and lower healthcare costs. This decrease was reduced by higher outside service expense relating to corporate business and legal matters, business development initiatives, and information technology issues. We also saw higher travel costs. Treatment Segment SG&A was down approximately \$950,000 or 13.1% due mainly to reduction in bad debt expense of approximately \$289,000, lower bonus/commission of approximately \$506,000, lower payroll and healthcare related expenses, and lower general expenses in various categories as we continue our effort to reduce costs. The decrease was partially offset by higher outside services related to business development/consulting. Services Segment SG&A increased approximately \$101,000 or 11.5% primarily due to higher salaries and payroll related expenses from increased headcount relating to the CHPRC subcontract. In addition, we saw higher insurance costs. Included in SG&A expenses is depreciation and amortization expense of \$92,000 and \$140,000 for the years ended December 31, 2010, and 2009, respectively.

Research and Development

Research and development costs increased \$312,000 for the year ended December 31, 2010, as compared to the corresponding period of 2009.

(In thousands)	2010	%	2009	%	Change
		Revenue		Revenue	
Research and Development	\$ 921	0.9	\$ 609	0.7	\$ 312

Research and development costs consist primarily of employee salaries and benefits, laboratory costs, third party fees, and other related costs associated with the development and enhancement of new potential waste treatment processes. The increase for the year ended December 31, 2010, as compared to the corresponding period of 2009, was primarily due to contracted services we engaged in to perform research and development on behalf of the Company. In addition, higher salaries and benefit costs for increased R&D initiatives accounted for this increase.

Loss (gain) on Disposal of Property and Equipment

The loss on disposal of fixed assets for 2010 was primarily due to disposal of equipment replaced at our M&EC facility.

Interest Income

Interest income decreased \$80,000 for the year ended December 31, 2010, as compared to 2009. The decrease was primarily the result of lower interest earned on the finite risk sinking fund due to lower interest rates.

Interest Expense

Interest expense decreased \$884,000 for the year ended December 31, 2010, as compared to the corresponding period of 2009.

(In thousands)	2010	2009	Change	%
PNC interest	\$ 428	\$ 820	\$ (392)	(47.8)
Other	327	819	(492)	(60.1)
Total	<u>\$ 755</u>	<u>\$ 1,639</u>	<u>\$ (884)</u>	<u>(53.9)</u>

The decrease in interest expense for 2010 was primarily due to lower interest on our revolver and term note resulting from lower average balances and lower interest rate from an amendment entered into with PNC on January 25, 2010. In addition, we incurred lower interest expense resulting from reduced loan balance from continuing principal pay down on the shareholder note in connection with the acquisition of Perma-Fix of Northwest, Inc. ("PFNW") and its wholly owned subsidiary, Perma-Fix Northwest Richland, Inc. ("PFNWR") and the promissory note dated May 8, 2009 entered into with Mr. William Lampson and Mr. Diehl Rettig. Also, interest expense related to certain vendor invoices was lower throughout 2010 as compared to the corresponding period of 2009.

Interest Expense - Financing Fees

Interest expense-financing fees increased approximately \$129,000 from 2009 to 2010 primarily due to debt discount amortized as financing fees in connection with the issuance of 200,000 shares of the Company's Common Stock and two Warrants for purchase up to 150,000 shares of the Company's Common Stock as consideration for the Company receiving a \$3,000,000 loan from Mr. William Lampson and Mr. Diehl Rettig in May 2009.

Income Taxes- Valuation Allowance

The provision for income taxes was \$1,846,000 for 2010, compared to tax benefit of \$1,986,000 for 2009. Our effective tax rate was 36.1% in 2010, compared to negative 25.8% in 2009. The higher income tax expense for 2010 was the result of the partial release of our valuation allowance in 2009 related to federal net operating loss (NOL) carryforwards. For 2010 and 2009, we released \$312,000 and \$2,490,000 of valuation allowance, respectively.

Discontinued Operations and Divestitures

Our discontinued operations consist of our Perma-Fix of Fort Lauderdale, Inc. ("PFFL"), Perma-Fix of South Georgia, Inc. ("PFSG"), and Perma-Fix of Orlando, Inc. ("PFO") facilities which met the held for sale criteria under ASC 360, "Property, Plant, and Equipment" on October 6, 2010. Our discontinued operations also encompass our Perma-Fix of Maryland, Inc. ("PFMD"), Perma-Fix of Dayton, Inc. ("PFD"), and Perma-Fix Treatment Services, Inc. ("PFTS") facilities, which we completed the sale of substantially all of the assets on January 8, 2008, March 14, 2008, and May 30, 2008, respectively. Our discontinued operations also includes three previously shut down locations, Perma-Fix of Pittsburgh, Inc. ("PFP"), Perma-Fix of Michigan, Inc. ("PFMI"), and Perma-Fix of Memphis, Inc. ("PFM"), which were approved as discontinued operations by our Board of Directors effective November 8, 2005, October 4, 2004, and March 12, 1998, respectively.

On August 12, 2011, we completed the sale of our wholly-owned subsidiary, PFFL, pursuant to the terms of a Stock Purchase Agreement, dated June 13, 2011. In consideration for the sale of 100% of the capital stock of PFFL, the buyer paid us \$5,500,000 in cash at closing. The cash consideration is subject to certain working capital adjustments within one hundred twenty days after closing. The proceeds received were used to pay down our revolver and used for working capital with the remaining excess funds swept into a money market account. As of December 31, 2011, expenses related to the sale of PFFL totaled approximately \$160,000, of which \$157,000 has been paid. As of December 31, 2011, the gain on the sale of PFFL totaled approximately \$1,707,000 (net of taxes of \$1,067,000), which included a working capital adjustment of \$185,000 to be received from the buyer.

On October 14, 2011, we completed the sale of our wholly-owned subsidiary, PFO, pursuant to the terms of an Asset Purchase Agreement, dated August 12, 2011. In consideration for such assets, the buyer paid us \$2,000,000 in cash at the closing and assumed certain liabilities of PFO. The cash consideration is subject to certain working capital adjustments within one hundred twenty days after closing. The proceeds received were swept into a money market account. As of December 31, 2011, expenses related to the sale of PFO totaled approximately \$37,000, of which \$20,000 has been paid. We recorded a loss on the sale of PFO of \$198,000 (net of taxes of \$209,000). No working capital adjustment has been made on the sale of PFO.

We continue to market our PFSG facility for sale. As required by ASC 360, based on our internal financial valuations, we concluded that no tangible asset impairments existed for PFSG as of December 31, 2011. PFSG has no intangible assets.

Our discontinued operations generated revenues of \$6,931,000, \$9,248,000, and \$8,283,000, for the years ended December 31, 2011, 2010, and 2009, respectively, and had net income of \$2,286,000 and net losses of \$663,000 and \$65,000 for years ended December 31, 2011, 2010, and 2009, respectively. Our net income for the twelve months ended December 31, 2011 included total gain on the sale of our discontinued operations of \$1,509,000,000 (net of taxes) as discussed above. Operating loss from discontinued operations for the twelve months ended December 31, 2011 included total increase of \$338,000 to the environmental reserve at our PFM and PFMI subsidiary (see below "Environmental Liabilities" in this section for further details). Our loss from discontinued operations for the twelve months ended December 31, 2010, included an increase to our environmental reserve of \$844,000 and \$261,000 at our PFSG and PFD facility, respectively, and a \$167,000 final settlement we received from a lawsuit that we had filed against the buyer of substantially all of the assets of PFTS, A Clean Environment, Inc. ("ACE"), regarding certain liabilities which we believed ACE assumed and agreed to pay under the Purchase Agreement but which ACE had refused to pay. Loss from discontinued operations in 2009 included an increase to environmental reserve of \$281,000 at our PFSG facility due to reassessment of our remediation estimates. It also included a recovery of approximately \$400,000 in closure cost after the buyer of PFTS's asset obtained its own financial assurance bond.

Assets related to discontinued operations total \$2,343,000 and \$7,433,000 as of December 31, 2011, and 2010, respectively, and liabilities related to discontinued operations total \$3,972,000 and \$5,747,000 as of December 31, 2011 and 2010, respectively.

Liabilities within our discontinued operations include a pension payable of \$533,000 as of December 31, 2011. The pension plan withdrawal liability is a result of the termination of the union employees of PFMI. The PFMI union employees participate in the Central States Teamsters Pension Fund ("CST"), which provides that a partial or full termination of union employees may result in a withdrawal liability, due from PFMI to CST. The recorded liability is based upon a demand letter received from CST in August 2005 that provided for the payment of \$22,000 per month, including interest at 8% per annum, over an eight year period. This obligation is recorded as a long-term liability, with a current portion of \$215,000 that we expect to pay over the next year.

Liquidity and Capital Resources

Our capital requirements consist of general working capital needs, scheduled principal payments on our debt obligations and capital leases, remediation projects and planned capital expenditures. Our capital resources consist primarily of cash generated from operations, funds available under our revolving credit facility and proceeds from issuance of our Common Stock. Our capital resources are impacted by changes in accounts receivable as a result of revenue fluctuation, economic trends, collection activities, and the profitability of the segments.

At December 31, 2011, we had cash of \$12,055,000. The following table reflects the cash flow activities during 2011.

(In thousands)	2011
Cash provided by operating activities of continuing operations	\$ 23,498
Cash used in operating activities of discontinued operations	(2,739)
Cash used in investing activities of continuing operations	(20,676)
Cash provided by investing activities of discontinued operations	7,691
Cash provided by financing activities of continuing operations	4,337
Principal repayment of long-term debt for discontinued operations	(157)
Increase in cash	<u>\$ 11,954</u>

As of December 31, 2011, we were in a positive cash position. We attempt to move all excess cash into a Money Market Sweep account in order to maximize the interest earned. When we are in a net borrowing position, we attempt to move all excess cash balances immediately to the revolving credit facility, so as to reduce debt and interest expense. We utilize a centralized cash management system, which includes a remittance lock box and is structured to accelerate collection activities and reduce cash balances, as idle cash is moved without delay to the revolving credit facility or the Money Market account, if applicable. The cash balance at December 31, 2011, primarily represents cash provided by operations, remaining proceeds received from the divestiture of our PFFL subsidiary after pay off of our revolver debt, proceeds received from the divestiture of our PFO subsidiary, and minor petty cash and local account balances used for miscellaneous services and supplies.

Operating Activities

Accounts Receivable, net of allowances for doubtful accounts, totaled \$19,106,000 at December 31, 2011, an increase of \$10,565,000 over the December 31, 2010 balance of \$8,541,000. Our recent acquired SEC subsidiaries accounted for \$11,422,000 of the increase. Excluding the increase at SEC, the decrease of approximately \$857,000 was primarily due to improved collection efforts within both segments.

Unbilled receivables are generated by differences between invoicing timing and our performance based methodology used for revenue recognition purposes. As major processing and contract completion phases are completed and the costs incurred, we recognize the corresponding percentage of revenue. Within our Treatment Segment, we experience delays in processing invoices due to the complexity of the documentation that is required for invoicing, as well as the difference between completion of revenue recognition milestones and agreed upon invoicing terms, which results in unbilled receivables. The timing differences occur for several reasons: partially from delays in the final processing of all wastes associated with certain work orders and partially from delays for analytical testing that is required after we have processed waste but prior to our release of waste for disposal. The tasks relating to these delays usually take several months to complete. Unbilled receivables within our Nuclear Services Segment can result from: (1) revenue recognized by our Earned Value Management System ("EVMS" - a program which integrates project scope, schedule, and cost to provide an objective measure of project progress) but invoice milestone have not yet been met and/or (2) contract claims and pending change orders, including Requests for Equitable Adjustments ("REAs") when work has been performed and collection of revenue is reasonably assured.

As of December 31, 2011, unbilled receivables totaled \$10,295,000, a decrease of \$1,697,000 from the December 31, 2010 balance of \$11,992,000. Our recent SEC acquisition accounted for \$3,045,000 of the unbilled balance as of December 31, 2011. Excluding the unbilled receivables of SEC, the reduction of \$4,742,000 reflected the significant efforts we made during 2011 to reduce this balance within our Treatment Segment. The delays in processing invoices, as mentioned above, usually take several months to complete and the related receivables are normally considered collectible within twelve months. However, as we have historical data to review the timing of these delays, we realize that certain issues, including, but not limited to delays at our third party disposal site, can extend collection of some of these receivables greater than twelve months. Therefore, we have segregated the unbilled receivables between current and long term. The current portion of the unbilled receivables as of December 30, 2011 was \$9,871,000 (which included total unbilled receivables of \$3,045,000 for SEC), an increase of \$435,000 from the balance of \$9,436,000 as of December 31, 2010. The long term portion as of December 31, 2011 was \$424,000 (which included \$0 unbilled receivables for SEC), a decrease of \$2,132,000 from the balance of \$2,556,000 as of December 31, 2010.

As of December 31, 2011, total consolidated accounts payable was \$13,117,000, an increase of \$8,226,000 from the December 31, 2010 balance of \$4,891,000. Our recent SEC acquisition accounted for \$6,531,000 of this increase. The remaining increase of \$1,695,000 was primarily the result of payables relating to higher income taxes from higher net income and legal fees relating to the SEC acquisition. In addition, we continue to manage payment terms with our vendors to maximize our cash position throughout all segments.

Accrued expenses as of December 31, 2011, totaled \$9,533,000, an increase of \$3,537,000 over the December 31, 2010 balance of \$5,996,000. Our recent SEC acquisition accounted for \$2,024,000 of this increase. Accrued expenses are made up of accrued compensation, interest payable, insurance payable, certain tax accruals, and other miscellaneous accruals. The remainder of the increase was primarily due to higher incentives due to higher net income and operating income and higher insurance expenses.

Disposal/transportation accrual as of December 31, 2011, totaled \$1,957,000, a decrease of \$231,000 over the December 31, 2010 balance of \$2,188,000. Our disposal accrual can vary based on revenue mix and the timing of waste shipment for final disposal. We shipped more waste for disposal as compared to 2010 year end. In addition, the decrease resulted from treatment of legacy wastes at our PFNWR facility.

Our working capital was \$11,549,000 (which included working capital of our discontinued operations and SEC) as of December 31, 2011, as compared to a working capital of \$2,329,000 as of December 31, 2010. The significant improvement in our working capital was primarily due to the increase in our trade receivables from increased revenue and the increased in cash generated from our operations. Our working capital was negatively impacted by the increase in our unearned revenue and increases in our accounts payable as discussed above.

Investing Activities

During 2011, our purchases of capital equipment totaled approximately \$2,303,000. These expenditures were for improvements to operations primarily within the Treatment Segment. These capital expenditures were funded by the cash provided by operating activities. We have budgeted approximately \$2,681,000 for 2012 capital expenditures for our segments to expand our operations into new markets, reduce the cost of waste processing and handling, expand the range of wastes that can be accepted for treatment and processing, and to maintain permit compliance requirements. Certain of these budgeted projects are discretionary and may either be delayed until later in the year or deferred altogether. We have traditionally incurred actual capital spending totals for a given year less than the initial budget amount. The initiation and timing of projects are also determined by financing alternatives or funds available for such capital projects.

The Company has a 25-year finite risk insurance policy entered into in June 2003 with Chartis, a subsidiary of American International Group, Inc. ("AIG"), which provides financial assurance to the applicable states for our permitted facilities in the event of unforeseen closure. Prior to obtaining or renewing operating permits, we are required to provide financial assurance that guarantees to the states that in the event of closure, our permitted facilities will be closed in accordance with the regulations. The policy, as amended in 2009, provides for a maximum allowable coverage of \$39,000,000 and has available capacity to allow for annual inflation and other performance and surety bond requirements. This finite risk insurance policy requires the following payments:

- an upfront payment of \$4,000,000, of which \$2,766,000 represents the full premium for the 25-year term of the policy, and the remaining \$1,234,000, is to be deposited in a sinking fund account representing a restricted cash account;
- seven annual installments of \$1,004,000 starting February 2004, of which \$991,000 is to be deposited in a sinking fund account, with the remaining \$13,000 representing a terrorism premium;
- a payment of \$2,000,000 due on March 6, 2009, of which approximately \$1,655,000 is to be deposited into a sinking fund account, with the remaining representing a fee payable to Chartis;

- three yearly payments of approximately \$1,073,000 payable starting December 31, 2009, of which \$888,000 is to be deposited into a sinking fund account, with the remaining representing a fee payable to Chartis. The second of the third payments was made in January 2011; and
- a payment of \$2,008,000 (payable in February 2011), of which \$1,982,000 is to be deposited in a sinking fund account, with the remaining \$26,000 representing a terrorism premium.

During February 2011, the \$2,008,000 and the \$1,073,000 installment payments which had remained payable on the closure policy were amended as follows: \$1,004,000 was to be paid by February 2011, of which \$991,000 was to be deposited into a sinking fund, with the remaining \$13,000 representing a terrorism premium; \$1,073,000 was due December 2011, of which \$888,000 was to be deposited into a sinking fund account, with the remaining representing a fee payable to Chartis; and a final payment of \$1,054,000 due February 2012, of which \$991,000 was to be deposited into a sinking fund, \$13,000 representing a terrorism premium, and the remaining \$50,000 representing a fee payable to Chartis. We paid the \$1,004,000, \$1,073,000, and \$1,054,000 in February 2011, January 2012, and February 2012, respectively, under the amended terms. As a result of the revision to the payment terms, the maximum allowable coverage under this closure policy was revised to \$36,431,000 as of February 2011, with such maximum allowable coverage increased to \$37,300,000 in March 2011. The maximum allowable coverage was increased to \$39,000,000 upon final payment of the \$1,054,000 in February 2012.

As of December 31, 2011, our total financial coverage amount under this policy totaled \$36,541,000. We have recorded \$13,473,000 in our sinking fund related to the policy noted above on the balance sheet, which includes interest earned of \$881,000 on the sinking fund as of December 31, 2011. Interest income for the twelve months ended December 31, 2011, was approximately \$34,000. On the fourth and subsequent anniversaries of the contract inception, we may elect to terminate this contract. If we so elect, Chartis is obligated to pay us an amount equal to 100% of the sinking fund account balance in return for complete releases of liability from both us and any applicable regulatory agency using this policy as an instrument to comply with financial assurance requirements.

In August 2007, we entered into a second finite risk insurance policy for our PFNWR facility with Chartis. The policy provided an initial \$7,800,000 of financial assurance coverage with an annual growth rate of 1.5%, which at the end of the four year term policy, provides a maximum coverage of \$8,200,000. We have the option to renew this policy at the end of the four year term. The policy requires total payments of \$7,158,000, consisting of an initial payment of \$1,363,000 (\$1,106,000 represented premium on the policy and the remaining was deposited into a sinking fund account), two annual payments of \$1,520,000 (for each annual payment, \$1,344,000 was deposited into a sinking fund and the remaining represented premium), and an additional \$2,755,000 payment (paid quarterly and all deposited into a sinking fund). We have made all of the payments. As of December 31, 2011, we have recorded \$5,881,000 in our sinking fund related to this policy on the balance sheet, which includes interest earned of \$181,000 on the sinking fund as of December 31, 2011. Interest income for the twelve months ended December 31, 2011 totaled approximately \$17,000. On July 31, 2011, the policy was renewed for an additional year which required a \$46,000 fee. We have the option to renew this policy annually going forward with a similar fee which will be determined at the time of renewal. All other terms of the policy remain substantially unchanged.

Financing Activities

We entered into a Revolving Credit, Term Loan and Security Agreement (“Loan Agreement”) with PNC Bank, National Association, a national banking association (“PNC”) acting as agent (“Agent”) for lenders, and as issuing bank. The Agreement, as amended on numerous occasions since it was executed, provided for a term loan (“Term Loan”) in the amount of \$7,000,000, which required monthly principal installments of \$83,000 (based upon a seven-year amortization). The Agreement also provided for a revolving line of credit (“Revolving Credit”) with a maximum principal amount outstanding at any one time of \$18,000,000. The Revolving Credit advances were subject to limitations of an amount up to the sum of (a) up to 85% of Commercial Receivables aged 90 days or less from invoice date, (b) up to 85% of Commercial Broker Receivables aged up to 120 days from invoice date, (c) up to 85% of acceptable Government Agency Receivables aged up to 150 days from invoice date, and (d) up to 50% of acceptable unbilled amounts aged up to 60 days, less (e) reserves the Agent reasonably deems proper and necessary.

In connection with the acquisition of SEC as discussed previously, we entered into an Amended and Restated Revolving Credit, Term Loan and Security Agreement, dated October 31, 2011 (“Amended Loan Agreement”), with PNC, replacing our previous Loan Agreement with PNC discussed above. The Amended Loan Agreement provides us with the following credit facilities:

- up to \$25,000,000 revolving credit facility, subject to the amount of borrowings based on a percentage of eligible receivables (as same to Loan Agreement noted above) and subject to certain reserves;
- a term loan of \$16,000,000, which requires monthly installments of approximately \$190,000 (based on a seven-year amortization); and
- equipment line of credit up to \$2,500,000, subject to certain limitations.

The Amended Loan Agreement terminates as of October 31, 2016, unless sooner terminated.

We have the option of paying an annual rate of interest due on the revolving credit facility at prime plus 2% or London Inter Bank Offer Rate (“LIBOR”) plus 3% and the term loan and equipment credit facilities at prime plus 2.5% or LIBOR plus 3.5%.

As a condition of the Amended Loan Agreement, we paid the remaining balance due under the term loan under our previous Loan Agreement totaling approximately \$3,833,000 using our credit facilities under the Amended Loan Agreement. In connection with the Amended Loan Agreement, we paid PNC a fee of \$217,500 and incurred other direct costs of approximately \$265,000, which are being amortized over the term of the Amended Loan Agreement as interest expense – financing fees. As a result of the termination of the original Loan Agreement with PNC, we recorded approximately \$91,000 in loss on extinguishment of debt in accordance with ASC 470-50, “Debt – Modifications and Extinguishments”. As of December 31, 2011, the excess availability under our revolving credit was \$15,382,000 based on our eligible receivables.

Pursuant to the Amended Loan Agreement, we may terminate the Amended Loan Agreement upon 90 days’ prior written notice upon payment in full of our obligations under the Amended Loan Agreement. We have agreed to pay PNC 1.0% of the total financing in the event we pay off our obligations on or before October 31, 2012 and 1/2% of the total financing if we pay off our obligations after October 31, 2012 but prior to or on October 31, 2013. No early termination fee shall apply if we pay off our obligations under the Amended Loan Agreement after October 31, 2013.

Our credit facility with PNC Bank contains certain financial covenants, along with customary representations and warranties. A breach of any of these financial covenants, unless waived by PNC, could result in a default under our credit facility triggering our lender to immediately require the repayment of all outstanding debt under our credit facility and terminate all commitments to extend further credit. We have met our financial covenants in each of the quarters in 2011 and we expect to meet our financial covenants in 2012. The following table illustrates the most significant financial covenants under our credit facility and reflects the quarterly compliance required by the terms of our senior credit facility as of December 31, 2011:

(Dollars in thousands)	Quarterly Requirement	1st Quarter Actual	2nd Quarter Actual	3rd Quarter Actual	4th Quarter Actual
	(dollars in thousands)				
PNC Credit Facility					
Fixed charge coverage ratio	1:25:1	1:35:1	1:54:1	2.89:1	2.05:1
Minimum tangible adjusted net worth	\$ 30,000	\$ 61,707	\$ 63,585	\$ 69,717	\$ 66,200

In conjunction with our acquisition of Perma-Fix Northwest, Inc. (“PFNW”), we agreed to pay shareholders of Nuvotec (n/k/a PFW) that qualified as accredited investors (which includes Mr. Robert Ferguson, a member of our Board of Directors), pursuant to Rule 501 of Regulation D promulgated under the Securities Act of 1933, \$2,500,000, with principal payable in equal installments of \$833,333 on June 30, 2009, June 30, 2010, and June 30, 2011. Interest is accrued on the outstanding principal balance at 8.25% starting in June 2007 and is payable on June 30, 2008, June 30, 2009, June 30, 2010, and June 30, 2011. On June 30, 2011, we made the final principal installment of \$833,333 plus accrued interest of \$69,000. See “Related Party Transactions” in this section for information regarding Mr. Robert Ferguson.

In connection with the acquisition of SEC, we entered into a \$2,500,000 unsecured, non-negotiable promissory note (the "Note") on October 31, 2011, bearing an annual rate of interest of 6%, payable in 36 monthly installments, with Homeland. The Note provides that we have the right to prepay such at any time without interest or penalty. We prepaid \$500,000 of the principal amount of the Note within 10 days of closing of the acquisition. The Note is subject to offset of amounts Homeland owes us under certain terms and provisions of the Purchase Agreement and the Note. As result of the prepayment of \$500,000, we are required to pay monthly payments of approximately \$76,000 (which includes interest) starting November 15, 2011, with a final payment of approximately \$15,500 due on March 15, 2014.

The Company has a promissory note dated May 8, 2009, with William N. Lampson and Diehl Rettig (collectively, the "Lenders") for \$3,000,000. The Lenders were formerly shareholders of PFNW prior to our acquisition of PFNW and PFNWR and are also stockholders of the Company having received shares of our Common Stock in connection with our acquisition of PFNW and PFNWR. The promissory note provided for monthly principal repayment of approximately \$87,000 plus accrued interest, starting June 8, 2009, with interest payable at LIBOR plus 4.5%, with LIBOR at least 1.5%. Any unpaid principal balance along with accrued interest was due May 8, 2011. We paid approximately \$22,000 in closing costs on the promissory note which was being amortized over the term of the note. The promissory note may be prepaid at any time by the Company without penalty. As consideration of the Company receiving this loan, we issued a Warrant to Mr. Lampson and a Warrant to Mr. Diehl to purchase up to 135,000 and 15,000 shares, respectively, of the Company's Common Stock at an exercise price of \$1.50 per share. The Warrants were exercisable six months from May 8, 2009 and were to expire on May 8, 2011. We also issued an aggregate of 200,000 shares of the Company's Common Stock, with Mr. Lampson receiving 180,000 shares and Mr. Rettig receiving 20,000 shares of the Company's Common Stock. The fair value of the Common Stock and Warrants on the date of issuance was estimated to be \$476,000 and \$190,000, respectively. The fair value of the Common Stock and Warrants was recorded as a debt discount and was being amortized over the term of the loan as interest expense – financing fees. On April 18, 2011, we entered into an amendment to the promissory note whereby the remaining principal balance on the promissory note of approximately \$990,000 is to be repaid in twelve monthly principal payments of approximately \$82,500 plus accrued interest, starting May 8, 2011, with interest payable at the same rate of the original loan. As consideration of the amended loan, the original Warrants issued to Mr. Lampson and to Mr. Rettig which were to expire on May 8, 2011, were extended to May 8, 2012 at the same exercise price (Mr. Rettig is now deceased; accordingly, the amended Warrant and the remaining portion of the note payable to Mr. Rettig is now held by and payable to his personal representative or estate). We accounted for the amended loan as a modification in accordance with ASC 470-50, "Debt – Modifications and Extinguishments". At the date of the loan modification, unamortized debt discount and fees on the original loan and the fair value of the modified Warrants were determined to be approximately \$42,000, which is being amortized as debt discount over the term of the modified loan as interest expense-financing fees in accordance to ASC 470-50. See "Related Party Transactions" in this section for Mr. Robert Ferguson's (a member of our Board of Directors) acquisition of one-half of Mr. Lampson's Warrant to purchase up to 65,000 shares of the Company's Common Stock).

In connection with the acquisition of PFNW and PFNWR in June 2007, we are required to pay to those former shareholders of Nuvotec (including Mr. Robert Ferguson, a member of our Board of Directors) an earn-out amount upon meeting certain conditions for each measurement year ended June 30, 2008 to June 30, 2011, with the aggregate of the full earn-out amount not to exceed \$4,552,000, pursuant to the Merger Agreement, as amended ("Agreement") (See "Related Party Transactions" in this section for further information regarding Mr. Ferguson). Under the Agreement, the earn-out amount to be paid for any particular measurement year is to be an amount equal to 10% of the amount that the revenues for our nuclear business (as defined) for such measurement year exceeds the budgeted amount of revenues for our nuclear business for that particular period. No earn-out was required to be paid for measurement year 2008, and we paid \$734,000 in earn out for measurement year 2009 in 2009. We were required to pay \$2,978,000 in earn-out prior to the Offset Amounts as discussed below for measurement year ended June 30, 2010. Pursuant to the Agreement, any indemnification obligations payable to the Company by the former shareholders of Nuvotec will be deducted ("Offset Amount") from any earn-out amounts payable by the Company for the measurement year ended June 30, 2010 and June 30, 2011. Pursuant to the Agreement, the aggregate amount of any Offset Amount may total up to \$1,000,000, except an Offset Amount is unlimited as to indemnification relating to liabilities for taxes, misrepresentation or inaccuracies with respect to the capitalization of Nuvotec or PECoS (n/k/a "PFNWR") or for willful or reckless misrepresentation of any representation, warranty or covenant. For the \$2,978,000 in earn-out for measurement year ended June 30, 2010, we identified an Offset Amount of approximately \$93,000 relating to an excise tax issue and a refund request from a PECoS customer in connection with services for waste treatment prior to our acquisition of PFNWR and PFNW. We also identified an anticipated Offset Amount of \$563,000 in connection with the receipt of nonconforming waste at the PFNWR facility prior to our acquisition of PFNWR and PFNW. We are currently involved in litigation with the party that delivered the nonconforming waste to the facility prior to our acquisition of PFNWR and PFNW. After the Offset Amount of \$93,000 and the anticipated Offset Amount of \$563,000, we were required to pay \$2,322,000 in earn-out amount for measurement year ended June 30, 2010. In September 2010, we paid \$1,000,000 of the \$2,322,000 in earn-out amount, with the remaining \$1,322,000 payable in a promissory note at an annual interest rate of 6.0%, as permitted under the Agreement, as amended. The promissory note provides for thirty six equal monthly payments of approximately \$40,000, consisting of interest and principal, starting October 15, 2010. The promissory note may be prepaid at any time without penalty. For measurement year ended June 30, 2011, we determined that the remaining \$840,000 in earn-out amount was earned, which we paid on October 3, 2011.

On April 8, 2009, the Company filed a shelf registration statement on Form S-3 with the U.S. Securities and Exchange Commission (“The Commission”), which was declared effective by The Commission on June 26, 2009. The shelf registration statement gives the Company the ability to sell up to 5,000,000 shares of its Common Stock from time to time and through one or more methods of distribution, subject to market conditions and the Company’s capital needs at that time. The terms of any offering under the registration statement will be established at the time of the offering. The Company does not have any immediate plans or current commitments to issue shares under the registration statement. **This disclosure shall not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of these securities in any state in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of such state.**

On October 7, 2011, the Company’s Board of Directors authorized a repurchase program of up to \$3,000,000 of the Company’s Common Stock. The Company may purchase Common Stock through open market and privately negotiated transactions at prices deemed appropriate by management. The timing, the amount of repurchase transactions and the prices paid for the stock under this program will depend on market conditions as well as corporate and regulatory limitations, including blackout period restrictions. The Board approved the repurchase plan in consideration of the Company’s improved cash position and current market volatility. We plan to fund any repurchases under this program through our internal cash flow and/or borrowing under our line of credit. As of the date of this report, we have not repurchased any of our Common Stock under the program as we continue to evaluate this repurchase program within our internal cash flow and/or borrowings under our line of credit.

In summary, we believe that we have made significant progress and continue to take steps to improve our operations and liquidity and to invest working capital into our facilities to fund capital additions in our Segments. We currently are in a positive cash position. We paid off our revolver debt from cash collected from the reduction in our unbilled receivables, proceeds received from the sale of our discontinued operations, and cash generated from the increase in revenue. Although there are no assurances, we believe that our cash flows from operations and our available liquidity from amended and restated line of credit are sufficient to service the Company’s current obligations and the current obligations resulting from the acquisition of SEHC and its subsidiaries.

Contractual Obligations

The following table summarizes our contractual obligations at December 31, 2011, and the effect such obligations are expected to have on our liquidity and cash flow in future periods, (in thousands):

Contractual Obligations	Total	Payments due by period			
		2012	2013- 2014	2015 - 2016	After 2016
Long-term debt ⁽¹⁾	\$ 18,955	\$ 3,948	\$ 6,054	\$ 8,953	∞ —
Interest on fixed rate long-term debt ⁽²⁾	175	126	49	—	—
Interest on variable rate debt ⁽³⁾	1,974	587	891	496	—
Operating leases	4,148	945	1,372	1,220	611
Finite risk policy ⁽⁴⁾	2,127	2,127	—	—	—
Pension withdrawal liability ⁽⁵⁾	533	232	301	—	—
Environmental contingencies ⁽⁶⁾	2,002	1,138	406	118	340
Total contractual obligations	<u>\$ 29,418</u>	<u>\$ 9,103</u>	<u>\$ 9,073</u>	<u>\$ 10,291</u>	<u>\$ 951</u>

⁽¹⁾ Amount excludes debt discount of approximately \$12,000 in connection with an amended loan dated April 18, 2011, between the Company and Mr. William Lampson and the estate of Mr. Diehl Rettig. See “Liquidity and Capital Resources of the Company – Financing Activities” earlier in this Management’s Discussion and Analysis for further discussion on the debt discount.

⁽²⁾ The Company entered into a promissory note dated September 28, 2010, in the principal amount of \$1,322,000 at an annual interest rate of 6.0%, with the former shareholders of Nuvotec (n/k/a PFNW) in connection with an earn-out amount that we are required to pay upon meeting certain conditions for each measurement year between June 30, 2008 to June 30, 2011, as result of our acquisition of PFNW and PFNWR. Also, in connection with the acquisition of SEHC and its subsidiaries on October 31, 2011, the Company entered into a promissory note in the principal amount of \$2,500,000 at an annual interest rate of 6%, with Homeland. The Company prepaid \$500,000 of the principal within 10 days of the closing of the acquisition. See “Liquidity and Capital Resources – Financing Activities” for further information on these promissory notes.

⁽³⁾ We have variable interest rates on our Term Loan and Revolving Credit of 2.5% and 2.0%, respectively, over the prime rate of interest, or variable interest rates on our Term Loan and Revolving Credit of 3.5% and 3.0%, respectively, over LIBOR. Our calculation of interest on our Term Loan and Revolving Credit was estimated using the more favorable LIBOR option of approximately 4.0% and 3.5% (assuming LIBOR of .5%), respectively, in years 2012 to October 31, 2016. In addition, we have a \$990,000 promissory note dated April 18, 2011, as amended, with Mr. William Lampson and the estate of Mr. Diehl Rettig which pays interest at LIBOR plus 4.5%, with LIBOR of at least 1.5%. See “Liquidity and Capital Resources – Financing Activities” for further information on this promissory note and for the Amended and Restated Revolving Credit, Term Loan and Security Agreement entered into with PNC Bank on October 31, 2011.

⁽⁴⁾ Our finite risk insurance policy provides financial assurance guarantees to the states in the event of unforeseen closure of our permitted facilities. See Liquidity and Capital Resources – Investing activities earlier in this Management’s Discussion and Analysis for further discussion on our finite risk policy.

⁽⁵⁾ The pension withdrawal liability is the estimated liability to us upon termination of our union employees at our discontinued operation, PFMI and remains the financial obligations of the Company. See Discontinued Operations earlier in this section for discussion on our discontinued operations.

⁽⁶⁾ The environmental contingencies and related assumptions are discussed further in the Environmental Contingencies section of this Management’s Discussion and Analysis, and are based on estimated cash flow spending for these liabilities. The environmental contingencies noted here are for PFMI, PFM, PFSG, and PFD which are the financial obligations of the Company. The environmental liability, as it relates to the remediation of the EPS site assumed by the Company as a result of the original acquisition of the PFD facility, was retained by the Company upon the sale of PFD in March 2008.

Critical Accounting Estimates

In preparing the consolidated financial statements in conformity with generally accepted accounting principles in the United States of America, management makes estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements, as well as, the reported amounts of revenues and expenses during the reporting period. We believe the following critical accounting policies affect the more significant estimates used in preparation of the consolidated financial statements:

Revenue Recognition Estimates. We utilize a performance based methodology for purposes of revenue recognition in our Treatment Segment. As we accept more complex waste streams in this segment, the treatment of those waste streams become more complicated and time consuming. We have continued to enhance our waste tracking capabilities and systems, which has enabled us to better match the revenue earned to the processing phases achieved using a proportional performance method. The major processing phases are receipt, treatment/processing and shipment/final disposition. Upon receiving mixed waste we recognize a certain percentage (ranging from 7.5% to 33%) of revenue as we incur costs for transportation, analytical and labor associated with the receipt of mixed waste. As the waste is processed, shipped and disposed of we recognize the remaining revenue and the associated costs of transportation and burial. We review and evaluate our revenue recognition estimates and policies on an annual basis.

For our Services Segment, revenues on services are performed under time and material, fixed price, and cost-reimbursement contracts. Revenues and costs associated with fixed price contracts are recognized using the percentage of completion (efforts expended) method. Revenues and costs associated with time and material contracts are recognized as revenue when earned and costs are incurred.

Under cost reimbursement contracts, we are reimbursed for costs incurred plus a certain percentage markup for indirect costs, in accordance with contract provision. Costs incurred on excess of contract funding may be renegotiated for reimbursement. We also earn a fee based on the approved costs to complete the contract. We recognize this fee using the proportion of costs incurred to total estimated contract costs.

Contract costs include all direct labor, material and other non-labor costs and those indirect costs related to contract support, such as depreciation, fringe benefits, overhead labor, supplies, tools, repairs and equipment rental. Provisions for estimated losses on uncompleted contracts are made in the period in which such losses are determined. Changes in job performance, job conditions and estimated profitability, including those arising from contract penalty provisions and final contract settlements may result in revisions to costs and income and are recognized in the period in which the revisions are determined.

Consulting revenues are recognized as services are rendered. The services provided are based on billable hours and revenues are recognized in relation to incurred labor and consulting costs. Out of pocket costs reimbursed by customers are also included in revenues.

The liability, "billings in excess of costs and estimated earnings", represents billings in excess of revenues recognized and accrued costs to jobs.

Allowance for Doubtful Accounts. The carrying amount of accounts receivable is reduced by an allowance for doubtful accounts, which is a valuation allowance that reflects management's best estimate of the amounts that are uncollectible. We regularly review all accounts receivable balances that exceed 60 days from the invoice date and based on an assessment of current credit worthiness, estimate the portion, if any, of the balances that are uncollectible. Specific accounts that are deemed to be uncollectible are reserved at 100% of their outstanding balance. The remaining balances aged over 60 days have a percentage applied by aging category (5% for balances 61-90 days, 20% for balances 91-120 days and 40% for balances over 120 days aged), based on a historical valuation, that allows us to calculate the total reserve required. This allowance was approximately 0.2% of revenue for 2011 and 1.2%, of accounts receivable as of December 31, 2011. Additionally, this allowance was approximately 0.2% of revenue for 2010 and 2.5%, of accounts receivable as of December 31, 2010.

Intangible Assets. Intangible assets relating to acquired businesses consist primarily of the cost of purchased businesses in excess of the estimated fair value of net identifiable assets acquired or goodwill and the recognized value of the permits required to operate the business. We continually reevaluate the propriety of the carrying amount of permits and goodwill to determine whether current events and circumstances warrant adjustments to the carrying value. We test each Reporting Unit's goodwill and permits, separately, for impairment, annually as of October 1. Our annual impairment test as of October 1, 2011 and 2010 resulted in no impairment of goodwill and permits. Our October 1, 2011 and 2010 impairment tests were performed based on our previous two reporting units: 1) Nuclear reporting unit, which included all of our treatment operations and operation under our CHPRC subcontract, and 2) Engineering reporting unit, which included our SYA subsidiary operations. The methodology utilized in performing this test estimates the fair value of our operating segments using a discounted cash flow valuation approach. Those cash flow estimates incorporate assumptions that marketplace participants would use in their estimates of fair value. The most significant assumptions used in the discounted cash flow valuation regarding each of the Reporting Unit's fair value in connection with goodwill valuations are: (1) detailed five year cash flow projections, (2) the risk adjusted discount rate, and (3) the expected long-term growth rate. The primary drivers of the cash flow projection in 2011 include sales revenue and projected margin which are based on our current revenue and projected government funding as it relates to our existing government contracts. The risk adjusted discount rate represents the weighted average cost of capital and is established based on (1) the 20 year risk-free rate, which is impacted by events external to our business, such as investor expectation regarding economic activity, (2) our required rate of return on equity, and (3) the current after tax rate of return on debt.

As a result of the acquisition of SEC on October 31, 2011, during the fourth quarter of 2011, the Company made structure and reporting changes to its internal organization and changes to its operating segments to create better consistency, greater coordination and enhanced communication. This restructuring aligns the internal management and functional support assets based on company service offerings and better reflects how our chief operating decision maker allocates resources and assesses performance. These changes resulted in four reporting units: (1) SYA reporting unit - our SYA subsidiary operations; (2) SEC reporting unit - our SEC operations; (3) Treatment reporting unit - our treatment operations; and (4) CHPRC reporting unit - our operations under the CHPRC subcontract. We reassigned approximately \$3,637,000 of the \$14,840,000 goodwill from our previous Nuclear reporting unit to our CHPRC reporting unit using a relative fair value approach in accordance to ASC 350, "Intangibles - Goodwill and Other" as a result of the change in reporting units. As a result of the restructuring of our reporting units, we concluded that we had an interim triggering event, and, therefore, we performed an interim goodwill impairment test for our treatment reporting unit as of October 1, 2011 which did not result in any impairment. We will perform all future goodwill impairment analysis on the new four reporting units.

Intangible assets that have definite useful lives are amortized using the straight-line method over the estimated useful lives and are excluded from our annual intangible asset valuation review conducted as of October 1. The Company also has one definite-lived permit which was excluded from the impairment review as noted above. This permit of approximately \$545,000 was capitalized in 2009 in connection with the authorization issued by the U.S. EPA to our DSSI facility to commercially store and dispose of radioactive PCBs. This permit is being amortized over a ten year period in accordance with its estimated useful life. These definite-lived intangible assets are tested for impairment whenever events or changes in circumstances suggest impairment might exist.

Our acquisition of SEC on October 31, 2011 included intangible assets acquired of a non-compete agreement, customer relationships, software, and customer contracts, which were recorded at fair value and are being amortized using the straight-line method over the estimated useful lives with the exception of customer relationships which are being amortized using an accelerated method.

Property and Equipment

Property and equipment expenditures are capitalized and depreciated using the straight-line method over the estimated useful lives of the assets for financial statement purposes, while accelerated depreciation methods are principally used for income tax purposes. Generally, annual depreciation rates range from ten to forty years for buildings (including improvements and asset retirement costs) and three to seven years for office furniture and equipment, vehicles, and decontamination and processing equipment. Leasehold improvements are capitalized and amortized over the lesser of the term of the lease or the life of the asset. Maintenance and repairs are charged directly to expense as incurred. The cost and accumulated depreciation of assets sold or retired are removed from the respective accounts, and any gain or loss from sale or retirement is recognized in the accompanying consolidated statements of operations. Renewals and improvement, which extend the useful lives of the assets, are capitalized. We include within buildings, asset retirement obligations, which represents our best estimates of the cost to close, at some undetermined future date, our permitted and/or licensed facilities. From 2009 to 2011, we adjusted our asset retirement obligations for various facilities as follows due to changes in estimates of the costs to close these facilities based on federal/state regulatory guidelines: increases of \$1,980,000 for DSSI (due to authorization for PCB storage and treatment) and \$158,000 for PFSG in 2009; increase of \$499,000 in 2010 for PFNWR; and reduction of \$504,000 in 2011 for PFNWR. Adjustments to the asset retirement obligations for these facilities are being depreciated prospectively over the remaining estimated life of the asset, in accordance with Accounting Standards Codification (“ASC”) 410, “Asset Retirement and Environmental Obligations”.

In accordance with ASC 360, “Property, Plant, and Equipment”, long-lived assets, such as property, plant and equipment, and purchased intangible assets subject to amortization, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized in the amount by which the carrying amount of the asset exceeds the fair value of the asset. Assets to be disposed of would be separately presented in the balance sheet and reported at the lower of the carrying amount or fair value less costs to sell, and are no longer depreciated. The assets and liabilities of a disposal group classified as held for sale would be presented separately in the appropriate asset and liability sections of the balance sheet.

In October 2010, our Board of Directors approved the divestiture of the PFFL, PFSG, and PFO. We performed updated financial valuations on the tangible assets of PFFL and PFO up to the sale which was August 12, 2011 and October 14, 2011, respectively, and concluded that no tangible asset impairment existed as required by ASC 360. Our analysis included the comparison of the offered sale price less cost to sell to the carrying value of the investment under each letter of intent separately. We performed updated financial valuations on the tangible assets of PFSG, which is currently held for sale and concluded that no tangible asset impairment existed as of December 31, 2011.

Accrued Closure Costs. Accrued closure costs represent a contingent environmental liability to clean up a facility in the event we cease operations in an existing facility. The accrued closure costs are estimates based on guidelines developed by federal and/or state regulatory authorities under Resource Conservation and Recovery Act (“RCRA”). Such costs are evaluated annually and adjusted for inflationary factors and for approved changes or expansion to the facilities. Increases or decreases in accrued closure costs resulting from changes or expansions at the facilities are determined based on specific RCRA guidelines applied to the requested change. This calculation includes certain estimates, such as disposal pricing, external labor, analytical costs and processing costs, which are based on current market conditions.

Accrued Environmental Liabilities. We have four remediation projects currently in progress. The current and long-term accrual amounts for the projects are our best estimates based on proposed or approved processes for clean-up. The circumstances that could affect the outcome range from new technologies that are being developed every day to reduce our overall costs, to increased contamination levels that could arise as we complete remediation which could increase our costs, neither of which we anticipate at this time. In addition, significant changes in regulations could adversely or favorably affect our costs to remediate existing sites or potential future sites, which cannot be reasonably quantified. In connection with the sale of our PFD facility in March 2008, the Company retained the environmental liability for the remediation of an independent site known as EPS. This liability was assumed by the Company as a result of the original acquisition of the PFD facility. The environmental liabilities of PFM, PFMI, and PFD remain the financial obligations of the Company. The environmental liabilities of PFSG are classified as held for sale within our discontinued operations.

Disposal/Transportation Costs. We accrue for waste disposal based upon a physical count of the waste at each facility at the end of each accounting period. Current market prices for transportation and disposal costs are applied to the end of period waste inventories to calculate the disposal accrual. Costs are calculated using current costs for disposal, but economic trends could materially affect our actual costs for disposal. As there are limited disposal sites available to us, a change in the number of available sites or an increase or decrease in demand for the existing disposal areas could significantly affect the actual disposal costs either positively or negatively.

Stock-Based Compensation. We account for stock-based compensation in accordance with ASC 718, "Compensation – Stock Compensation". ASC 718 establishes accounting standards for entity exchanges of equity instruments for goods or services. It also addresses transactions in which an entity incurs liabilities in exchange for goods or services that are based on the fair value of the entity's equity instruments or that may be settled by the issuance of those equity instruments. ASC 718 requires all stock-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values. The Company uses the Black-Scholes option-pricing model to determine the fair-value of stock-based awards which requires subjective assumptions. Assumptions used to estimate the fair value of stock options granted include the exercise price of the award, the expected term, the expected volatility of the Company's stock over the option's expected term, the risk-free interest rate over the option's expected term, and the expected annual dividend yield. The Company's expected term represents the period that stock-based awards are expected to be outstanding and is determined based on historical experience of similar awards, giving consideration to the contractual terms of the stock-based awards, vesting schedules, and post-vesting data. Our computation of expected volatility is based on the Company's historical volatility from our traded Common Stock over the expected term of the option grants. The interest rate for periods within the expected term of the award is based on the U.S. Treasury yield curve in effect at the time of grant.

We recognize stock-based compensation expense using a straight-line amortization method over the requisite period, which is the vesting period of the stock option grant. ASC 718 requires that stock-based compensation expense be based on options that are ultimately expected to vest. ASC 718 requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. We have generally estimated forfeiture rate based on historical trends of actual forfeiture. When actual forfeitures vary from our estimates, we recognize the difference in compensation expense in the period the actual forfeitures occur or when options vest. Forfeiture rates are evaluated, and revised as necessary.

Income Taxes. The provision for income tax is determined in accordance with ASC 740, "Income Taxes". As part of the process of preparing our consolidated financial statements, we are required to estimate our income taxes in each of the jurisdictions in which we operate. We record this amount as a provision or benefit for taxes. This process involves estimating our actual current tax exposure, including assessing the risks associated with tax audits, and assessing temporary differences resulting from different treatment of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities. We assess the likelihood that our deferred tax assets will be recovered from future taxable income and, to the extent that we believe recovery is not likely, we establish a valuation allowance. As of December 31, 2011, we had deferred tax assets of approximately \$20,293,000, which were primarily related to federal and state net operating loss carryforwards, impairment charges, and closure costs. In 2011 and 2010, we determined that it was more likely than not that approximately \$3,721,000 and \$554,000 of our net deferred income tax assets will be realized based, primarily, on profitable historic results and projections of future taxable income. Our net operating losses are subject to being audited by the Internal Revenue Services, and, as a result, the amounts could be reduced.

Foreign Operation

On October 31, 2011, we acquired Safety & Ecology Corporation Limited (“SECL” - a United Kingdom corporation), a subsidiary of SEHC. The financial results of SECL are included in the consolidated financial statements of the Company within the Services Segment. The financial results of SECL are translated into U.S. dollars using exchange rates in effect at period-end for assets and liabilities and average exchange rates during the period for result of operations. The related translation adjustments are reported as a separate component of stockholders’ equity.

Known Trends and Uncertainties

The DOE and DOD represent major customers for our Treatment Segment and Services Segment. For our Treatment Segment, in conjunction with the federal government’s September 30 fiscal year-end, the Treatment Segment historically experienced seasonably large shipments during the third quarter, leading up to this government fiscal year-end, as a result of incentives and other quota requirements. Correspondingly for a period of approximately three months following September 30, this segment generally slows down, as the government budgets are still being finalized, planning for the new year is occurring, and we enter the holiday season. This trend generally continues into the first quarter of the new year as government entities evaluate their spending priorities. Because government spending is contingent upon its annual budget and allocation of funding, we cannot provide assurance that we will not have large fluctuations in the quarters in the near future.

Our Services Segment generally experiences a seasonal slowdown during the winter months as heavy construction projects are typically performed in the early Spring to late Fall months, winter weather conditions delay work at project sites, and our technical services experience reduced activities and related billable hours throughout the November and December holiday period.

Economic Conditions. With much of our segments’ customer base being government or prime contractors treating government waste, economic upturns or downturns do not usually have a significant impact on the demand for our services.

We believe demand for our services will be subject to fluctuations due to a variety of factors beyond our control, including the current economic conditions, and the manner in which the government will be required to spend funding to remediate federal sites. Our operations depend, in large part, upon governmental funding, particularly funding levels at the DOE. In addition, our governmental contracts and subcontracts relating to activities at governmental sites are subject to termination or renegotiation on 30 days notice at the government’s option. Significant reductions in the level of governmental funding due to the completion of most stimulus funded projects and federal budgets driven by temporary continuing resolutions could have a material adverse impact on our business, financial position, results of operations and cash flows.

Legal Matters:

Perma-Fix of Northwest Richland, Inc. (“PFNWR”)

PFNWR filed suit (PFNWR vs. Philotechnics, Ltd.) in the U.S. District Court, Eastern District of Tennessee, asserting contract breach and seeking specific performance of the “return-of-waste clause” in the brokerage contract between a prior facility owner (now owned by PFNWR and Philotechnics, Ltd. (“Philo”)), as to certain non-conforming waste Philo delivered for treatment from Philo’s customer, El du Pont de Nemours and Company (“DuPont”), to the PFNWR facility, before PFNWR acquired the facility. Our complaint seeks an order that Philo: (A) specifically perform its obligations under the contract’s “return-of-waste” clause by physically taking custody of and by removing the nonconforming waste, (B) pay PFNWR all additional costs of maintaining and managing the waste, and (C) pay PFNWR the cost to treat and dispose of the nonconforming waste so as to allow PFNWR to compliantly dispose of that waste offsite. See “Liquidity and Capital Resources of the Company – Financing Activities” of the “Management’s Discussion and Analysis of Financial Condition and Results of Operations”, discussing an Offset Amount offsetting against the earn-out amount relating to the claims contained in this lawsuit.

Subsidiary of SEHC

The lawsuit styled *First Fidelity Lending Corp. (“First Fidelity”) vs. SEC and Christopher Leichtweis* (“Leichtweis”, who was named our Senior Vice President upon completion of our acquisition of SEHC and its subsidiaries), pending in the Circuit Court for the 15th Judicial District of Palm Beach County, Florida, alleging SEC and Leichtweis breached the General Agreement of Indemnity with the surety, First Fidelity, in connection with SEC’s performance bonds on certain projects, has been dismissed by First Fidelity.

Significant Customers. Our segments have significant relationships with the federal government, and continue to enter into contracts, directly as the prime contractor or indirectly as a subcontractor, with the federal government. The contracts that we are a party to with the federal government or with others as a subcontractor to the federal government generally provide that the government may terminate or renegotiate the contracts on 30 days notice, at the government’s election. Our inability to continue under existing contracts that we have with the federal government (directly or indirectly as a subcontractor) could have a material adverse effect on our operations and financial condition.

We performed services relating to waste generated by the federal government, either directly as a prime contractor or indirectly as a subcontractor (including CHPRC as discussed below) to the federal government, representing approximately \$100,165,000 or 84.4% of our total revenue from continuing operations during 2011, as compared to \$80,275,000 or 82.1% of our total revenue from continuing operations during 2010, and \$75,013,000 or 81.2% of our total revenue from continuing operations during 2009.

During the second quarter of 2008, we were awarded a subcontract by CHPRC, a general contractor to the DOE, to participate in the cleanup of the central portion of the Hanford Site located in the state of Washington. This subcontract is a cost plus award fee contract and provides, among other things, a base period from October 1, 2008 through September 30, 2013, and an option period from October 1, 2013 through September 30, 2018. We believe full operations under this subcontract will result in total revenues to us for on-site and off-site work of approximately \$200,000,000 to \$250,000,000 over the five year base period. As provided above, M&EC’s subcontract is terminable or subject to renegotiation, at the option of the government, on 30 days notice. Three other subcontracts that our subsidiaries have with CHPRC have been renegotiated and extended through September 30, 2013. Revenues from CHPRC totaled \$59,136,000 or 49.9%, \$51,929,000 or 53.1%, and \$45,169,000 or 48.8%, of our total revenue from continuing operations for twelve months ended December 31, 2011, 2010, and 2009, respectively.

Prior to our acquisition of SEHC and its subsidiaries, the DOE had advised a subsidiary of SEHC which was performing work on a DOE project that there were deficiencies in the subsidiary’s performance and that the subsidiary’s performance on this project was unsatisfactory to the DOE. In addition, the subsidiary’s performance resulted in substantial cost overruns. It is unknown whether the DOE will renew the contract on this project with the SEHC’s subsidiary. Subsequent to our acquisition of SEC, we have worked with the DOE on this project attempting to resolve the deficiencies which may have been caused by the subsidiary of SEHC prior to our acquisition. We do not believe that the SEHC’s subsidiary’s deficiency on this project will affect our ability to obtain additional contracts with the DOE.

Prior to our acquisition of SEHC and its subsidiaries, a subsidiary of SEHC was performing work on two other non-governmental projects and the contractors on these projects had advised the SEHC subsidiary that there were deficiencies in the subsidiary’s work and that failure of the subsidiary to correct these deficiencies could result in a default under the contracts relating to these projects. On one of these projects, which has now been completed, there were substantial cost overruns prior to our acquisition for which the subsidiary has submitted a request for adjustment to the price to recover certain cost overruns. Due to the problems on this project, these cost overruns may not be reimbursable. In connection with the other project, in which there also has been substantial overruns, we expect the project to be completed by the second quarter of 2012. If, however, the second project is terminated prior to completion, the SEHC subsidiary may incur liability in connection with this project. After our acquisition of SEC, we began working with the contractors on both of these projects attempting to resolve any deficiencies and issues relating to SEHC’s subsidiary’s work on these projects.

Insurance. We maintain insurance coverage similar to, or greater than, the coverage maintained by other companies of the same size and industry, which complies with the requirements under applicable environmental laws. We evaluate our insurance policies annually to determine adequacy, cost effectiveness, and desired deductible levels. Due to the continued uncertainty in the economy and changes within the environmental insurance market, we have no guarantees that if Chartis does not provide insurance coverage that we will be able to obtain similar insurance in future years, or that the cost of such insurance will not increase materially.

Climate Change. Climate change is receiving ever increasing attention from scientists and legislators alike. The debate is ongoing as to the extent to which our climate is changing, the potential causes of this change and its potential impacts. Some attribute global warming to increased levels of greenhouse gases, including carbon dioxide, which has led to significant legislative and regulatory efforts to limit greenhouse gas emissions.

Presently there are no federally mandated greenhouse gas reduction requirements in the United States. However, there are a number of legislative and regulatory proposals to address greenhouse gas emissions, which are in various phases of discussion or implementation. The outcome of federal and state actions to address global climate change could result in a variety of regulatory programs including potential new regulations. Any adoption by federal or state governments mandating a substantial reduction in greenhouse gas emissions could increase costs associated with our operations. Until the timing, scope and extent of any future regulation becomes known, we cannot predict the effect on our financial position, operating results and cash flows.

Environmental Contingencies

We are engaged in the waste management services segment of the pollution control industry. As a participant in the on-site treatment, storage and disposal market and the off-site treatment and services market, we are subject to rigorous federal, state and local regulations. These regulations mandate strict compliance and therefore are a cost and concern to us. Because of their integral role in providing quality environmental services, we make every reasonable attempt to maintain complete compliance with these regulations; however, even with a diligent commitment, we, along with many of our competitors, may be required to pay fines for violations or investigate and potentially remediate our waste management facilities.

We routinely use third party disposal companies, who ultimately destroy or secure landfill residual materials generated at our facilities or at a client's site. We, compared to certain of our competitors, dispose of significantly less hazardous or industrial by-products from our operations due to rendering material non-hazardous, discharging treated wastewaters to publicly-owned treatment works and/or processing wastes into saleable products. In the past, numerous third party disposal sites have improperly managed waste and consequently require remedial action; consequently, any party utilizing these sites may be liable for some or all of the remedial costs. Despite our aggressive compliance and auditing procedures for disposal of wastes, we could further be notified, in the future, that we are a PRP at a remedial action site, which could have a material adverse effect.

We have budgeted for 2012, \$1,138,000 in environmental remediation expenditures to comply with federal, state and local regulations in connection with remediation of certain contaminants at our facilities. Our facilities where the remediation expenditures will be made are the Leased Property in Dayton, Ohio (EPS), a former RCRA storage facility as operated by the former owners of PFD, PFM's facility in Memphis, Tennessee, PFSG's facility in Valdosta, Georgia, and PFMI's facility in Detroit, Michigan. The environmental liability of PFD (as it relates to the remediation of the EPS site assumed by the Company as a result of the original acquisition of the PFD facility) was retained by the Company upon the sale of PFD in March 2008. All of the reserves are within our discontinued operations. While no assurances can be made that we will be able to do so, we expect to fund the expenses to remediate these sites from funds generated internally.

At December 31, 2011, we had total accrued environmental remediation liabilities of \$2,002,000 of which \$1,138,000 is recorded as a current liability, which reflects a decrease of \$254,000 from the December 31, 2010, balance of \$2,256,000. The net decrease represents payment of approximately \$592,000 on remediation projects and increases in reserve of approximately \$288,000 at PFM and \$50,000 at PFMI due to reassessment of our remediation reserves. The December 31, 2011, current and long-term accrued environmental balance is recorded as follows (in thousands):

	Current Accrual	Long-term Accrual	Total
PFD	\$ 224	\$ 135	\$ 359
PFM	74	15	89
PFSG	783	714	1,497
PFMI	57	-	57
Total Liability	<u>\$ 1,138</u>	<u>\$ 864</u>	<u>\$ 2,002</u>

Related Party Transactions

Mr. Robert Schreiber, Jr.

During March 2011, we entered into a new lease with Lawrence Properties LLC, a company jointly owned by Robert Schreiber, Jr., the President of Schreiber, Yonley and Associates, and Mr. Schreiber's spouse. Mr. Schreiber is a member of our executive management team. The new lease is for a term of five years starting June 1, 2011. The new lease replaced the prior five-year lease with Lawrence Properties LLC, which expired on May 31, 2011. Under the new lease, we pay monthly rent of approximately \$11,400, which we believe is lower than costs charged by unrelated third party landlords. Additional rent will be assessed for any increases over the new lease commencement year for property taxes or assessments and property and casualty insurance premiums.

Mr. David Centofanti

Mr. David Centofanti serves as our Director of Information Services. For such services, he received total compensation in 2011 of approximately \$173,000. Mr. David Centofanti is the son of our Chief Executive Officer and Chairman of our Board, Dr. Louis F. Centofanti. We believe the compensation received by Mr. Centofanti for his technical expertise which he provides to the Company is competitive and comparable to compensation we would have to pay to an unaffiliated third party with the same technical expertise.

Mr. Robert L. Ferguson

On June 13, 2007, we acquired Nuvotec (n/k/a Perma-Fix Northwest, Inc. or "PFNW") and Nuvotec's wholly owned subsidiary, PEcoS (n/k/a Perma-Fix Northwest Richland, Inc. or "PFNWR"), pursuant to the terms of the Merger Agreement, as amended, between us, Nuvotec, PEcoS, and our wholly owned subsidiary. At the time of the acquisition, Robert L. Ferguson was the Chairman, Chief Executive Officer, and individually or through entities controlled by him, the owner of approximately 21.29% of Nuvotec's outstanding common stock. In connection with the acquisition, Mr. Ferguson was nominated to serve as a Director and subsequently was elected as a director at our Annual Meeting of Stockholders. Mr. Ferguson served as a director until his resignation in February 2010. Mr. Ferguson was recommended by the Corporate Governance and Nominating Committee and the Board of Directors nominated Mr. Ferguson to stand for election as a Director at our 2011 Annual Meeting of Stockholders, at which time he was elected as a Director.

Pursuant to the terms of the Merger Agreement, as consideration for the acquisition of PFNW and PFNWR by the Company, Mr. Ferguson (or entities controlled by him):

- (a) received a total of \$224,560 cash and 192,783 shares of our Common Stock in July 2007; and
- (b) is entitled to receive 21.29% of an aggregate earn-out amount of \$4,552,000, based on the annual revenues of our nuclear business (as defined) over the four year period ended on June 30, 2011. The aggregate earn-out amount was paid as follows:
 - (i) an aggregate \$2,574,000 in earn-out amount was paid in cash; and
 - (ii) we issued a promissory note, dated September 28, 2010, in the principle amount of \$1,322,000, which provides for 36 equal monthly payments of \$40,000, consisting of interest (annual interest rate of 6%) and principal, starting October 15, 2010.

The total \$3,896,000 in earn-out amount paid to date or to be paid pursuant to the promissory note excludes approximately \$656,000 in Offset Amount, which represents potential indemnification obligations (as defined by the Merger Agreement) which may be payable to the Company by the former shareholders of Nuvotec. Pursuant to the Merger Agreement, the aggregate amount of any Offset Amount may total up to \$1,000,000, except an Offset Amount is unlimited as to indemnification relating to liabilities for taxes, misrepresentation or inaccuracies with respect to the capitalization of Nuvotec or PEcoS or for willful or reckless misrepresentation of any representation, warranty or covenant.

Mr. Ferguson acquired from Mr. William Lampson one-half of a Warrant (the "Lampson Warrant") for the purchase up to 135,000 of the Company's Common Stock at \$1.50 per share. We originally issued the Lampson Warrant to Mr. Lampson as consideration for a loan in the principal amount of \$3,000,000 on May 8, 2009 from Mr. Lampson and Mr. Diehl Rettig. The terms of the loan were amended on April 18, 2011, to provide that the remaining principal balance of \$990,000 is payable in 12 monthly principal payments plus accrued interest starting May 8, 2011. In connection with the loan amendment, the expiration date of the Lampson Warrant was extended one year to May 8, 2012. As a result of the acquisition of one-half of the Lampson Warrant by Mr. Ferguson, Mr. Ferguson and Mr. Lampson each hold a Warrant for the purchase of up to 67,500 shares of Common Stock at \$1.50 per share and with an expiration date of May 8, 2012.

Christopher Leichtweis

The Company is obligated to make lease payments of approximately \$29,000 per month through June 2018, pursuant to a Lease Agreement, dated June 1, 2008 (the "Lease"), between Leichtweis Enterprises, LLC, as lessor, and Safety and Ecology Holdings Corporation ("SEHC"), as lessee. Leichtweis Enterprises, LLC, is owned by Mr. Christopher Leichtweis, who was named as a Senior Vice President of the Company and President of SEC upon the acquisition of SEHC and its subsidiaries by the Company from Homeland on October 31, 2011. The Lease covers SEHC's principal offices in Knoxville, Tennessee.

Under an agreement of indemnity, SEC, Leichtweis and his spouse, jointly and severally, agreed to indemnify the individual surety with respect to contingent liabilities that may be incurred by the individual surety under certain of SEC's bonded projects. In addition, SEC has agreed to indemnify Leichtweis against judgments, penalties, fines, and expense associated with those SEC performance bonds that Leichtweis has agreed to indemnify in the event SEC cannot perform, which has an aggregate bonded amount of approximately \$10,900,000. The indemnification agreement provided by SEC to Leichtweis also provides for compensating Leichtweis at a rate of 0.75% of the value of bonds (60% having been paid previously and the balance at substantial completion of the contract).

Upon the closing of the acquisition of SEHC and its subsidiaries by the Company from Homeland on October 31, 2011, certain security holders of Homeland ("Management Investors") purchased 813,007 restricted shares of the Company's Common Stock for a total consideration of approximately \$1,000,000, or \$1.23 a share, which was the average of the closing prices of the Company's Common Stock as quoted on the Nasdaq during the 30 trading days ending on the trading day immediately prior to the closing of the acquisition. The purchase of the Company's Common Stock was pursuant to a private placement under Section 4(2) of the Securities Act of 1933, as amended (the "Act") or Rule 506 of Regulation D promulgated under the Act. Mr. Leichtweis purchased 747,112 of the 813,007 shares of the Company's Common Stock for the aggregate purchase price of approximately \$918,948 or \$1.23 per share. The purchase price for these shares was deducted from the consideration paid to Homeland for the acquisition of SEHC.

Employment Agreements

We have an employment agreement with each of Dr. Centofanti (our President and Chief Executive Officer), Ben Naccarato (our Chief Financial Officer), James Blankenhorn (our Chief Operating Officer) and Christopher Leichtweis (our Senior Vice President). Each employment agreement provides for annual base salaries, bonuses, and other benefits commonly found in such agreements. In addition, each employment agreement provides that in the event of termination of such officer without cause or termination by the officer for good reason (as such terms are defined in the employment agreement), the terminated officer shall receive payments of an amount equal to benefits that have accrued as of the termination but not yet paid, plus an amount equal to one year's base salary at the time of termination. In addition, the employment agreements provide that in the event of a change in control (as defined in the employment agreements), all outstanding stock options to purchase our common stock granted to, and held by, the officer covered by the employment agreement to be immediately vested and exercisable.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The Company is exposed to certain market risks arising from adverse changes in interest rates, primarily due to the potential effect of such changes on our variable rate loan arrangements with PNC and with Mr. William Lampson and Mr. Diehl Rettig (who is now deceased and the loan is payable to his representative or estate). The interest rates payable to PNC are based on a spread over prime rate or a spread over LIBOR and the interest rate payable on the promissory note to Mr. Lampson and Mr. Rettig is based on a spread over a minimum floor base LIBOR of 1.5%. As of December 31, 2011, the Company had approximately \$16,140,000 in variable rate borrowings. Assuming a 1% change in the average interest rate as of December 31, 2011, our interest cost would change by approximately \$161,400. As of December 31, 2011, we had no interest swap agreement outstanding.

We consider our direct exposure to foreign exchange rate fluctuation to be minimal. The Company has a small foreign operation (Safety & Ecology Corporation Limited ("SECL") - a United Kingdom corporation) located in Blydon On Tyne, England, which we acquired on October 31, 2011. As of December 31, 2011, SECL's assets were \$99,000 or 0.1% of the total consolidated assets of the Company and had generated revenues of approximately \$30,000 in U.S. dollars since our acquisition; therefore, increases or decreases to the value of the U.S dollar relative to the British pound would not have a material impact to our financial results.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements contained within this report may be deemed “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (collectively, the “Private Securities Litigation Reform Act of 1995”). All statements in this report other than a statement of historical fact are forward-looking statements that are subject to known and unknown risks, uncertainties and other factors, which could cause actual results and performance of the Company to differ materially from such statements. The words “believe,” “expect,” “anticipate,” “intend,” “will,” and similar expressions identify forward-looking statements. Forward-looking statements contained herein relate to, among other things,

- demand for our services subject to fluctuations;
- funding by the federal government;
 - goals;
- ability to improve operations;
- ability to renew permits and licenses with minimal effort and costs;
- we anticipate meeting our financial covenants in 2012;
- ability to close and remediate certain contaminated sites for projected amounts over the projected periods;
- ability to fund expenses to remediate sites from funds generated internally;
- our ability to develop or adopt new and existing technologies in the conduct of our operations;
- ability to fund budgeted capital expenditures during 2012 through our operations and lease financing;
- our cash flows from operations and our available liquidity from our line of credit are sufficient to service the Company’s current obligations and current obligations resulting from acquisition of SEC;
- continue to take steps to improve our operations and liquidity and to invest working capital into our facilities to fund capital additions to our segments.
- due to the continued uncertainty in the economy and changes within the environmental insurance market, we have no guarantee that we will be able to obtain similar insurance in future years, or that the cost of such insurance will not increase materially;
- we could be subject to fines, penalties or other liabilities or could be adversely affected by existing or subsequently enacted laws or regulations;
- as our operations and activities expand, there could be increase in the potential litigation;
- our inability to continue under existing contracts that we have with the federal government (directly or indirectly as a subcontractor) could have a material adverse effect on our operations and financial condition;
- full operations under the CHPRC subcontract could result in total revenues to us for on-site and off-site work of approximately \$200,000,000 to \$250,000,000 over the five year base period;
- demand for our services will be subject to fluctuations due to a variety of factors beyond our control;
 - investment of working capital;
 - seasonality and the government’s budget process;
 - process backlog;
 - funding of any repurchases of our common stock;
 - contracts with the federal government;
- new radioactive disposal facility located in Andrews, Texas beginning operations in 2012, could reduce our reliance on Energy Solutions as a disposal site;
- SEHC’s subsidiary’s deficiency on its project with the federal government could affect our ability to obtain additional contracts with the DOE.
- treatment processes we utilize offer a cost saving alternative to more traditional remediation and disposal methods offered by certain of our competitors;
 - no further impairment to intangible assets;
 - no expectation of material future inflationary changes;
- despite our aggressive compliance and auditing procedure for disposal of wastes, we could further be notified, in the future, that we are a PRP at a remedial action site, which could have a material adverse effect;
- we could be deemed responsible for part for the cleanup of certain properties and be subject to fines and civil penalties in connection with violations of regulatory requirements;
- we do not expect ASU 2011-04 to have a material effect on our financial position, results of operations, or cash flow; and
- we do not expect adoption of ASU 2011-08 to have an impact on our consolidated financial statements.

While the Company believes the expectations reflected in such forward-looking statements are reasonable, it can give no assurance such expectations will prove to be correct. There are a variety of factors which could cause future outcomes to differ materially from those described in this report, including, but not limited to:

- general economic conditions;
- material reduction in revenues;
- ability to meet PNC covenant requirements;
- inability to collect in a timely manner a material amount of receivables;
- increased competitive pressures;
- the ability to maintain and obtain required permits and approvals to conduct operations;
- the ability to develop new and existing technologies in the conduct of operations;
- ability to retain or renew certain required permits;
- discovery of additional contamination or expanded contamination at any of the sites or facilities leased or owned by us or our subsidiaries which would result in a material increase in remediation expenditures;
- changes in federal, state and local laws and regulations, especially environmental laws and regulations, or in interpretation of such;
- potential increases in equipment, maintenance, operating or labor costs;
- management retention and development;
- financial valuation of intangible assets is substantially more/less than expected;
- the requirement to use internally generated funds for purposes not presently anticipated;
- inability to continue to be profitable on an annualized basis;
- the inability to maintain the listing of our Common Stock on the NASDAQ;
- terminations of contracts with federal agencies or subcontracts involving federal agencies, or reduction in amount of waste delivered to us under these contracts or subcontracts;
- renegotiation of contracts involving the federal government;
- disposal expense accrual could prove to be inadequate in the event the waste requires retreatment; and
- Risk Factors contained in Item 1A of this report.

We undertake no obligations to update publicly any forward-looking statement, whether as a result of new information, future events or otherwise.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Index to Consolidated Financial Statements

Consolidated Financial Statements	Page No.
Report of Independent Registered Public Accounting Firm, BDO USA, LLP	55
Consolidated Balance Sheets as of December 31, 2011 and 2010	56
Consolidated Statements of Operations for the years ended December 31, 2011, 2010, and 2009	58
Consolidated Statements of Cash Flows for the years ended December 31, 2011, 2010, and 2009	59
Consolidated Statements of Stockholders' Equity for the years ended December 31, 2011, 2010, and 2009	60
Notes to Consolidated Financial Statements	61
Financial Statement Schedule	
II Valuation and Qualifying Accounts for the years ended December 31, 2011, 2010, and 2009	135

Schedules Omitted

In accordance with the rules of Regulation S-X, other schedules are not submitted because (a) they are not applicable to or required by the Company, or (b) the information required to be set forth therein is included in the consolidated financial statements or notes thereto.

Report of Independent Registered Public Accounting Firm

Board of Directors and Stockholders
Perma-Fix Environmental Services, Inc.
Atlanta, Georgia

We have audited the accompanying consolidated balance sheets of Perma-Fix Environmental Services, Inc. and subsidiaries as of December 31, 2011 and 2010 and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2011. In connection with our audits of the financial statements, we have also audited the financial statement schedule listed in the accompanying index. These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements and schedule. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Perma-Fix Environmental Services, Inc. and subsidiaries at December 31, 2011 and 2010, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2011, in conformity with accounting principles generally accepted in the United States of America.

Also, in our opinion, the financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Perma-Fix Environmental Services, Inc. and subsidiaries' internal control over financial reporting as of December 31, 2011, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and our report dated March 15, 2012 expressed an unqualified opinion thereon.

/s/BDO USA, LLP

Atlanta, Georgia
March 15, 2012

PERMA-FIX ENVIRONMENTAL SERVICES, INC.
CONSOLIDATED BALANCE SHEETS

As of December 31,

(Amount in Thousands, Except for Share and per Share Amounts)	2011	2010
ASSETS		
Current assets:		
Cash	\$ 12,055	\$ 101
Restricted cash	1,535	35
Accounts receivable, net of allowance for doubtful accounts of \$228 and \$215, respectively	19,106	8,541
Unbilled receivables - current	9,871	9,436
Retainage receivable	912	—
Inventories	573	465
Prepaid and other assets	4,604	2,870
Deferred tax assets -current	2,426	1,734
Current assets related to discontinued operations	693	2,034
Total current assets	51,775	25,216
Property and equipment:		
Buildings and land	26,026	24,693
Equipment	34,283	33,279
Vehicles	818	235
Leasehold improvements	11,529	11,506
Office furniture and equipment	2,081	1,890
Construction-in-progress	764	593
	75,501	72,196
Less accumulated depreciation and amortization	(35,666)	(31,753)
Net property and equipment	39,835	40,443
Property and equipment related to discontinued operations	1,650	4,209
Intangibles and other long term assets:		
Permits	16,854	16,863
Goodwill	27,063	15,330
Other intangible assets	4,258	271
Unbilled receivables – non-current	424	2,556
Finite Risk Sinking Fund	19,354	17,424
Deferred tax asset, net of liabilities	1,295	—
Other assets	1,595	1,813
Intangible and other assets related to discontinued operations	—	1,190
Total assets	<u>\$ 164,103</u>	<u>\$ 125,315</u>

The accompanying notes are an integral part of these consolidated financial statements.

PERMA-FIX ENVIRONMENTAL SERVICES, INC.
CONSOLIDATED BALANCE SHEETS, CONTINUED

As of December 31,

(Amount in Thousands, Except for Share and per Share Amounts)	2011	2010
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 13,117	\$ 4,891
Accrued expenses	9,533	5,996
Disposal/transportation accrual	1,957	2,188
Unearned revenue	6,260	3,527
Billing in excess of costs and estimated earning	3,226	—
Current liabilities related to discontinued operations	2,197	2,673
Current portion of long-term debt	<u>3,936</u>	<u>3,612</u>
Total current liabilities	40,226	22,887
Accrued closure costs	11,937	12,362
Other long-term liabilities	610	671
Deferred tax liability	—	1,180
Long-term liabilities related to discontinued operations	1,775	3,074
Long-term debt, less current portion	<u>15,007</u>	<u>6,637</u>
Total long-term liabilities	<u>29,329</u>	<u>23,924</u>
Total liabilities	69,555	46,811
Commitments and Contingencies		
Preferred Stock of subsidiary, \$1.00 par value; 1,467,396 shares authorized, 1,284,730 shares issued and outstanding, liquidation value \$1.00 per share plus accrued and unpaid dividends	1,285	1,285
Stockholders' Equity:		
Preferred Stock, \$.001 par value; 2,000,000 shares authorized, no shares issued and outstanding		
Common Stock, \$.001 par value; 75,000,000 shares authorized, 56,068,248 and 55,106,180 shares issued, respectively; 56,030,038 and 55,067,970 shares outstanding, respectively	56	55
Additional paid-in capital	102,411	100,821
Accumulated deficit	(9,505)	(23,569)
Accumulated other comprehensive loss	(3)	—
Less Common Stock in treasury at cost; 38,210 shares	(88)	(88)
Total Perma-Fix Environmental Services, Inc. stockholders' equity	<u>92,871</u>	<u>77,219</u>
Noncontrolling interest	<u>392</u>	—
Total stockholders' equity	93,263	77,219
Total liabilities and stockholders' equity	<u>\$ 164,103</u>	<u>\$ 125,315</u>

The accompanying notes are an integral part of these consolidated financial statements.

PERMA-FIX ENVIRONMENTAL SERVICES, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS

For the years ended December 31,

(Amounts in Thousands, Except for per Share Amounts)	2011	2010	2009
Net revenues	\$ 118,610	\$ 97,790	\$ 92,393
Cost of goods sold	89,822	77,175	67,912
Gross profit	28,788	20,615	24,481
Selling, general and administrative expenses	15,564	13,361	14,422
Research and development	1,502	921	609
Loss (gain) on disposal of property and equipment	(15)	138	(7)
Income from operations	11,737	6,195	9,457
Other income (expense):			
Interest income	58	65	145
Interest expense	(657)	(755)	(1,639)
Interest expense – financing fees	(207)	(412)	(283)
Loss on extinguishment of debt	(91)	—	—
Other	5	24	21
Income from continuing operations before income taxes	10,845	5,117	7,701
Income tax expense (benefit)	(955)	1,846	(1,986)
Income from continuing operations	11,800	3,271	9,687
Income (loss) from discontinued operations, net of taxes	777	(663)	(65)
Gain on disposal of discontinued operations, net of taxes	1,509	—	—
Net income	<u>\$ 14,086</u>	<u>\$ 2,608</u>	<u>\$ 9,622</u>
Less: net income attributable to noncontrolling interest	22	—	—
Net income attributable to Perma-Fix Environmental Services, Inc. common stockholders	<u>\$ 14,064</u>	<u>\$ 2,608</u>	<u>\$ 9,622</u>
Net income (loss) per common share attributable to Perma-Fix Environmental Services, Inc. stockholders - basic:			
Continuing operations	\$.21	\$.06	\$.18
Discontinued operations	.01	(.01)	—
Disposal of discontinued operations	.03	—	—
Net income per common share	<u>\$.25</u>	<u>\$.05</u>	<u>\$.18</u>
Net income (loss) per common share attributable to Perma-Fix Environmental Services, Inc. stockholders - diluted:			
Continuing operations	\$.21	\$.06	\$.18
Discontinued operations	.01	(.01)	—
Disposal of discontinued operations	.03	—	—
Net income per common share	<u>\$.25</u>	<u>\$.05</u>	<u>\$.18</u>
Number of common shares used in computing net income (loss) per share:			
Basic	55,295	54,947	54,238
Diluted	55,317	55,030	54,526

The accompanying notes are an integral part of these consolidated financial statements.

PERMA-FIX ENVIRONMENTAL SERVICES, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

For the years ended December 31,

(Amounts in Thousands)	2011	2010	2009
Cash flows from operating activities:			
Net income	\$ 14,086	\$ 2,608	\$ 9,622
Less: Income (loss) on discontinued operations	2,286	(663)	(65)
Income from continuing operations	11,800	3,271	9,687
Adjustments to reconcile net income from continuing operations to cash provided by operations:			
Depreciation and amortization	4,961	4,530	4,321
Amortization of debt discount	141	333	216
Deferred tax (benefit) expense	(3,090)	1,819	(2,490)
Provision for bad debt and other reserves	83	59	343
Foreign exchange loss	(3)	—	—
(Gain) loss on disposal of plant, property and equipment	(15)	138	(7)
Issuance of common stock for services	210	240	251
Stock-based compensation	345	343	713
Changes in operating assets and liabilities of continuing operations, net of effect of business acquisitions:			
Accounts receivable	7,125	3,215	(683)
Unbilled receivables	1,697	279	4,623
Prepaid expenses, inventories and other assets	1,044	1,844	1,352
Accounts payable, accrued expenses and unearned revenue	(800)	(7,997)	(10,035)
Cash provided by continuing operations	23,498	8,074	8,291
Cash (used in) provided by discontinued operations	(2,739)	(344)	154
Cash provided by operating activities	<u>20,759</u>	<u>7,730</u>	<u>8,445</u>
Cash flows from investing activities:			
Purchases of property and equipment, net	(2,303)	(1,571)	(1,308)
Proceeds from sale of plant, property and equipment	25	11	7
Payments to finite risk sinking fund	(1,930)	(1,944)	(4,135)
Payment of earn-out to Nuvotec shareholders	(840)	(1,000)	(734)
Cash used for acquisition consideration, net of cash acquired	(15,628)	—	—
Cash used in investing activities of continuing operations	(20,676)	(4,504)	(6,170)
Cash provided by (used in) investing activities of discontinued operations	7,691	(544)	(186)
Net cash used in investing activities	<u>(12,985)</u>	<u>(5,048)</u>	<u>(6,356)</u>
Cash flow from financing activities:			
Net repayments of revolving credit	(2,019)	(640)	(3,857)
Principal repayments of long term debt	(11,329)	(3,117)	(2,584)
Proceeds from issuance of long-term debt	16,000	—	2,982
Proceeds from issuance of stock	1,000	509	631
Proceeds from finite risk financing	685	653	753
Cash provided by (used in) financing activities of continuing operations	4,337	(2,595)	(2,075)
Principal repayment of long-term debt for discontinued operations	(157)	(52)	(55)
Cash provided by (used in) financing activities	<u>4,180</u>	<u>(2,647)</u>	<u>(2,130)</u>
Increase (decrease) in cash	11,954	35	(41)
Cash at beginning of period	101	66	107
Cash at end of period	<u>\$ 12,055</u>	<u>\$ 101</u>	<u>\$ 66</u>
Supplemental disclosure:			
Interest paid	\$ 707	\$ 893	\$ 4,188
Income taxes paid	2,051	492	349
Non-cash investing and financing activities:			
Long-term debt incurred for purchase of property and equipment	—	429	125
Note issued for earn-out to Nuvotec shareholders	—	1,322	—
Issuance of Common Stock for debt	—	—	476
Issuance of Warrants for debt	—	—	190
Warrant extension for debt modification	36	—	—
Note issued for SEC acquisition	2,500	—	—
Amount held in escrow account in connection with SEC acquisition (see Note 7)	1,500	—	—

The accompanying notes are an integral part of these consolidated financial statements.

PERMA-FIX ENVIRONMENTAL SERVICES, INC
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

*For the years ended December 31,
(Amounts in Thousands, Except for Share Amounts)*

	Common Stock		Additional Paid-In Capital	Common Stock Held In Treasury	Accumulated Other Comprehensive Loss	Noncontrolling Interest in Subsidiary	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount						
Balance at December 31, 2008	<u>53,934,560</u>	<u>\$ 54</u>	<u>\$ 97,381</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (35,799)</u>	<u>\$ 61,636</u>
Comprehensive income:								
Net income	—	—	—	—	—	—	9,622	9,622
Foreign currency adjustment	—	—	—	—	—	—	—	—
Total comprehensive income	—	—	—	—	—	—	—	9,622
Issuance of Common Stock for services	136,522	—	251	—	—	—	—	251
Issuance of Common Stock upon exercise of Options	357,822	1	630	—	—	—	—	631
Issuance of Common Stock for debt	200,000	—	476	—	—	—	—	476
Issuance of Warrants for debt	—	—	190	—	—	—	—	190
Stock-Based Compensation	—	—	713	—	—	—	—	713
Balance at December 31, 2009	<u>54,628,904</u>	<u>\$ 55</u>	<u>\$ 99,641</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (26,177)</u>	<u>\$ 73,519</u>
Comprehensive income:								
Net income	—	—	—	—	—	—	2,608	2,608
Foreign currency adjustment	—	—	—	—	—	—	—	—
Total comprehensive income	—	—	—	—	—	—	—	2,608
Issuance of Common Stock for services	127,276	—	240	—	—	—	—	240
Issuance of Common Stock upon exercise of Options	350,000	—	597	—	—	—	—	597
Payment of Option exercise by Common Stock shares	—	—	—	(88)	—	—	—	(88)
Stock-Based Compensation	—	—	343	—	—	—	—	343
Balance at December 31, 2010	<u>55,106,180</u>	<u>\$ 55</u>	<u>\$ 100,821</u>	<u>\$ (88)</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (23,569)</u>	<u>\$ 77,219</u>
Comprehensive income:								
Net income	—	—	—	—	—	22	14,064	14,086
Foreign currency adjustment	—	—	—	—	(3)	—	—	(3)
Total comprehensive income	—	—	—	—	—	—	—	14,083
Issuance of Common Stock for services	149,061	—	210	—	—	—	—	210
Common Stock Issued in conjunction with acquisition	813,007	1	999	—	—	—	—	1,000
Warrant extension for debt modification	—	—	36	—	—	—	—	36
Noncontrolling interest investment in subsidiary	—	—	—	—	—	370	—	370
Stock-Based Compensation	—	—	345	—	—	—	—	345
Balance at December 31, 2011	<u>56,068,248</u>	<u>\$ 56</u>	<u>\$ 102,411</u>	<u>\$ (88)</u>	<u>\$ (3)</u>	<u>\$ 392</u>	<u>\$ (9,505)</u>	<u>\$ 93,263</u>

The accompanying notes are an integral part of these consolidated financial statements.

PERMA-FIX ENVIRONMENTAL SERVICES, INC.
Notes to Consolidated Financial Statements
December 31, 2011, 2010, and 2009

NOTE 1

DESCRIPTION OF BUSINESS AND BASIS OF PRESENTATION

Perma-Fix Environmental Services, Inc. (the Company, which may be referred to as we, us, or our), an environmental and technology know-how company, is a Delaware corporation, engaged through its subsidiaries, in two reportable segments:

TREATMENT SEGMENT which includes:

- nuclear, low-level radioactive, mixed (waste containing both hazardous and low-level radioactive constituents), hazardous and non-hazardous waste treatment, processing and disposal services primarily through four uniquely licensed and permitted treatment and storage facilities; and
- research and development activities to identify, develop and implement innovative waste processing techniques for problematic waste streams.

SERVICE SEGMENT which includes:

- On-site waste management services to commercial and government customers;
- Technical services which include:
 - o health physic and radiological control technician services providing both field support as well as professional technical support to commercial and government customers;
 - o safety and industrial hygiene services providing field support and professional technical support to commercial and government customers;
 - o staff augmentation services providing consulting, engineering, project management, waste management, environmental, and decontamination and decommissioning field personnel, technical personnel, management and services to commercial and government customers; and
 - o consulting engineering services (through our Schreiber, Yonley & Associates subsidiary – “SYA”) providing consulting environmental services to industrial and government customers;
 - § including air, water, and hazardous waste permitting, air, soil and water sampling, compliance reporting, emission reduction strategies, compliance auditing, and various compliance and training activities; and
 - § engineering and compliance support to other segments.
- A company owned equipment calibration and maintenance laboratory that services, maintains and calibrates health physics and industrial hygiene instrumentation.

We have grown through acquisitions and internal growth. On October 31, 2011, the Company completed the acquisition of all of the issued and outstanding shares of capital stock of Safety & Ecology Holdings Corporation (“SEHC”) and its subsidiaries, Safety & Ecology Corporation (“SEC”), SEC Federal Services Corporation, Safety & Ecology Corporation Limited (“SECL” - a United Kingdom facility) and SEC Radcon Alliance, LLC (“SECRA” – which we own 75%), (Collectively “SEC”), pursuant to that certain Stock Purchase Agreement, dated July 15, 2011 (“Purchase Agreement”), between the Company, Homeland Capital Security Corporation (“Homeland”) and SEHC. SEC is an international provider of environmental, hazardous and radiological remediation infrastructure upgrades and nuclear energy services and is located in Knoxville, Tennessee. SEC provides remediation of nuclear materials for the U.S. government and other commercial customers (see “Note 7 – Business Acquisition” for further detail on this acquisition).

Our consolidated financial statements include our accounts and the accounts of our wholly-owned subsidiaries as follows:

Continuing Operations: Diversified Scientific Services, Inc. (“DSSI”), East Tennessee Materials & Energy Corporation (“M&EC”), Perma-Fix of Florida, Inc. (“PFF”), Perma-Fix of Northwest Richland, Inc. (“PFNWR”), Schreiber, Yonley and Associates (“SYA”), Safety & Ecology Corporation (“SEC”), Safety & Ecology Corporation Limited (“SECL” - a United Kingdom facility) and SEC Radcon Alliance, LLC (“SECRA”).

Discontinued Operations (See "Note 8"): Perma-Fix of Fort Lauderdale, Inc. ("PFFL" – divested on August 12, 2011), Perma-Fix of South Georgia, Inc. ("PFSG"), and Perma-Fix of Orlando ("PFO" – divested on October 14, 2011); Perma-Fix of Maryland ("PFMD"), Perma-Fix of Dayton, Inc. ("PFD"), and Perma-Fix Treatment Services, Inc. ("PFTS"), which were sold in January 2008, March 2008, and May 2008, respectively; and Perma-Fix of Michigan, Inc. ("PFMI"), Perma-Fix of Pittsburgh, Inc. ("PFP"), and Perma-Fix of Memphis, Inc. ("PFM"), three non-operational facilities.

NOTE 2

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation

Our consolidated financial statements include our accounts and those of our wholly-owned subsidiaries after elimination of all significant intercompany accounts and transactions.

Reclassifications

Certain prior year amounts have been reclassified to conform with the current year presentation.

Use of Estimates

When we prepare financial statements in conformity with generally accepted accounting principles in the United States of America, we make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements, as well as, the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. See Notes 9, 12, and 14 for estimates of discontinued operations and environmental liabilities, closure costs, and contingencies for details on significant estimates.

Restricted Cash

Restricted cash reflects \$35,000 held in escrow for our worker's compensation policy. Also, restricted cash reflects \$1,500,000 received by the Company from an escrow account in connection with the acquisition of SEC on October 31, 2011. This \$1,500,000 was received by the Company subsequent to 2011 year end (See "Note 7 – Business Acquisition" for further detail of this \$1,500,000).

Accounts Receivable

Accounts receivable are customer obligations due under normal trade terms requiring payment within 30 or 60 days from the invoice date based on the customer type (government, broker, or commercial). Account balances are stated by invoice at the amount billed to the customer. Payments of accounts receivable are made directly to a lockbox and are applied to the specific invoices stated on the customer's remittance advice. The carrying amount of accounts receivable is reduced by an allowance for doubtful accounts, which is a valuation allowance that reflects management's best estimate of the amounts that will not be collected. We regularly review all accounts receivable balances that exceed 60 days from the invoice date and based on an assessment of current credit worthiness, estimate the portion, if any, of the balance that will not be collected. This analysis excludes government related receivables due to our past successful experience in their collectability. Specific accounts that are deemed to be uncollectible are reserved at 100% of their outstanding balance. The remaining balances aged over 60 days have a percentage applied by aging category (5% for balances 61-90 days, 20% for balances 91-120 days and 40% for balances over 120 days aged), based on a historical valuation, that allows us to calculate the total reserve required. Once we have exhausted all options in the collection of a delinquent accounts receivable balance, which includes collection letters, demands for payment, collection agencies and attorneys, the account is deemed uncollectible and subsequently written off. The write off process involves approvals, based on dollar amount, from senior management.

Retainage receivables represent amounts that are billed or billable to our customers, but are retained by the customer until completion of the project or as otherwise specified in the contract. As of December 2011, we have retainage receivable balance of \$912,000 which was all current. The retainage receivable was recorded as a result of the SEC acquisition.

Unbilled Receivables

Unbilled receivables are generated by differences between invoicing timing and our performance based methodology used for revenue recognition purposes. As major processing and contract completion phases are completed and the costs incurred, we recognize the corresponding percentage of revenue. Within our Treatment Segment, we experience delays in processing invoices due to the complexity of the documentation that is required for invoicing, as well as the difference between completion of revenue recognition milestones and agreed upon invoicing terms, which results in unbilled receivables. The timing differences occur for several reasons: partially from delays in the final processing of all wastes associated with certain work orders and partially from delays for analytical testing that is required after we have processed waste but prior to our release of waste for disposal. The tasks relating to these delays usually take several months to complete. As we now have historical data to review the timing of these delays, we realize that certain issues, including but not limited to delays at our third party disposal site, can extend collection of some of these receivables greater than twelve months. However, our historical experience suggests that a significant part of unbilled receivables are ultimately collectible with minimal concession on our part. We therefore, segregate the unbilled receivables between current and long term. Unbilled receivables within our Services Segment can result from: (1) revenue recognized by our Earned Value Management program (a program which integrates project scope, schedule, and cost to provide an objective measure of project progress) but invoice milestone have not yet been met and/or (2) contract claims and pending change orders, including Requests for Equitable Adjustments (“REAs”) when work has been performed and collection of revenue is reasonably assured.

Inventories

Inventories consist of treatment chemicals, saleable used oils, and certain supplies. Additionally, we have replacement parts in inventory, which are deemed critical to the operating equipment and may also have extended lead times should the part fail and need to be replaced. Inventories are valued at the lower of cost or market with cost determined by the first-in, first-out method.

Property and Equipment

Property and equipment expenditures are capitalized and depreciated using the straight-line method over the estimated useful lives of the assets for financial statement purposes, while accelerated depreciation methods are principally used for income tax purposes. Generally, annual depreciation rates range from ten to forty years for buildings (including improvements and asset retirement costs) and three to seven years for office furniture and equipment, vehicles, and decontamination and processing equipment. Leasehold improvements are capitalized and amortized over the lesser of the term of the lease or the life of the asset. Maintenance and repairs are charged directly to expense as incurred. The cost and accumulated depreciation of assets sold or retired are removed from the respective accounts, and any gain or loss from sale or retirement is recognized in the accompanying consolidated statements of operations. Renewals and improvement, which extend the useful lives of the assets, are capitalized. We include within buildings, asset retirement obligations, which represents our best estimates of the cost to close, at some undetermined future date, our permitted and/or licensed facilities. The asset retirement cost was originally recorded at \$4,559,000 and depreciates over the estimated useful life of the property. Subsequent additions and adjustments to asset retirement obligations (due to changes in estimates) are depreciated prospectively over the remaining estimated life of the asset, in accordance with Accounting Standards Codification (“ASC”) 410, “Asset Retirement and Environmental Obligations”.

In accordance with ASC 360, “Property, Plant, and Equipment”, long-lived assets, such as property, plant and equipment, and purchased intangible assets subject to amortization, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized in the amount by which the carrying amount of the asset exceeds the fair value of the asset. Assets to be disposed of would be separately presented in the balance sheet and reported at the lower of the carrying amount or fair value less costs to sell, and are no longer depreciated. The assets and liabilities of a disposal group classified as held for sale would be presented separately in the appropriate asset and liability sections of the balance sheet.

In October 2010, our Board of Directors approved the divestiture of the PFFL, PFSG, and PFO. We performed updated financial valuations on the tangible assets of PFFL and PFO up to the sale, which was August 12, 2011 and October 14, 2011, respectively, and concluded that no tangible asset impairment existed as required by ASC 360. Our analysis included the comparison of the offered sale price less cost to sell to the carrying value of the investment under each letter of intent separately. We performed updated financial valuation on the tangible assets of PFSG which is currently held for sale and concluded that no tangible asset impairment existed as of December 31, 2011.

Capitalized Interest

The Company's policy is to capitalize interest cost incurred on debt during the construction of major projects exceeding one year; however, no interest was required to be capitalized for each of the years 2009 to 2011.

Goodwill and Other Intangible Assets

Intangible assets relating to acquired businesses consist primarily of the cost of purchased businesses in excess of the estimated fair value of net identifiable assets acquired ("goodwill") and the recognized permit value of the business. Goodwill and intangible assets that have indefinite useful lives are tested annually for impairment, or more frequently if triggering events occur or other impairment indicators arise which might impair recoverability. An impairment loss is recognized to the extent that the carrying amount exceeds the asset's fair value. For goodwill, the impairment determination is made at the reporting unit level and consists of two steps. First, the Company determines the fair value of a reporting unit and compares it to its carrying amount. Second, if the carrying amount of a reporting unit exceeds its fair value, an impairment loss is recognized for any excess of the carrying amount of the reporting unit's goodwill over the implied fair value of the goodwill. The implied value of goodwill is determined by allocating the fair value of the reporting unit in a manner similar to a purchase price allocation, in accordance with ASC 805, "Business Combinations". Our annual financial valuations performed as of October 1, 2011, 2010, and 2009, indicated no impairments. Our October 1, 2011, 2010, and 2009 impairment tests were performed based on our previous two reporting units: 1) Nuclear reporting unit, which included all of our treatment operations and operation under our CHPRC subcontract, and 2) Engineering reporting unit, which included our SYA subsidiary operations. The Company estimates the fair value of our reporting units using a discounted cash flow valuation approach. This approach is dependent on estimates for future sales, operating income, working capital changes, and capital expenditures, as well as, expected growth rates for cash flows and long-term interest rates, all of which are impacted by economic conditions related to our industry as well as conditions in the U.S. capital markets.

As a result of the acquisition of SEC on October 31, 2011, during the fourth quarter of 2011, the Company made structure and reporting changes to its internal organization and changes to its operating segments to create better consistency, greater coordination and enhanced communication. This restructuring aligns the internal management and functional support assets based on company service offerings and better reflects how our chief operating decision maker allocates resources and assesses performance. These changes resulted in four reporting units: (1) SYA reporting unit - our SYA subsidiary operations; (2) SEC reporting unit - our SEC operations; (3) Treatment reporting unit - our treatment operations; and (4) CHPRC reporting unit - our operations under the CHPRC subcontract. We reassigned approximately \$3,637,000 of the \$14,840,000 goodwill from our previous Nuclear reporting unit to our CHPRC reporting unit using a relative fair value approach in accordance to ASC 350, "Intangibles - Goodwill and Other" as a result of the change in reporting units. As a result of the restructuring of our reporting units, we concluded that we had an interim triggering event, and, therefore, we performed an interim goodwill impairment test for our treatment reporting unit as of October 1, 2011 which did not result in any impairment. We will perform all future goodwill impairment analysis on the new four reporting units.

Intangible assets that have definite useful lives are amortized using the straight-line method over the estimated useful lives and are excluded from our annual intangible asset valuation review conducted as of October 1. The Company also has one definite-lived permit which was excluded from the impairment review as noted above. This permit of approximately \$545,000 was capitalized in 2009 in connection with the authorization issued by the U.S. EPA to our DSSI facility to commercially store and dispose of radioactive PCBs. This permit is being amortized over a ten year period in accordance with its estimated useful life. These definite-lived intangible assets are tested for impairment whenever events or changes in circumstances suggest impairment might exist.

Our acquisition of SEC on October 31, 2011 included intangible assets acquired of a non-compete agreement, customer relationships, software, and customer contracts. These intangibles are being amortized using the straight-line method over the estimated useful lives with the exception of customer relationships which are being amortized using an accelerated method (see “Note 6 – Goodwill and Other Intangible Assets” for further discussion on goodwill and other intangible assets).

We performed updated internal financial valuations on the intangible assets of PFFL and PFO based on the letters of intent to test for asset impairment as required by ASC 350, “Intangibles-Goodwill and Other” during 2011 and concluded that no intangible asset impairment existed prior to the sale date of August 12, 2011 and October 14, 2011, respectively. Our PFSG facility has no intangible assets.

Research and Development

Innovation and technical know-how by our operations is very important to the success of our business. Our goal is to discover, develop, and bring to market innovative ways to process waste that address unmet environmental needs. We conduct research internally and also through collaborations with other third parties. Research and development costs consist primarily of employee salaries and benefits, laboratory costs, third party fees, and other related costs associated with the development and enhancement of new potential waste treatment processes and are charged to expense when incurred in accordance with Accounting Standards Codification (“ASC”) Topic 730, “Research and Development”.

Accrued Closure Costs

Accrued closure costs represent our estimated environmental liability to clean up our facilities as required by our permits, in the event of closure.

ASC 410, “Asset Retirement and Environmental Obligations”, requires that the fair value of a liability for an asset retirement obligation be recognized in the period in which it is incurred if a reasonable estimate of fair value can be made, and that the associated asset retirement costs be capitalized as part of the carrying amount of the long-lived asset. In conjunction with the state mandated permit and licensing requirements, we are obligated to determine our best estimate of the cost to close, at some undetermined future date, our permitted and/or licensed facilities. We subsequently increase this liability as a result of changes to the facility, changes in estimated cost for closure, and/or for inflation. The associated asset retirement cost is recorded as property and equipment (buildings). We depreciate the asset retirement cost on a straight-line basis over its estimated useful life in accordance with our depreciation policy.

Income Taxes

Income taxes are accounted for in accordance with ASC 740, “Income Taxes”. Under ASC 740, the provision for income taxes is comprised of taxes that are currently payable and deferred taxes that relate to the temporary differences between financial reporting carrying values and tax bases of assets and liabilities. Deferred tax assets and liabilities are measured using enacted income tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. Any effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

ASC 740 requires that deferred income tax assets be reduced by a valuation allowance if it is more likely than not that some portion or all of the deferred income tax assets will not be realized. We evaluate the realizability of our deferred income tax assets, primarily resulting from impairment loss and net operating loss carryforwards, and adjust our valuation allowance, if necessary. Once we utilize our net operating loss carryforwards or reverse the related valuation allowance we have recorded on these deferred tax assets, we would expect our provision for income tax expense in future periods to reflect an effective tax rate that will be significantly higher than past periods.

ASC 740 sets out a consistent framework for preparers to use to determine the appropriate recognition and measurement of uncertain tax positions. ASC 740 uses a two-step approach wherein a tax benefit is recognized if a position is more-likely-than-not to be sustained. The amount of the benefit is then measured to be the highest tax benefit which is greater than 50% likely to be realized. ASC 740 also sets out disclosure requirements to enhance transparency of an entity's tax reserves.

We reassess the validity of our conclusions regarding uncertain income tax positions on a quarterly basis to determine if facts or circumstances have arisen that might cause us to change our judgment regarding the likelihood of a tax position's sustainability under audit. As we believe that all such positions are fully supportable by existing Federal law and related interpretations, there are no uncertain tax positions to consider in accordance with ASC 740.

Foreign Operation

On October 31, 2011, we acquired Safety & Ecology Corporation Limited ("SECL" - a United Kingdom corporation), a subsidiary of SEHC. The financial results of SECL are included in the consolidated financial statements of the Company within the Services Segment. The financial results of SECL are translated into U.S. dollars using exchange rates in effect at period-end for assets and liabilities and average exchange rates during the period for result of operations. The related translation adjustments are reported as a separate component of stockholders' equity.

Concentration Risk

Approximately 120 (80 full time and 40 temporary) or 13.0% of the Company's employees are unionized and are covered by collective bargaining agreements. We generated total revenue from continuing operations of \$59,136,000 or 49.9%, \$51,929,000 or 53.1%, and \$45,169,000 or 48.8%, from CH Plateau Remediation Company ("CHPRC") for the twelve months ended December 31, 2011, 2010, and 2009, respectively.

We performed services relating to waste generated by the federal government, either directly as a prime contractor or indirectly as a subcontractor (including CHPRC as discussed above) to the federal government, representing approximately \$100,165,000 or 84.4% of our total revenue from continuing operations during 2011, as compared to \$80,275,000 or 82.1% of our total revenue from continuing operations during 2010, and \$75,013,000 or 81.2% of our total revenue from continuing operations during 2009.

Gross Receipts Taxes and Other Charges

ASC 605-45, "Revenue Recognition – Principal Agent Consideration" provides guidance regarding the accounting and financial statement presentation for certain taxes assessed by a governmental authority. These taxes and surcharges include, among others, universal service fund charges, sales, use, waste, and some excise taxes. In determining whether to include such taxes in our revenue and expenses, we assess, among other things, whether we are the primary obligor or principal taxpayer for the taxes assessed in each jurisdiction where we do business. As we are merely a collection agent for the government authority in certain of our facilities, we record the taxes on a net method and do not include them in our revenue and cost of services.

Revenue Recognition

Treatment Segment revenues. The processing of mixed waste is complex and may take several months or more to complete, as such we recognize revenues using a performance based methodology basis with our measure of progress towards completion determined based on output measures consisting of milestones achieved and completed. We have waste tracking capabilities, which we continue to enhance, to allow us to better match the revenues earned to the processing phases achieved. The revenues are recognized as each of the following three processing phases are completed: receipt, treatment/processing and shipment/final disposal. However, based on the processing of certain waste streams, the treatment/processing and shipment/final disposal phases may be combined as sometimes they are completed concurrently. As major processing phases are completed and the costs incurred, we recognize the corresponding percentage of revenue utilizing a proportional performance model. We experience delays in processing invoices due to the complexity of the documentation that is required for invoicing, as well as the difference between completion of revenue recognition milestones and agreed upon invoicing terms, which results in unbilled receivables.

The timing differences occur for several reasons, partially from delays in the final processing of all wastes associated with certain work orders and partially from delays for analytical testing that is required after we have processed waste but prior to our release of waste for disposal. As the waste moves through these processing phases and revenues are recognized, the correlating costs are expensed as incurred. Although we use our best estimates and all available information to accurately determine these disposal expenses, the risk does exist that these estimates could prove to be inadequate in the event the waste requires retreatment. Furthermore, should the waste be returned to the generator, the related receivables could be uncollectible; however, historical experience has not indicated this to be a material uncertainty.

Services Segment revenues. Revenues include services performed under time and material, cost reimbursement, and fixed price contracts. Revenues and costs associated with fixed price contracts are recognized using the percentage of completion (efforts expended) method. Revenues and costs associated with time and material contracts are recognized as revenues when earned and costs are incurred.

Under cost reimbursement contracts, we are reimbursed for costs incurred plus a certain percentage markup for indirect costs, in accordance with contract provision. Costs incurred on excess of contract funding may be renegotiated for reimbursement. We also earn a fee based on the approved costs to complete the contract. We recognize this fee using the proportion of costs incurred to total estimated contract costs. We include in revenues the amount of the reimbursement for costs incurred plus the markup for indirect costs as well as the fee that we have earned.

Contract costs include all direct labor, material and other non-labor costs and those indirect costs related to contract support, such as depreciation, fringe benefits, overhead labor, supplies, tools, repairs and equipment rental. Provisions for estimated losses on uncompleted contracts are made in the period in which such losses are determined. Changes in job performance, job conditions and estimated profitability, including those arising from contract penalty provisions and final contract settlements may result in revisions to costs and income and are recognized in the period in which the revisions are determined.

Consulting revenues are recognized as services are rendered. The services provided are based on billable hours and revenues are recognized in relation to incurred labor and consulting costs. Out of pocket costs reimbursed by customers are also included in revenues.

The liability, "billings in excess of costs and estimated earnings", represents billings in excess of revenues recognized and accrued costs to jobs.

Self-Insurance

We are self-insured for a significant portion of our group health. The Company estimates expected losses based on statistical analyses of historical industry data, as well as our own estimates based on the Company's actual historical data to determine required self-insurance reserves. The assumptions are closely reviewed, monitored, and adjusted when warranted by changing circumstances. The estimated accruals for these liabilities could be affected if actual experience related to the number of claims and cost per claim differs from these assumptions and historical trends. Based on the information known on December 31, 2011, we believe we have provided adequate reserves for our self-insurance exposure. As of December 31, 2011 and 2010, self-insurance reserves were \$475,000 and \$499,000, respectively, and were included in accrued expenses in the accompanying consolidated balance sheets. The total amounts expensed for self-insurance during 2011, 2010, and 2009 were \$3,041,000, \$2,896,000, and \$2,440,000, respectively, for our continuing operations, and \$311,000, \$314,000, and \$295,000, for our discontinued operations, respectively.

Stock-Based Compensation

We account for stock-based compensation in accordance with ASC 718, "Compensation – Stock Compensation". ASC 718 establishes accounting standards for entity exchanges of equity instruments for goods or services. It also addresses transactions in which an entity incurs liabilities in exchange for goods or services that are based on the fair value of the entity's equity instruments or that may be settled by the issuance of those equity instruments. ASC 718 requires all share-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values. The Company uses the Black-Scholes option-pricing model to determine the fair-value of stock-based awards which requires subjective assumptions. Assumptions used to estimate the fair value of stock options granted include the exercise price of the award, the expected term, the expected volatility of the Company's stock over the option's expected term, the risk-free interest rate over the option's expected term, and the expected annual dividend yield. The Company's expected term represents the period that stock-based awards are expected to be outstanding and is determined based on historical experience of similar awards, giving consideration to the contractual terms of the stock-based awards, vesting schedules, and post-vesting data. Our computation of expected volatility is based on the Company's historical volatility from our traded common stock over the expected term of the option grants. The interest rate for periods within the expected term of the award is based on the U.S. Treasury yield curve in effect at the time of grant.

We recognize stock-based compensation expense using a straight-line amortization method over the requisite period, which is the vesting period of the stock option grant. As ASC 718 requires that stock-based compensation expense be based on options that are ultimately expected to vest, our stock-based compensation expense is reduced at an estimated forfeiture rate. Our estimated forfeiture rate is generally based on historical trends of actual forfeitures. Forfeiture rates are evaluated, and revised as necessary.

Comprehensive Income

The components of comprehensive income are net income and the effects of foreign currency translation adjustments. The accumulated other comprehensive loss for the foreign currency translation adjustment at December 31, 2011 was \$3,000. We had no foreign currency translation adjustment at December 31, 2010.

Net Income (Loss) Per Share

Basic earning per share excludes any dilutive effects of stock options, warrants, and convertible preferred stock. In periods where they are anti-dilutive, such amounts are excluded from the calculations of dilutive earnings per share.

The following is a reconciliation of basic net income (loss) per share to diluted net income (loss) per share for the years ended December 31, 2011, 2010, and 2009:

(Amounts in Thousands, Except for Per Share Amounts)	2011	2010	2009
Income per share from continuing operations attributable to Perma-Fix Environmental Services, Inc. common stockholders			
Income from continuing operations	\$ 11,778	\$ 3,271	\$ 9,687
Basic income per share	<u>\$.21</u>	<u>\$.06</u>	<u>\$.18</u>
Diluted income per share	<u>\$.21</u>	<u>\$.06</u>	<u>\$.18</u>
Income (loss) per share from discontinued operations attributable to Perma-Fix Environmental Services, Inc. common stockholders			
Income (loss) from discontinued operations	<u>\$ 777</u>	<u>\$ (663)</u>	<u>\$ (65)</u>
Basic loss per share	<u>\$.01</u>	<u>\$ (.01)</u>	<u>\$ —</u>
Diluted loss per share	<u>\$.01</u>	<u>\$ (.01)</u>	<u>\$ —</u>
Income per share from disposal of discontinued operations attributable to Perma-Fix Environmental Services, Inc. common stockholders			
Gain on disposal of discontinued operations	<u>\$ 1,509</u>	<u>\$ —</u>	<u>\$ —</u>
Basic income per share	<u>\$.03</u>	<u>\$ —</u>	<u>\$ —</u>
Diluted income per share	<u>\$.03</u>	<u>\$ —</u>	<u>\$ —</u>
Weighted average common shares outstanding – basic	55,295	54,947	54,238
Potential shares exercisable under stock option plans	22	56	245
Potential shares upon exercise of Warrants	—	27	43
Weighted average common shares outstanding – diluted	<u>55,317</u>	<u>55,030</u>	<u>54,526</u>

Potential shares excluded from above weighted average share calculations due to their anti-dilutive effect include:

Upon exercise of options	2,549	2,195	1,595
Upon exercise of Warrants	150	—	—

Fair Value of Financial Instruments

The carrying values of cash, trade accounts receivable, and trade accounts payable approximate their fair values principally because of the short-term maturities of these financial instruments. The fair value of our long-term debt is estimated based on the current rates offered to us for debt of similar terms and maturities. Under this method, the fair value of long-term debt was not significantly different from the stated carrying value at December 31, 2011 and 2010. The carrying value of our subsidiary's preferred stock is not significantly different than its fair value.

Recently Issued Accounting Standards

In May 2011, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2011-04 (“ASU 2011-04”), “Fair Value Measurement (Topic 820) - Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs”. ASU 2011-04 improves comparability of fair value measurements presented and disclosed in financial statements prepared in accordance with U.S. generally accepted accounting principles (“GAAP”) and International Financial Reporting Standards (“IFRSs”). ASU 2011-04 changes certain fair value measurement principles and enhances the disclosure requirements particularly for level 3 fair value measurements. The amendments in this guidance are to be applied prospectively, and are effective for interim and annual periods beginning after December 15, 2011. We do not expect ASU 2011-04 to have a material effect on our financial position, results of operations, or cash flow.

In June 2011, the FASB issued ASU No. 2011-05, “Comprehensive Income (Topic 220) - Presentation of Comprehensive Income”, and in December 2011, the FASB issued ASU No. 2011-12, “Deferral of the Effective Date for Amendments to the Presentation of Reclassifications of Items Out of Accumulated Other Comprehensive Income”. Both ASUs amend guidance for the presentation of comprehensive income. The amended guidances require an entity to present components of net income and other comprehensive income in one continuous statement, referred to as the statement of comprehensive income, or in two separate, but consecutive statements. The current option to report other comprehensive

income and its components in the statement of stockholders' equity will be eliminated. Although the new guidance changes the presentation of comprehensive income, there are no changes to the components that are recognized in net income or other comprehensive income under existing guidance. Both ASUs are effective for interim and annual periods beginning after December 15, 2011 with early adoption permitted. These ASUs will change our financial statement presentation of comprehensive income but will not impact our net income, financial position, or cash flows.

In September 2011, the FASB issued ASU No. 2011-08, “Intangibles – Goodwill and Other (Topic 350) – Testing Goodwill for Impairment” that gives companies the option to make a qualitative evaluation about the likelihood of goodwill impairment. Companies will be required to perform the two-step impairment test only if it concludes that the fair value of a reporting unit is more likely than not, less than its carrying value. ASU No. 2011-08 is effective for annual and interim goodwill impairment tests performed for fiscal years beginning after December 15, 2011, with early adoption permitted. We do not expect adoption of ASU No. 2011-08 to have an impact on our consolidated financial statements.

NOTE 3

STOCK-BASED COMPENSATION

We follow FASB ASC 718, “Compensation – Stock Compensation” (“ASC 718”) to account for stock-based compensation. ASC 718 requires all stock-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values.

The Company has certain stock option plans under which it awards incentive and non-qualified stock options to employees, officers, and outside directors. Stock options granted to employees have either a ten year contractual term with one-fifth yearly vesting over a five year period or a six year contractual term with one-third yearly vesting over a three year period. Stock options granted to outside directors have a ten year contractual term with a vesting period of six months.

On August 24, 2011, we granted an aggregate of 90,000 options from the Company’s 2003 Outside Directors Stock Plan to our one newly elected director and our five re-elected directors at our Annual Meeting of Stockholders held on August 24, 2011. The options granted were for a contractual term of ten years with vesting period of six months. The exercise price of the options was \$1.41 per share which was equal to our closing stock price the day preceding the grant date, pursuant to the 2003 Outside Directors Stock Plan.

On July 25, 2011, we granted 300,000 Incentive Stock Options (“ISOs”) from the 2010 Stock Option Plan to Mr. James Blankenhorn, our Chief Operating Officer, which allows for the purchase of up to 300,000 shares of the Company’s Common Stock at \$1.57 per share. Mr. Blankenhorn’s employment with the Company became effective June 1, 2011. The options granted are for a term of six years from grant date with one-third yearly vesting over a three year period.

Upon the closing of the acquisition of SEHC and its subsidiaries on October 31, 2011, Mr. Christopher Leichtweis (“Leichtweis”), a former officer and director of Homeland, was appointed a Senior Vice President of the Company and President of SEC pursuant to the terms of a four year employment agreement. In connection with Leichtweis’ employment on October 31, 2011, we granted Leichtweis a non-qualified stock option (the “Option”) to purchase up to 250,000 shares of our Common Stock as reported on the Nasdaq on the grant date, which was \$1.35. The Option has a term of 10 years from grant date, with 25% yearly vesting over a four-year period. The Option was granted in accordance with, and is subject to, the Non-Qualified Stock Option Agreement, dated October 31, 2011.

The Company estimates fair value of stock options using the Black-Scholes valuation model. Assumptions used to estimate the fair value of stock options granted include the exercise price of the award, the expected term, the expected volatility of the Company's stock over the option's expected term, the risk-free interest rate over the option's expected term, and the expected annual dividend yield. The fair value of the employee and director stock options granted and the related assumptions used in the Black-Scholes option pricing model used to value the options granted for fiscal year 2011, 2010, and 2009 were as follows:

	Employee Stock Option Granted		
	For Year Ended		
	2011	2010 ⁽⁴⁾	2009
Weighted-average fair value per share	\$ 0.82	\$ —	\$ 0.82
Risk -free interest rate ⁽¹⁾	1.29%- 1.92%	—	1.98%- 2.40%
Expected volatility of stock ⁽²⁾	58.72%- 60.02%	—	59.16%- 61.20%
Dividend yield	None	—	None
Expected option life (in years) ⁽³⁾	6.0	—	3.9-5.8

	Outside Director Stock Option Granted		
	For Year Ended		
	2011	2010	2009
Weighted-average fair value per share	\$ 0.94	\$ 1.12	\$ 1.97
Risk -free interest rate ⁽¹⁾	2.29%	2.52%	3.69%
Expected volatility of stock ⁽²⁾	57.48%	60.69%	63.37%
Dividend yield	None	None	None
Expected option life (in years) ⁽³⁾	10.0	10.0	10.0

⁽¹⁾ The risk-free interest rate is based on the U.S. Treasury yield in effect at the grant date over the expected term of the option.

⁽²⁾ The expected volatility is based on historical volatility from our traded Common Stock over the expected term of the option.

⁽³⁾ The expected option life is based on historical exercises and post-vesting data.

⁽⁴⁾ No employee option grants were made in 2010.

As of December 31, 2011, we had 2,228,833 employee stock options outstanding, of which 1,638,833 are vested. The weighted average exercise price of the 1,638,833 outstanding and fully vested employee stock option is \$2.08 with a remaining weighted contractual life of 1.74 years. Additionally, we had 811,000 outstanding director stock options, of which 721,000 are vested. The weighted average exercise price of the 721,000 outstanding and fully vested director stock option is \$2.23 with a weighted remaining contractual life of 4.75 years.

The following table summarizes stock-based compensation recognized for the fiscal year 2011, 2010, and 2009.

	Year Ended		
	2011	2010	2009
Employee Stock Options	\$ 246,000	\$ 276,000	\$ 544,000
Director Stock Options	99,000	67,000	169,000
Total	<u>\$ 345,000</u>	<u>\$ 343,000</u>	<u>\$ 713,000</u>

We recognized stock-based compensation expense using a straight-line amortization method over the requisite period, which is the vesting period of the stock option grant. ASC 718 requires that stock-based compensation expense be based on options that are ultimately expected to vest. ASC 718 requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. We have generally estimated forfeiture rate based on historical trends of actual forfeiture. When actual forfeitures vary from our estimates, we recognize the difference in compensation expense in the period the actual forfeitures occur or when options vest. As of December 31, 2011, we have approximately \$433,000 of total unrecognized compensation cost related to unvested options, of which \$164,000 is expected to be recognized in 2012, \$135,000 in 2013, and \$96,000 in 2014, with the remaining \$38,000 in 2015.

NOTE 4

CAPITAL STOCK, STOCK PLANS, WARRANTS, AND INCENTIVE COMPENSATION

Stock Option Plans

Effective September 13, 1993, we adopted a Non-qualified Stock Option Plan pursuant to which officers and key employees can receive long-term performance-based equity interests in the Company. The option grants under the plan are exercisable for a period of up to ten years from the date of grant at an exercise price, which is not less than the market price of the Common Stock at date of grant. On September 13, 2003, the plan expired. No new options will be issued under this plan, but the options issued under the Plan prior to the expiration date will remain in effect until their respective maturity dates.

Effective December 12, 1993, we adopted the 1992 Outside Directors Stock Option Plan, pursuant to which options to purchase an aggregate of 100,000 shares of Common Stock had been authorized. This plan provides for the grant of options to purchase up to 5,000 shares of Common Stock for each of our outside directors upon initial election and each re-election. The plan also provides for the grant of additional options to purchase up to 10,000 shares of Common Stock on the foregoing terms to each outside director upon initial election to the Board. The options have an exercise price equal to the closing trading price on the date of grant. As amended and approved at the December 1996 Annual Meeting, the plan provided that each eligible director shall receive, at such eligible director's option, either 65% or 100% of the fee payable to such director for services rendered to us as a member of the Board in Common Stock. The number of shares of our Common Stock issuable to the eligible director shall be determined by valuing our Common Stock at 75% of its fair market value as defined by the Outside Directors Plan. As amended and approved at the May 1998 Annual Meeting, the Plan authorized 500,000 shares to be issued under the Plan. On December 12, 2003, the plan expired. No new options will be issued under this plan, but the options issued under the Plan prior to the expiration date will remain in effect until their respective maturity dates.

Effective July 29, 2003, we adopted the 2003 Outside Directors Stock Plan, which was approved by our stockholders at the Annual Meeting of Stockholders on such date. A maximum of 1,000,000 shares of our Common Stock are authorized for issuance under this plan. The plan provides for the grant of an option to purchase up to 30,000 shares of Common Stock for each outside director upon initial election to the Board of Directors, and the grant of an option to purchase up to 12,000 shares of Common Stock upon each reelection. The options granted generally have vesting period of six months from the date of grant, with exercise price equal to the closing trade price on the date prior to grant date. The plan also provides for the issuance to each outside director a number of shares of Common Stock in lieu of 65% or 100% of the fee payable to the eligible director for services rendered as a member of the Board of Directors. The number of shares issued is determined at 75% of the market value as defined in the plan. During the annual meeting held on August 5, 2008, the stockholders approved the First Amendment to our 2003 Outside Director Stock Plan which increased from 1,000,000 to 2,000,000 the number of shares reserved for issuance under the plan.

Effective July 28, 2004, we adopted the 2004 Stock Option Plan, which was approved by our stockholders at the Annual Meeting of Stockholders on such date. The plan provides for the grants of options to selected officers and employees, including any employee who is also a member of the Board of Directors of the Company. A maximum of 2,000,000 shares of our Common Stock are authorized for issuance under this plan in the form of either Incentive or Non-Qualified Stock Options. The option grants under the plan are exercisable for a period of up to 10 years from the date of grant at an exercise price of not less than market price of the Common Stock at grant date.

On April 28, 2010, we adopted the 2010 Stock Option Plan (the "2010 Plan"), which was approved by our stockholders at the Company's Annual Meeting of Stockholders on September 29, 2010. The 2010 Plan authorizes an aggregate grant of 1,000,000 non-qualified and incentive stock options to officers and employees (including an employee who is a member of the Board of Directors) of the Company for the purchase of up to 1,000,000 shares of the Company's Common Stock. The term of each stock option granted will be fixed by the Compensation Committee, but no stock option will be exercisable more than ten years after the grant date, or in the case of an incentive stock option granted to a 10% stockholder, five years after the grant date. The exercise price of any incentive stock option granted under the 2010 Option Plan to an individual who is not a 10% stockholder at the time of the grant will not be less than the fair market value of the shares at the time of the grant, and the exercise price of any incentive stock option granted to a 10% stockholder shall not be less than 110% of the fair market value at the time of grant. The exercise price of any non-qualified stock options granted under the 2010 Stock Plan will not be less than the fair market value of the shares at the time of grant.

We follow FASB ASC 718 to account for employee and director stock options. ASC 718 establishes accounting standards for entity exchanges of equity instruments for goods or services. It also addresses transactions in which an entity incurs liabilities in exchange for goods or services that are based on the fair value of the entity's equity instruments or that may be settled by the issuance of those equity instruments. ASC 718 requires all stock-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values. See "Note 3 – Stock-Based Compensation" for further discussion on ASC 718.

No employees exercised options during 2011. During 2010, we issued an aggregate of 350,000 shares of our Common Stock upon exercise of 350,000 employee stock options, at exercise prices ranging from \$1.25 to \$2.19. An employee used 38,210 shares of personally held Company Common Stock as payment for the exercise of 70,000 options to purchase 70,000 shares of the Company's Common Stock at \$1.25 per share, as permitted under the 1993 Non-Qualified Stock Option Plan. The 38,210 shares are held as treasury stock. The cost of the 38,210 shares was determined to be approximately \$88,000 in accordance with the Plan. Total proceeds received during 2010 for option exercises was approximately \$509,000. During 2009, we issued an aggregate of 357,822 shares of our Common Stock upon exercise of 347,822 employee stock options, at exercise prices ranging from \$1.25 to \$1.86 and 10,000 outside director options, at an exercise price of \$1.25. Total proceeds received during 2009 for option exercises totaled approximately \$631,000.

Pursuant to the terms of the Purchase Agreement between the Company, Homeland, and SEHC dated July 15, 2011, upon closing of the Purchase Agreement which occurred on October 31, 2011, certain security holders of Homeland ("Management Investors") purchased 813,007 restricted shares of the Company's Common Stock for a total consideration of approximately \$1,000,000, or \$1.23 a share, which was the average of the closing prices of the Company's Common Stock as quoted on the Nasdaq during the 30 trading days ending on the trading day immediately prior to the closing of the acquisition. The purchase of the Company's Common Stock was pursuant to a private placement under Section 4(2) of the Securities Act of 1933, as amended (the "Act") or Rule 506 of Regulation D promulgated under the Act.

We issued a total of 149,061, 127,276, and 136,522 shares of our Common Stock in 2011, 2010, and 2009, respectively, under our 2003 Outside Directors Stock Plan to our outside directors as compensation for serving on our Board of Directors. During 2011, we paid each of our outside directors \$6,500 in fees quarterly for serving as a member of our Board of Directors. The Audit Committee Chairman receives an additional quarterly fee of \$5,500 due to the position's additional responsibility. In addition, effective August 24, 2011, our Research and Development Committee Chairman (a newly formed Committee) receives an additional quarterly fee of \$1,000 due to the additional time commitment to the position. Each board member is also paid \$1,000 for each board meeting attendance as well as \$500 for each telephonic conference call. As a member of the Board of Directors, each director elects to receive either 65% or 100% of the director's fee in shares of our Common Stock. The number of shares received is calculated based on 75% of the fair market value of our Common Stock determined on the business day immediately preceding the date that the quarterly fee is due. The balance of each director's fee, if any, is payable in cash.

Summary of the status of options under the Company's total Plans as of December 31, 2011, 2010, and 2009 and changes during the years ending on those dates is presented below. The Company's Plans consist of the 1993 Non-Qualified Stock Option plan, the 2004 and 2010 Stock Option Plans, and the 1992 and 2003 Outside Director Plans:

	2011			2010			2009		
	Shares	Weighted Average Exercise Price	Intrinsic Value ^(a)	Shares	Weighted Average Exercise Price	Intrinsic Value ^(a)	Shares	Weighted Average Exercise Price	Intrinsic Value ^(a)
Non-qualified Stock Option Plan:									
Balance at beginning of year	630,359	\$ 2.00		991,359	\$ 1.89		1,084,848	\$ 1.86	
Granted	—	—		—	—		—	—	
Exercised	—	—	\$ —	(350,000)	1.70	\$ 227,000	(89,489)	1.54	\$ 68,526
Forfeited	(272,359)	1.76		(11,000)	1.45		(4,000)	1.97	
Balance at end of year	<u>358,000</u>	2.18	\$ —	<u>630,359</u>	2.00	\$ —	<u>991,359</u>	1.89	\$ 374,939
Options exercisable at year end	358,000	2.18	\$ —	630,359	2.00	\$ —	991,359	1.89	\$ 374,939
1992 Outside Directors Stock Plan:									
Balance at beginning of year	85,000	\$ 2.50		100,000	\$ 2.38		135,000	\$ 2.08	
Granted	—	—		—	—		—	—	
Exercised	—	—	\$ —	—	—	\$ —	(10,000)	1.25	\$ 10,300
Forfeited	(30,000)	2.59		(15,000)	1.69		(25,000)	1.25	
Balance at end of year	<u>55,000</u>	2.45	\$ —	<u>85,000</u>	2.50	\$ —	<u>100,000</u>	2.38	\$ 12,488
Options exercisable at year end	55,000	2.45	\$ —	85,000	2.50	\$ —	100,000	2.38	\$ 12,488
2003 Outside Directors Stock Plan:									
Balance at beginning of year	666,000	\$ 2.21		594,000	\$ 2.27		510,000	\$ 2.21	
Granted	90,000	1.41		72,000	1.68		84,000	2.67	
Balance at end of year	<u>756,000</u>	2.11	\$ 12,600	<u>666,000</u>	2.21	\$ —	<u>594,000</u>	2.27	\$ 108,000
Options exercisable at year end	666,000	2.21	\$ —	594,000	2.27	\$ —	510,000	2.21	\$ 108,000
2004 Stock Option Plan:									
Balance at beginning of year	1,374,166	\$ 2.04		1,424,166	\$ 2.05		1,687,499	\$ 2.08	
Granted	—	—		—	—		170,000	1.57	
Exercised	—	—	\$ —	—	—	\$ —	(258,333)	1.86	\$ 152,750
Forfeited	(53,333)	2.25		(50,000)	2.26		(175,000)	2.16	
Balance at end of year	<u>1,320,833</u>	2.03	\$ 18,900	<u>1,374,166</u>	2.04	\$ 30,900	<u>1,424,166</u>	2.05	\$ 324,153
Options exercisable at year end	1,280,833	2.05	\$ 13,700	1,022,333	2.04	\$ 14,100	718,833	1.99	\$ 202,353
2010 Stock Option Plan:^(b)									
Balance at beginning of year	—	\$ —		—	\$ —		—	\$ —	
Granted	300,000	1.57		—	—		—	—	
Exercised	—	—	\$ —	—	—	\$ —	—	—	\$ —
Forfeited	—	—		—	—		—	—	
Balance at end of year	<u>300,000</u>	1.57	\$ —	<u>—</u>	—	\$ —	<u>—</u>	—	\$ —
Options exercisable at year end	—	—	\$ —	—	—	\$ —	—	—	\$ —

(a) Represents the difference between the market price at the date of exercise or the end of the year, as applicable, and the exercise price.

(b) Plan was approved in September 2010 which authorizes grants of up to an aggregate of 1,000,000 non-qualified and incentive stock options.

The summary of the Company's total Plans as of December 31, 2011, and changes during the period then ended are presented as follows:

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
Options outstanding January 1, 2010	2,755,525	\$ 2.09		
Granted	390,000	1.53		
Exercised	—	—		\$ —
Forfeited	(355,692)	1.90		
Options outstanding end of Period ⁽¹⁾	<u>2,789,833</u>	2.03	3.2	\$ 31,500
Options exercisable at December 31, 2011 ⁽¹⁾	<u>2,359,833</u>	\$ 2.13	2.7	\$ 13,700
Options vested and expected to vest at December 31, 2011	<u>2,789,833</u>	\$ 2.03	3.2	\$ 31,500

⁽¹⁾ Options with exercise price ranging from \$1.42 to \$2.98

Warrants and Capital Stock Issuance for Debt

We have issued various Warrants pursuant to acquisitions, private placements, debt and debt conversion to facilitate certain financing arrangements. The Warrants principally are for a term of two to five years and entitle the holder to purchase one share of Common Stock for each warrant at the stated exercise price.

As of December 31, 2011, we have three Warrants outstanding to purchase up to an aggregate 150,000 shares of the Company's Common Stock at \$1.50 per share. The purchases of up to 150,000 shares of the Company's Stock were originally covered under two Warrants issued on May 8, 2009 as consideration of a \$3,000,000 loan received by the Company from Mr. William N. Lampson and Mr. Diehl Rettig (collectively, "the Lender"). On April 18, 2011, the loan was amended. As consideration of the amended loan, the original Warrants issued to Mr. Lampson (for purchase up to 135,000 shares of the Company's Common Stock) and to Mr. Rettig (for purchase up to 15,000 shares of the Company's Common Stock) which were to expire on May 8, 2011, were amended and extended to May 8, 2012 at the same exercise price under the original Warrants (\$1.50 per share - Mr. Rettig is now deceased; accordingly, the amended Warrant is now held by Mr. Rettig's personal representative or estate). During August 2011, Mr. Robert L. Ferguson (a member of our Board of Directors) acquired from Mr. William Lampson one-half of Mr. Lampson's Warrant (the "Lampson Warrant"). As a result of the acquisition of one-half of the Lampson Warrant by Mr. Ferguson, Mr. Ferguson and Mr. Lampson each hold a Warrant for the purchase of up to 67,500 shares of Common Stock at \$1.50 per share and with an expiration date of May 8, 2012.

As consideration of receiving the \$3,000,000 from the Lender, we also issued, pursuant to an exemption from registration under Section 4(2) of the Securities Act of 1933, as amended (the "Act"), and/or Rule 506 of Regulation D promulgated under the Act, an aggregate of 200,000 shares of the Company's Common Stock to the Lenders in 2009 (See "Note 10 – Long Term Debt – Promissory Note and Installment Agreement" for further information regarding the Common Stock and Warrant issuances. Also see "Note 16 – Related Party Transactions – Robert L. Ferguson" for the Mr. Ferguson's acquisition of the Warrant).

Shares Reserved

At December 31, 2011, we have reserved approximately 3,189,833 shares of Common Stock for future issuance under all of the option and warrant arrangements.

NOTE 5

PREFERRED STOCK ISSUANCE AND CONVERSION

Series B Preferred Stock

As partial consideration of the M&EC Acquisition in 2001, M&EC issued shares of its Series B Preferred Stock to stockholders of M&EC having a stated value of approximately \$1,285,000. No other shares of M&EC's Series B Preferred Stock are outstanding. The Series B Preferred Stock is non-voting and non-convertible, has a \$1.00 liquidation preference per share and may be redeemed at the option of M&EC at any time after one year from the date of issuance for the per share price of \$1.00. Following the first 12 months after the original issuance of the Series B Preferred Stock, the holders of the Series B Preferred Stock will be entitled to receive, when, as, and if declared by the Board of Directors of M&EC out of legally available funds, dividends at the rate of 5% per year per share applied to the amount of \$1.00 per share, which shall be fully cumulative. We began accruing dividends for the Series B Preferred Stock in July 2002, and have accrued a total of approximately \$610,000 since July 2002, of which \$64,000 was accrued in each of the years ended December 31, 2003 to 2011.

NOTE 6

GOODWILL AND OTHER INTANGIBLE ASSETS

The following summarizes changes in the carrying amount of goodwill by reporting segments. In the fourth quarter of 2009, we determined that we had not appropriately recorded a deferred tax liability on indefinite lived intangible assets in connection with our acquisition of PFNWR in June 2007. Accordingly, we recorded an adjustment in the fourth quarter of 2009 to correct goodwill and deferred tax liability related to the acquisition. This correction increased goodwill and increased deferred tax liability by \$298,000. We did not amend our prior financial statements for this adjustment as the correction was not considered material to the Consolidated Balance Sheet and had no impact on our Consolidated Statement of Operations, income per share, accumulated deficit or our cash flow. The \$734,000, \$2,978,000 and \$840,000 recorded in 2009, 2010, and 2011, respectively, resulted from earn-out amounts that we were required to pay in connection with the acquisition of our PFNWR facility in 2007 (See “Note 14 – “Commitments and Contingencies – Earn-Out Amount – Perma-Fix Northwest, Inc. (“PFNW”) and Perma-Fix Northwest Richland, Inc. (“PFNWR”)” for information regarding this earn-out amount). During the fourth quarter of 2011, we recorded \$10,893,000 in goodwill within our Services Segment resulting from the acquisition of SEC on October 31, 2011. As a result of the acquisition of SEC on October 31, 2011, during the fourth quarter of 2011, the Company made structure and reporting changes to its internal organization and changes to its operating segments, resulting in changes to its reporting units. As a result of these changes, we reassigned approximately \$3,637,000 of the \$14,840,000 goodwill from our treatment operations reporting unit (in our Treatment Segment) to our CHPRC reporting unit (in our Services Segment) using a relative fair value approach in accordance with ASC 350, Intangibles – Goodwill and Other” (see “Note 2 – Summary of Significant Accounting Policies – Goodwill and Other Intangible Assets” for further information regarding this reassignment).

Goodwill (amounts in thousands)	Treatment	Services	Total
Balance as of December 31, 2008	\$ 9,990	\$ 1,330	\$ 11,320
Additional Goodwill Recorded as Result of PFNWR Acquisition	298	—	298
Goodwill Recorded in connection with PFNWR Earn-Out	734	—	734
Balance as of December 31, 2009	\$ 11,022	\$ 1,330	\$ 12,352
Goodwill Recorded in connection with PFNWR Earn-Out	2,978	—	2,978
Balance as of December 31, 2010	\$ 14,000	\$ 1,330	\$ 15,330
Goodwill Recorded in connection with PFNWR Earn-Out	840	—	840
Goodwill Recorded in connection with SEC Acquisition	—	10,893	10,893
Reassignment of goodwill from change in reporting unit	(3,637)	3,637	—
Balance as of December 31, 2011	<u>\$ 11,203</u>	<u>\$ 15,860</u>	<u>\$ 27,063</u>

The following table summarizes changes in the carrying amount of permits. No permit exists at our Services Segment. In the first quarter of 2010, we reclassified approximately \$384,000 in costs from permit in process to permit at PFF. These costs were incurred for the expansion of our operating permit at the facility. The Company currently has only one definite-lived permit, which is at our DSSI facility. This permit of approximately \$545,000 was capitalized in 2009 in connection with the authorization issued by the U.S. EPA to our DSSI facility to commercially store and dispose of radioactive PCBs. This permit is being amortized over a ten year period in accordance with its estimated useful life.

Permit (amount in thousands)	Treatment
Balance as of December 31, 2008	\$ 16,741
Permits capitalized in connection with PCB at DSSI	545
PCB permit amortized	(45)
Permits in progress	(352)
Balance as of December 31, 2009	\$ 16,889
PCB permit amortized	(55)
Permit enhancement at PFF	384
Permits in progress	(355)
Balance as of December 31, 2010	\$ 16,863
PCB permit amortized	(55)
Permits in progress	46
Balance as of December 31, 2011	\$ 16,854

The following table summarizes information relating the Company's Other intangible assets:

Intangibles (amount in thousands)	Useful Lives (Years)	December 31, 2011			December 31, 2010		
		Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Patent	8-18	\$ 402	\$ (77)	\$ 325	\$ 245	\$ (55)	\$ 190
Software	3	158	(66)	92	102	(21)	81
Non-compete agreement	5	265	(9)	256	—	—	—
Customer contracts	.5	445	(144)	301	—	—	—
Customer relationships	12	3,370	(86)	3,284	—	—	—
Total		\$ 4,640	\$ (382)	\$ 4,258	\$ 347	\$ (76)	\$ 271

Intangible assets recorded as a result of the acquisition of SEC on October 31, 2011 included a non-compete agreement, customer relationships, customer contracts, and software (\$4,000) which were recorded at fair market value of approximately \$4,084,000 (see "Note 7 –Business Acquisition" for the purchase price allocation of SEC). The intangible assets acquired are amortized on a straight-line basis over their useful lives with the exception of customer relationships which are being amortized using an accelerated method. The following table summarizes the expected amortization over the next five years for our definite-lived intangible assets, which includes the one definite-lived permit noted above.

Year	Amount (In thousands)
2012	\$ 940
2013	575
2014	519
2015	471
2016	429
	\$ 2,934

Amortization expense relating to intangible asset for the Company was \$386,000, \$79,000, and \$70,000 for the years ended December 31, 2011, 2010, and 2009, respectively.

NOTE 7

BUSINESS ACQUISITION

On October 31, 2011, we completed the acquisition of SEC pursuant to that certain Stock Purchase Agreement, dated July 15, 2011 (“Purchase Agreement”), between us, Homeland Capital Security Corporation (“Homeland”) and SEHC. SEC is an international provider of environmental, hazardous and radiological remediation infrastructure upgrades and nuclear energy services. SEC provides remediation of nuclear materials for the U.S. government and other commercial customers. We acquired SEC for a total consideration of approximately \$17,885,000 determined as follows:

- (i) cash consideration of approximately \$14,885,000, after certain working capital closing adjustments. This cash consideration was reduced by approximately \$1,000,000 total consideration for our Common Stock purchased from us by certain security holders of Homeland as discussed below;
- (ii) \$2,500,000 unsecured, non-negotiable promissory note (the “Note”), bearing an annual rate of interest of 6%, payable in 36 monthly installments, which Note provides that we have the right to prepay such at any time without interest or penalty. We prepaid \$500,000 of the principal amount of the Note within 10 days of closing of the acquisition. The Note may be subject to offset of amounts Homeland owes us for indemnification for breach of, or failure to perform, certain terms and provisions of the Purchase Agreement if the Escrow Agreement has terminated pursuant to its terms or the amount held in escrow has been exhausted pursuant to the terms of the Purchase Agreement. Under the terms of the Note, in the event of a continuing event of default under the Note, Homeland has the option to convert the unpaid portion of the Note into our restricted shares of Common Stock equal to the quotient determined by dividing the principal amount owing under the Note and all accrued and unpaid interest thereon, plus certain expenses, by the average of the closing prices per share of our Common Stock as reported by the primary national securities exchange or automatic quotation system on which our Common Stock is traded during the 30 consecutive trading day period ending on the trading day immediately prior to receipt by us of Homeland’s written notice of its election to receive our Common Stock as a result of the event of default that is continuing; provided that the number of shares of our Common Stock to be issued to Homeland under the Note in the event of a continuing event of default plus the number of shares of our Common Stock issued to the Management Investors, as discussed below, shall not exceed 19.9% of the voting power of all of our voting securities issued and outstanding as of the date of the Purchase Agreement; and
- (iii) the sum of \$2,000,000 deposited in an escrow account to satisfy any claims that we may have against Homeland for indemnification pursuant to the Purchase Agreement and the Escrow Agreement, dated October 31, 2011 (“Escrow Agreement”). On January 3, 2012, we received \$1,500,000 of the amount deposited in the escrow account as certain terms pursuant to an agreement entered into by Homeland, SEHC and us at closing of the acquisition were not met by December 31, 2011.

Pursuant to the terms of the Purchase Agreement, upon closing of the Purchase Agreement, certain security holders of Homeland (“Management Investors”) purchased 813,007 restricted shares of our Common Stock for a total consideration of approximately \$1,000,000, or \$1.23 a share, which was the average of the closing prices of our Common Stock as quoted on the Nasdaq during the 30 trading days ending on the trading day immediately prior to the closing of the acquisition. The purchase of the Company’s Common Stock was pursuant to a private placement under Section 4(2) of the Securities Act of 1933, as amended (the “Act”) or Rule 506 of Regulation D promulgated under the Act.

The acquisition was accounted for using the purchase method of accounting, in accordance with FASB ASC 805 – “Business Combinations”. The consideration for the acquisition was attributed to net assets on the basis of the fair value of assets acquired and liabilities assumed as of October 31, 2011. The excess of the cost of the acquisition over the estimated fair value of the net tangible assets and intangible assets on the acquisition date, which amounted to \$10,893,000, was allocated to goodwill which is not amortized but subject to an annual impairment test. The Company has not yet finalized the allocation of the purchase price to the net assets acquired in this acquisition. As such the estimated purchase price allocation is preliminary and subject to further revision. The following table summarizes the preliminary purchase price allocation of the fair values of the assets acquired and liabilities assumed as of December 31, 2011.

(Amounts in thousands)

Current assets	\$ 22,413
Property, plant and equipment	2,135
Intangibles	4,084
Goodwill	10,893
Other assets	34
Total assets acquired	39,559
Current liabilities	(15,748)
Customer Contracts	(3,465)
Non-current liabilities	(2,091)
Total liabilities acquired	(21,304)
Non Controlling Interest	(370)
Total consideration	\$ 17,885

The following table summarizes the preliminary components of tangible assets acquired:

(Amounts in thousands)	Preliminary Fair Value	Weighted Average
		Estimated Useful Life

Vehicles	\$	583	5.0 years
Lab Equipment		1,235	7.0 years
Office furniture and equipment		317	4.0 years
Total Tangible Assets	\$	<u>2,135</u>	

The results of operations of SEC have been included in Perma-Fix's consolidated financial statements from the date of the closing of the acquisition, which was October 31, 2011. SEC contributed revenues of approximately \$10,669,000 and net loss of \$224,000. During the year ended December 31, 2011, the Company incurred \$594,000 in acquisition-related costs. These costs are included in selling, general and administrative expenses in the Company's consolidated statement of operations for the year ended December 31, 2011. The following unaudited pro forma financial information presents the combined results of operations of combining SEC and Perma Fix as though the acquisition had occurred as of the beginning of the periods presented below, which is January 1, 2010. The pro forma financial information does not necessarily represent the results of operations that would have occurred had SEC and Perma Fix been a single company during the periods presented, nor does Perma Fix believe that the pro forma financial information presented is necessarily representative of future operating results. As the acquisition was a stock transaction, none of the goodwill related to SEC is deductible for tax purposes.

(Amounts in Thousands, Except per Share Data)

	Year Ended December 31,	
	(unaudited) 2011	(unaudited) 2010
Net revenues	\$ 188,681	\$ 194,766
Net income from continuing operations	\$ 3,327	\$ 10,165
Net income per share from continuing operations- basic	\$.06	.18
Net income per share from continuing operations- diluted	\$.06	.18

NOTE 8

CHANGES IN ESTIMATE – LEGACY WASTE ACCRUAL – PERMA-FIX NORTHWEST, INC. (“PFNW”) AND PERMA-FIX NORTHWEST RICHLAND, INC (“PFNWR”)

In acquiring PFNWR and PFNW in June 2007, the Company allocated the cost of the acquisition to the specific tangible and intangible assets acquired and liabilities assumed based upon their fair values at the date of acquisition. Judgment and estimates were made to determine these values using the most readily available information at the time of acquisition. In 2008, the Company finalized the cost of the acquisition to the assets acquired and liabilities assumed. Adjustments to assets acquired or liabilities assumed during the purchase allocation period, which is generally one year, were recorded to goodwill.

During the third quarter of 2009, as a result of a change in estimate related to accrued costs to dispose of legacy waste that were assumed as part of our acquisition of PFNWR and PFNW in June 2007, we reduced our disposal/transportation accrual by approximately \$787,000 which was recorded as a reduction to our disposal/transportation expense in our cost of goods sold. The change in estimate was necessary due to our accumulation of new information that had resulted in our identifying more efficient and cost effective ways to dispose of this legacy waste.

NOTE 9

DISCONTINUED OPERATIONS AND DIVESTITURES

Our discontinued operations consist of our Perma-Fix of Fort Lauderdale, Inc. (“PFFL”), Perma-Fix of South Georgia, Inc. (“PFSG”), and Perma-Fix of Orlando, Inc. (“PFO”) facilities which met the held for sale criteria under ASC 360, “Property, Plant, and Equipment” on October 6, 2010. Our discontinued operations also encompass our Perma-Fix of Maryland, Inc. (“PFMD”), Perma-Fix of Dayton, Inc. (“PFD”), and Perma-Fix Treatment Services, Inc. (“PFTS”) facilities, which we completed the sale of substantially all of the assets on January 8, 2008, March 14, 2008, and May 30, 2008, respectively. Our discontinued operations also includes three previously shut down locations, Perma-Fix of Pittsburgh, Inc. (“PFP”), Perma-Fix of Michigan, Inc. (“PFMI”), and Perma-Fix of Memphis, Inc. (“PFM”), which were approved as discontinued operations by our Board of Directors effective November 8, 2005, October 4, 2004, and March 12, 1998, respectively.

On August 12, 2011, we completed the sale of our wholly-owned subsidiary, PFFL, pursuant to the terms of a Stock Purchase Agreement, dated June 13, 2011. In consideration for the sale of 100% of the capital stock of PFFL, the buyer paid us \$5,500,000 in cash at closing. The cash consideration is subject to certain working capital adjustments within one hundred twenty days after closing. The proceeds received were used to pay down our revolver and used for working capital with the remaining excess funds swept into a money market account. As of December 31, 2011, expenses related to the sale of PFFL totaled approximately \$160,000, of which \$157,000 has been paid. As of December 31, 2011, the gain on the sale of PFFL totaled approximately \$1,707,000 (net of taxes of \$1,067,000), which included a working capital adjustment of \$185,000 to be received from the buyer.

On October 14, 2011, we completed the sale of our wholly-owned subsidiary, PFO, pursuant to the terms of an Asset Purchase Agreement, dated August 12, 2011. In consideration for such assets, the buyer paid us \$2,000,000 in cash at the closing and assumed certain liabilities of PFO. The cash consideration is subject to certain working capital adjustments within one hundred twenty days after closing. The proceeds received were swept into a money market account. As of December 31, 2011, expenses related to the sale of PFO totaled approximately \$37,000, of which \$20,000 has been paid. We recorded a loss on the sale of PFO of \$198,000 (net of taxes of \$209,000). No working capital adjustment has been made on the sale of PFO.

We continue to market our PFSG facility for sale. As required by ASC 360, based on our internal financial valuations, we concluded that no tangible asset impairments existed for PFSG as of December 31, 2011.

[Index](#)

The following table summarizes the results of discontinued operations for the years ended December 31, 2011, 2010, and 2009. The gains on disposals of discontinued operations, net of taxes, for 2011, was the result of the divestiture of PFFL and PFO as mentioned above, and are reported separately on our Consolidated Statements of Operations as “Gain on disposal of discontinued operations, net of taxes”. The operating results of discontinued operations are included in our Consolidated Statements of Operations as part of our “Income (loss) from discontinued operations, net of taxes”.

Amount in Thousands	For The Year Ended December 31,		
	2011	2010	2009
Net revenue	\$ 6,931	\$ 9,248	\$ 8,283
Interest expense	(68)	(84)	(103)
Operating loss from discontinued operations	(366)	(839)	(76)
Income tax benefit	(1,143)	(176)	(11)
Gain on disposal of discontinued operations ⁽¹⁾	1,509	—	—
Income (loss) from discontinued operations	2,286	(663)	(65)

⁽¹⁾ Net of taxes of \$1,276,000 for year ended December 31, 2011.

Operating loss from discontinued operations for the twelve months ended December 31, 2011 included an aggregate increase of \$338,000 to the environmental reserve at our PFM and PFMI subsidiary. Our loss from discontinued operations for the twelve months ended December 31, 2010, included an aggregate increase to our environmental reserve of \$1,105,000 at our PFSG and PFD facilities and a \$167,000 final settlement we received from a lawsuit that we filed against the buyer of PFTS, A Clean Environment, Inc. (“ACE”), regarding certain liabilities which we believed ACE assumed and agreed to pay under the Purchase Agreement but which ACE had refused to pay. Loss from discontinued operations in 2009 included an increase to environmental reserve of \$281,000 at our PFSG facility due to reassessment of our remediation estimates. It also included a recovery of approximately \$400,000 in closure cost after the buyer of PFTS’s asset obtained its own financial assurance bond.

Assets related to discontinued operations total \$2,343,000 and \$7,433,000 as of December 31, 2011, and 2010, respectively, and liabilities related to discontinued operations total \$3,972,000 and \$5,747,000 as of December 31, 2011 and 2010, respectively.

The following table presents the major classes of assets and liabilities of discontinued operations that are classified as held for sale as of December 31, 2011 and 2010. The held for sale assets and liabilities may differ at the closing of a sale transaction from the reported balances as of December 31, 2011:

(Amounts in Thousands)	December 31, 2011	December 31, 2010
Accounts receivable, net ⁽¹⁾	\$ 385	\$ 1,760
Inventories	25	131
Other assets	22	1,295
Property, plant and equipment, net ⁽²⁾	1,650	4,209
Total assets held for sale	<u>\$ 2,082</u>	<u>\$ 7,395</u>
Accounts payable	\$ 190	\$ 705
Accrued expenses and other liabilities	577	1,170
Note payable	105	407
Environmental liabilities	1,497	1,500
Total liabilities held for sale	<u>\$ 2,369</u>	<u>\$ 3,782</u>

⁽¹⁾ net of allowance for doubtful account of \$48,000 and \$97,000 as of December 31, 2011, and 2010, respectively.

⁽²⁾ net of accumulated depreciation of \$62,000 and \$755,000 as of December 31, 2011, and 2010, respectively.

The following table presents the major classes of assets and liabilities of discontinued operations that are not held for sale as of December 31, 2011 and 2010:

(Amounts in Thousands)	December 31, 2011	December 31, 2010
Other assets	\$ 261	\$ 38
Total assets of discontinued operations	<u>\$ 261</u>	<u>\$ 38</u>
Accrued expenses and other liabilities	\$ 1,083	\$ 1,209
Accounts payable	15	—
Environmental liabilities	505	756
Total liabilities of discontinued operations	<u>\$ 1,603</u>	<u>\$ 1,965</u>

Environmental Liabilities

We have four remediation projects currently in progress at four of our discontinued operations, PFD, PFM, PFSG, and PFMI. These remediation projects principally entail the removal/remediation of contaminated soil and, in some cases, the remediation of surrounding ground water. All of the remedial clean-up projects in question were an issue for that facility for years prior to our acquisition of the facility and were recognized pursuant to a business combination and recorded as part of the purchase price allocation to assets acquired and liabilities assumed.

Three of the facilities, (PFD, PFM, and PFSG) are RCRA permitted facilities, and as a result, the remediation activities are closely reviewed and monitored by the applicable state regulators. We recognized our best estimate of such environmental liabilities upon the acquisition of our facilities, as part of the acquisition cost.

At December 31, 2011, we had total accrued environmental remediation liabilities of \$2,002,000 of which \$1,138,000 is recorded as a current liability, which reflects a decrease of \$254,000 from the December 31, 2010, balance of \$2,256,000. The net decrease represents payment of approximately \$592,000 on remediation projects and increases in reserve of approximately \$288,000 at PFM and \$50,000 at PFMI due to reassessment of our remediation reserves. The December 31, 2011, current and long-term accrued environmental balance is recorded as follows (in thousands):

	Current Accrual	Long-term Accrual	Total
PFD	\$ 224	\$ 135	\$ 359
PFM	74	15	89
PFSG	783	714	1,497
PFMI	57	-	57
Total Liability	<u>\$ 1,138</u>	<u>\$ 864</u>	<u>\$ 2,002</u>

PFD

In June 1994, we acquired PFD, which we divested in March 2008. Prior to our acquisition of PFD in 1994, the former owners of PFD had merged Environmental Processing Services, Inc. ("EPS") with PFD. In acquiring PFD in 1994, we were indemnified by the seller for costs associated with remediating the property leased by EPS ("Leased Property"). Such remediation involves soil and/or groundwater restoration. The Leased Property used by EPS to operate its facility was separate and apart from the property on which PFD's facility was located. Upon the sale of substantially all of the assets of PFD in March 2008, we retained the environmental liability of PFD as it related only to the remediation of the EPS site. We have pursued remedial activities for this Leased Property since we acquired PFD and after evaluating various technologies, have received approval from the Ohio Environmental Protection Agency for the final remedial process. Final remediation is also expected to begin in 2012. We incurred remedial expenditures of \$89,000 in 2011. We have accrued approximately \$359,000, at December 31, 2011, for the estimated, remaining costs of remediating the Leased Property, which will extend approximately over the next six years.

PFM

In acquiring PFM in 1993, we assumed certain liabilities relative to the removal of contaminated soil and to undergo groundwater remediation at the facility. Prior to our ownership of PFM, the owners installed monitoring and treatment equipment to restore the groundwater to acceptable standards in accordance with federal, state and local authorities. The groundwater remediation at this facility has been ongoing since approximately 1990. With approval of a remediation approach in 2006, PFM began final remediation of this facility in 2007. In 2008, we completed all soil remediation with the exception of that associated with the groundwater remediation. In 2011, remediation of the remaining contaminated soil was completed leaving only treatment of the aquifer. In 2011, we incurred remediation expenditure of \$481,000 and increase the reserve by \$288,000 due to reassessment of the reserve. We have accrued approximately \$89,000 at December 31, 2011, for closure which we anticipate spending over the next five years.

PFSG

During 1999, we recognized an environmental accrual of \$2,199,000, in conjunction with the acquisition of PFSG. This amount represented our estimate of the long- term costs to remove contaminated soil and to undergo groundwater remediation activities at the PFSG acquired facility in Valdosta, Georgia. PFSG have over the past five years, completed the initial evaluation, and selected the remedial process to be utilized. Approval to proceed with final remediation has not yet been received from the appropriate agency. Remedial activities began in 2003. In 2011, we incurred remedial expenditures of approximately \$2,000. We have accrued approximately \$1,497,000 at December 31, 2011, to complete remediation of the facility, which we anticipate spending over approximately the next ten years.

PFMI

As a result of the discontinued operations at the PFMI facility in 2004, we were required to complete certain closure and remediation activities pursuant to our RCRA permit, which were completed in January 2006. During 2006, based on state-mandated criteria, we began implementing the modified methodology to remediate the facility. We have completed the remediation activities. In 2010, as required under the Consent Order, a closure plan was submitted, which is currently under final review, with approval expected in 2012. In 2011, we incurred remediation expenditure of \$20,000 and increased the reserve by \$50,000 due to reassessment of the reserve. As of December 31, 2011, we have \$57,000 accrued for the closure, and it is anticipated that closure activities, with the exception of post-closure monitoring, will be completed in 2012.

We performed, or had performed, due diligence on each of these environmental projects, and also reviewed/utilized reports obtained from third party engineering firms who have been either engaged by the prior owners or by us to assist in our review. Based upon our expertise and the analysis performed, we have accrued our best estimate of the cost to complete the remedial projects. No insurance or third party recovery was taken into account in determining our cost estimates or reserve, nor do our cost estimates or reserves reflect any discount for present value purposes. We do not believe that any adverse changes to our estimates would be material to us. The circumstances that could affect the outcome range from new technologies, that are being developed every day that reduce our overall costs, to increased contamination levels that could arise as we complete remediation which could increase our costs, neither of which we anticipate at this time.

**NOTE 10
LONG-TERM DEBT**

Long-term debt consists of the following at December 31, 2011 and 2010:

(Amounts in Thousands)	December 31, 2011	December 31, 2010
Revolving Credit facility dated October 31, 2011, borrowings based upon eligible accounts receivable, subject to monthly borrowing base calculation, variable interest paid monthly at option of prime rate (3.25% at December 31, 2011) plus 2.0% or London InterBank Offer Rate ("LIBOR") plus 3.0%, balance due October 31, 2016. Effective interest rate for 2011 and 2010 was 4.4% and 4.4%, respectively. ^{(1) (2)}	\$ —	\$ 2,019
Term Loan dated October 31, 2011, payable in equal monthly installments of principal of \$190, balance due in July 2012, variable interest paid monthly at option of prime rate plus 2.5% or LIBOR plus 3.5%. Effective interest rate for 2011 and 2010 was 4.2% and 4.7%, respectively. ^{(1) (2)}	15,810	4,667
Installment Agreement in the Agreement and Plan of Merger with Nuvotec and PEcoS, dated April 27, 2007, payable in three equal yearly installments of principal of \$833 beginning June, 2009. Interest accrues at annual rate of 8.25% on outstanding principal balance. Final principal and remaining accrued interest payment was due on June 30, 2011.	—	833
Promissory Note dated April 18, 2011, payable in monthly installments of principal of \$83 starting May 8, 2011, balance due April 8, 2012, variable interest paid monthly at LIBOR plus 4.5%, with LIBOR at least 1.5%. ^{(3) (4) (5)}	318	1,222
Promissory Note dated September 28, 2010, payable in 36 monthly equal installments of \$40, which includes interest and principal, beginning October 15, 2010, interest accrues at annual rate of 6.0%. ⁽⁵⁾	798	1,218
Promissory Note dated October 31, 2011, payable in monthly installments of \$76, which includes interest and principal, starting November 15, 2011, interest accrues at annual rate of 6.0%, balance due May 15, 2014. ^{(5) (6)}	1,863	—
Various capital lease and promissory note obligations , payable 2012 to 2015, interest at rates ranging from 5.0% to 8.3%.	259	697
	<u>19,048</u>	<u>10,656</u>
Less current portion of long-term debt	3,936	3,612
Less long-term debt related to assets held for sale	105	407
	<u>\$ 15,007</u>	<u>\$ 6,637</u>

⁽¹⁾ Our Revolving Credit facility is collateralized by our accounts receivable and our Term Loan is collateralized by our property, plant, and equipment.

⁽²⁾ On October 31, 2011, the Company entered into an "Amended and Restated Revolving Credit, Term Loan and Security Agreement" with PNC Bank. Under the original credit facility with PNC dated December 22, 2000, as amended, from March 5, 2009 to January 24, 2010, variable interest was determined based on the options as noted; however, variable interest under the LIBOR option provided for a minimum floor base of 2.5% for both our Revolving Credit and Term Loan. Effective January 25, 2010, minimum floor base under the LIBOR option was amended from 2.5% to 1.0%.

⁽³⁾ Original promissory note dated May 8, 2009 of \$3,000,000 was modified on April 18, 2011, with principal balance of approximately \$990,000. See "Promissory Note and Installment Agreement" below for terms of original and amended promissory notes.

⁽⁴⁾ Net of debt discount of (\$12,000) and (\$117,000) for December 31, 2011 and December 31, 2010, respectively. See "Promissory Note and Installment Agreement" below for additional information.

⁽⁵⁾ Uncollateralized note.

⁽⁶⁾ Promissory note entered into in connection with acquisition of SEC on October 31, 2011. See "Promissory Note and Installment Agreement" below for prepayment of \$500,000 of the principal in November 2011.

Revolving Credit and Term Loan Agreement

We entered into a Revolving Credit, Term Loan and Security Agreement (“Loan Agreement”) with PNC Bank, National Association, a national banking association (“PNC”) acting as agent (“Agent”) for lenders, and as issuing bank. The Agreement, as amended on numerous occasions since it was executed, provided for a term loan (“Term Loan”) in the amount of \$7,000,000, which required monthly principal installments of \$83,000 (based upon a seven-year amortization). The Agreement also provided for a revolving line of credit (“Revolving Credit”) with a maximum principal amount outstanding at any one time of \$18,000,000. The Revolving Credit advances were subject to limitations of an amount up to the sum of (a) up to 85% of Commercial Receivables aged 90 days or less from invoice date, (b) up to 85% of Commercial Broker Receivables aged up to 120 days from invoice date, (c) up to 85% of acceptable Government Agency Receivables aged up to 150 days from invoice date, and (d) up to 50% of acceptable unbilled amounts aged up to 60 days, less (e) reserves the Agent reasonably deems proper and necessary.

In connection with the acquisition of SEC, we entered into an Amended and Restated Revolving Credit, Term Loan and Security Agreement, dated October 31, 2011 (“Amended Loan Agreement”), with PNC, replacing our previous Loan Agreement with PNC discussed above. The Amended Loan Agreement provides us with the following credit facilities:

- up to \$25,000,000 revolving credit facility, subject to the amount of borrowings based on a percentage of eligible receivables (as same to Loan Agreement noted above) and subject to certain reserves;
- a term loan of \$16,000,000, which requires monthly installments of approximately \$190,000 (based on a seven-year amortization); and
- equipment line of credit up to \$2,500,000, subject to certain limitations.

The Amended Loan Agreement terminates as of October 31, 2016, unless sooner terminated.

We have the option of paying an annual rate of interest due on the revolving credit facility at prime plus 2% or London Inter Bank Offer Rate (“LIBOR”) plus 3% and the term loan and equipment credit facilities at prime plus 2.5% or LIBOR plus 3.5%.

As a condition of the Amended Loan Agreement, we paid the remaining balance due under the term loan under our previous Loan Agreement totaling approximately \$3,833,000 using our credit facilities under the Amended Loan Agreement. In connection with the Amended Loan Agreement, we paid PNC a fee of \$217,500 and incurred other direct costs of approximately \$265,000, which are being amortized over the term of the Amended Loan Agreement as interest expense – financing fees. As a result of the termination of the original Loan Agreement with PNC, we recorded approximately \$91,000 in loss on extinguishment of debt in accordance with ASC 470-50, “Debt – Modifications and Extinguishments”. As of December 31, 2011, the excess availability under our revolving credit was \$15,382,000 based on our eligible receivables.

Pursuant to the Amended Loan Agreement, we may terminate the Amended Loan Agreement upon 90 days’ prior written notice upon payment in full of our obligations under the Amended Loan Agreement. We have agreed to pay PNC 1.0% of the total financing in the event we pay off our obligations on or before October 31, 2012 and 1/2% of the total financing if we pay off our obligations after October 31, 2012 but prior to or on October 31, 2013. No early termination fee shall apply if we pay off our obligations under the Amended Loan Agreement after October 31, 2013.

Promissory Notes and Installment Agreements

The Company has a promissory note dated May 8, 2009, with William N. Lampson and Diehl Rettig (collectively, the “Lenders”) for \$3,000,000. The Lenders were formerly shareholders of PFNW prior to our acquisition of PFNW and PFNWR and are also stockholders of the Company having received shares of our Common Stock in connection with our acquisition of PFNW and PFNWR. The promissory note provided for monthly principal repayment of approximately \$87,000 plus accrued interest, starting June 8, 2009, with interest payable at LIBOR plus 4.5%, with LIBOR at least 1.5%. Any unpaid principal balance along with accrued interest was due May 8, 2011. We paid approximately \$22,000 in closing costs on the promissory note which was being amortized over the term of the note. The promissory note may be prepaid at any time by the Company without penalty. As consideration of the Company receiving this loan, we issued a Warrant to Mr. Lampson and a Warrant to Mr. Diehl to purchase up to 135,000 and 15,000 shares, respectively, of the Company’s Common Stock at an exercise price of \$1.50 per share. The Warrants were exercisable six months from May 8, 2009 and were to expire on May 8, 2011. We also issued an aggregate of 200,000 shares of the Company’s Common Stock, with Mr. Lampson receiving 180,000 shares and Mr. Rettig receiving 20,000 shares of the Company’s Common Stock. The fair value of the Common Stock and Warrants on the date of issuance was estimated to be \$476,000 and \$190,000, respectively. The fair value of the Common Stock and Warrants was recorded as a debt discount and was being amortized over the term of the loan as interest expense – financing fees. On April 18, 2011, we entered into an amendment to the promissory note whereby the remaining principal balance on the promissory note of approximately \$990,000 is to be repaid in twelve monthly principal payments of approximately \$82,500 plus accrued interest, starting May 8, 2011, with interest payable at the same rate of the original loan. As consideration of the amended loan, the original Warrants issued to Mr. Lampson and to Mr. Rettig which were to expire on May 8, 2011, were extended to May 8, 2012 at the same exercise price (Mr. Rettig is now deceased; accordingly, the amended Warrant and the remaining portion of the note payable to Mr. Rettig is now held by and payable to his personal representative or estate). We accounted for the amended loan as a modification in accordance with ASC 470-50, “Debt – Modifications and Extinguishments”. At the date of the loan modification, unamortized debt discount and fees on the original loan and the fair value of the modified Warrants were determined to be approximately \$42,000, which is being amortized as debt discount over the term of the modified loan as interest expense-financing fees in accordance to ASC 470-50. See “Note 16 - Related Party Transactions” for Mr. Robert Ferguson’s (a member of our Board of Directors) acquisition of one-half of Mr. Lampson’s Warrant to purchase up to 65,000 shares of the Company’s Common Stock).

The promissory note also includes an embedded Put Option (“Put”) that can be exercised upon default, whereby the lender has the option to receive a cash payment equal to the amount of the unpaid principal balance plus all accrued and unpaid interest, or the number of whole shares of our Common Stock equal to the outstanding principal balance. The maximum number of payoff shares is restricted to less than 19.9% of the outstanding equity. We concluded that the Put should have been bifurcated at inception; however, the Put Option had and continues to have nominal value as of December 31, 2011. We will continue to monitor the fair value of the Put until expiration.

In conjunction with our acquisition of Perma-Fix Northwest, Inc. (“PFNW”), we agreed to pay shareholders of Nuvotec (n/k/a PFNW) that qualified as accredited investors (which includes Mr. Robert Ferguson, a member of our Board of Directors), pursuant to Rule 501 of Regulation D promulgated under the Securities Act of 1933, \$2,500,000, with principal payable in equal installments of \$833,333 on June 30, 2009, June 30, 2010, and June 30, 2011. Interest is accrued on the outstanding principal balance at 8.25% starting in June 2007 and is payable on June 30, 2008, June 30, 2009, June 30, 2010, and June 30, 2011. On June 30, 2011, we made the final principal installment of \$833,333 plus accrued interest of \$69,000 (See “Note 16 – Related Party Transactions” in this section for information regarding Mr. Robert Ferguson).

In connection with the acquisition of SEC, we entered into a \$2,500,000 unsecured, non-negotiable promissory note (the “Note”) on October 31, 2011, bearing an annual rate of interest of 6%, payable in 36 monthly installments, with Homeland. The Note provides that we have the right to prepay such at any time without interest or penalty. We prepaid \$500,000 of the principal amount of the Note within 10 days of closing of the acquisition. The Note is subject to offset of amounts Homeland owes us under certain terms and provisions of the Purchase Agreement and the Note. As result of the prepayment of \$500,000, we are required to pay monthly payments of approximately \$76,000 (which includes interest) starting November 15, 2011, with a final payment of approximately \$15,500 due on March 15, 2014.

The promissory note payable to SEC also includes an embedded conversion option ("Conversion Option") that can be exercised upon default, whereby Homeland has the option to convert the unpaid portion of the Note into a number of whole shares of our restricted Common Stock. The numbers of shares of our restricted Common Stock is determined by the principal amount owing under the Note plus all accrued and unpaid interest dividing by the average of the closing prices per share of our Common Stock as reported by the primary national securities exchange on which our Common Stock is traded during the 30 consecutive trading day period ending on the trading day immediately prior to receipt by us of Homeland's written notice of its election to receive our Common Stock as a result of the event of default by us, with the number of shares of our Common Stock issuable upon such default subject to certain limitations. We concluded that the Conversion Option had and continues to have nominal value as of December 31, 2011. We will continue to monitor the fair value of the Conversion Option on a regular basis.

On September 28, 2010, the Company entered into a promissory note in the principal amount of \$1,322,000, with the former shareholders of Nuvotec (which includes Mr. Robert Ferguson, a member of our Board of Directors) in connection with an earn-out amount that we are required to pay upon meeting certain conditions for each earn-out measurement year ending June 30, 2008 to June 30, 2011, as a result of our acquisition of PFNW and Perma-Fix Northwest Richland, Inc. ("PFNWR"). Interest is accrued at an annual interest rate of 6%. The promissory note provides for 36 equal monthly payments of approximately \$40,000, consisting of interest and principal, starting October 15, 2010. The promissory note may be prepaid at any time without penalty. See further details of the earn-out amount in "Note 14 - Commitments and Contingencies - Earn-Out Amount - Perma-Fix Northwest, Inc. ("PFNW") and Perma-Fix Northwest Richland, Inc. ("PFNWR")" and "Note 16 - Related Party Transactions" for information regarding Mr. Robert Ferguson.

The aggregate approximate amount of the maturities of long-term debt maturing in future years as of December 31, 2011 for our continuing operations, are \$3,948,000 in 2012; \$3,565,000 in 2013; 2,489,000 in 2014; \$2,286,000 in 2015, and \$6,667,000 in 2016. The total aggregate amount above excludes total debt discount of approximately \$12,000 for the amended Warrants in connection with the amended \$3,000,000 loan between the Company and Mr. William Lampson and Mr. Diehl Rettig as previously discussed. Debt related to assets held for sale totals \$105,000 at December 31, 2011, and is due as follows: \$34,000 in 2012, \$36,000 in 2013, and \$35,000 in 2014.

Capital Leases

The following table lists future maturities of the capital leases as of December 31, 2011 of our continuing operations (in thousands):

	<u>Capital Leases</u>
Year ending December 31:	
2012	\$ 63
2013	54
2014	37
2015	—
2016	—
Total Minimum Lease Payments	154
Less amount representing interest (effective interest rate of 6.76%)	(13)
Less estimated executory costs	—
Net minimum lease payments	141
Less current installments of obligations under capital leases	63
Obligations under capital leases excluding current installments	<u>\$ 78</u>

As of December 31, 2011, total debt related to assets held for sale noted above were all capital leases and is due as noted above.

NOTE 11
ACCRUED EXPENSES

Accrued expenses at December 31 include the following (in thousands):

	2011	2010
Salaries and employee benefits	\$ 6,524	\$ 3,615
Accrued sales, property and other tax	417	350
Interest payable	98	79
Insurance payable	1,462	1,016
Other	1,032	936
Total accrued expenses	<u>\$ 9,533</u>	<u>\$ 5,996</u>

NOTE 12
ACCRUED CLOSURE COSTS

We accrue for the estimated closure costs as determined pursuant to Resource Conservation and Recovery Act ("RCRA") guidelines for all fixed-based regulated operating and discontinued facilities, even though we do not intend to or have present plans to close any of our existing facilities. The permits and/or licenses define the waste, which may be received at the facility in question, and the treatment or process used to handle and/or store the waste. In addition, the permits and/or licenses specify, in detail, the process and steps that a hazardous waste or mixed waste facility must follow should the facility be closed or cease operating as a hazardous waste or mixed waste facility. Closure procedures and cost calculations in connection with closure of a facility are based on guidelines developed by the federal and/or state regulatory authorities under RCRA and the other appropriate statutes or regulations promulgated pursuant to the statutes. The closure procedures are very specific to the waste accepted and processes used at each facility. We recognize the closure cost as a liability on the balance sheet. Since all our facilities are acquired facilities, the closure cost for each facility was recognized pursuant to a business combination and recorded as part of the purchase price allocation of fair value to identifiable assets acquired and liabilities assumed. The closure calculation is increased annually for inflation based on RCRA guidelines, and for any approved changes or expansions to the facility, which may result in either an increase or decrease in the approved closure amount. If there is a change to the closure estimate, we record this change in the liability and asset, with the asset depreciated in accordance with our depreciation policy. Annual inflation factor increases are expensed during the current year. In 2009 to 2011, we increased our asset retirement obligations for various facilities as follows due to changes in estimates of the costs to close these facilities based on federal/state regulatory guidelines: increases of \$1,980,000 for DSSI (due to authorization for PCB storage and treatment) and \$158,000 for PFSG in 2009; increase of \$499,000 in 2010 for PFNWR; and reduction of \$504,000 in 2011 for PFNWR.

During 2011, the accrued long-term closure cost decreased by \$425,000 to a total of \$11,937,000 as compared to the 2010 total of \$12,362,000 for our continuing operations. This decrease was principally a result of the change in estimate to close our PFNWR facility as discussed above and normal inflation factor increases. During 2011, long-term accrued closure cost for our discontinued operations decreased by \$65,000 to a total of \$540,000, as compared to the 2010 total of \$605,000. The decrease of approximately \$70,000 was principally the release of our closure requirement from the Florida Department of Environmental Protection resulting from the divestiture of our PFO facility on October 14, 2011. The remaining increase was primarily due to normal inflation factor adjustments. We are waiting on the release of closure requirement from the appropriate government agency for our PFFL facility.

NOTE 13 INCOME TAXES

The components of current and deferred federal and state income tax for continuing operations for the years ended December 31, consisted of the following (in thousands):

	2011	2010	2009
Federal income tax expense - current	\$ 2,043	\$ 112	\$ 168
Federal income tax (benefit) expense - deferred	(2,567)	1,717	(2,330)
State income tax expense (benefit) - current	92	(85)	336
State income tax (benefit) expense - deferred	(523)	102	(160)
Total income tax (benefit) expense	<u>\$ (955)</u>	<u>\$ 1,846</u>	<u>\$ (1,986)</u>

We had temporary differences and net operating loss carry forwards from both our continuing and discontinued operations, which gave rise to deferred tax assets and liabilities at December 31, as follows (in thousands):

	2011	2010
Deferred tax assets:		
Net operating losses	\$ 4,425	\$ 4,954
Environmental and closure reserves	5,047	5,309
Impairment of assets	7,679	7,679
Investment	197	—
Other	2,946	2,560
Deferred tax liabilities:		
Depreciation and amortization	(9,167)	(8,004)
Prepaid expenses	(46)	—
	<u>11,081</u>	<u>12,498</u>
Valuation allowance	(7,360)	(11,944)
Net deferred income tax asset	<u>\$ 3,721</u>	<u>\$ 554</u>

An overall reconciliation between the expected tax benefit using the federal statutory rate of 34% and the provision for income taxes from continuing operations as reported in the accompanying consolidated statement of operations is provided below.

	2011	2010	2009
Tax expense at statutory rate	\$ 3,682	\$ 1,740	\$ 2,618
State tax expense (benefit), net of federal benefit	50	(56)	222
Previously unrecorded state tax benefit	—	(173)	(1,497)
Permanent items	150	61	175
Other	(377)	(1,369)	57
(Decrease) increase in valuation allowance	(4,460)	1,643	(3,561)
Income tax expense (benefit)	<u>\$ (955)</u>	<u>\$ 1,846</u>	<u>\$ (1,986)</u>

The provision for income taxes is determined in accordance with ASC 740, "Income Taxes". Deferred income tax assets and liabilities are recognized for future tax consequences attributed to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis. Deferred income tax assets and liabilities are measured using enacted income tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. Any effect on deferred income tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

The Company regularly assesses the likelihood that the deferred tax asset will be recovered from future taxable income. The Company considers projected future taxable income and ongoing tax planning strategies, then records a valuation allowance to reduce the carrying value of the net deferred income taxes to an amount that is more likely than not to be realized. In 2011, 2010 and 2009, we determined that it was more likely than not that approximately \$3,721,000, \$554,000 and \$2,192,000, respectively, of deferred income tax assets will be realized based, primarily, on profitable historic results and projections of future taxable income. Our valuation allowance increased (decreased) by approximately (\$4,460,000), \$1,643,000 and (\$3,561,000) for the years ended December 31, 2011, 2010, and 2009, respectively.

We have estimated net operating loss carryforwards (NOLs) for federal and state income tax purposes of approximately \$6,091,000 and \$27,718,000, respectively, as of December 31, 2011. These net operating losses can be carried forward and applied against future taxable income, if any, and expire in various amounts through 2021. However, as a result of various stock offerings and certain acquisitions, the use of these NOLs will be limited under the provisions of Section 382 of the Internal Revenue Code of 1986, as amended. Additionally, NOLs may be further limited under the provisions of Treasury Regulation 1.1502-21 regarding Separate Return Limitation Years.

NOTE 14

COMMITMENTS AND CONTINGENCIES

Hazardous Waste

In connection with our waste management services, we handle both hazardous and non-hazardous waste, which we transport to our own, or other facilities for destruction or disposal. As a result of disposing of hazardous substances, in the event any cleanup is required, we could be a potentially responsible party for the costs of the cleanup notwithstanding any absence of fault on our part.

Legal Matters

In the normal course of conducting our business, we are involved in various litigations. We are not a party to any litigation or governmental proceeding which our management believes could result in any judgments or fines against us that would have a material adverse affect on our financial position, liquidity or results of future operations.

Earn-Out Amount – Perma-Fix Northwest, Inc. (“PFNW”) and Perma-Fix Northwest Richland, Inc. (“PFNWR”)

In connection with the acquisition of PFNW and PFNWR in June 2007, we are required to pay to those former shareholders of Nuvotec (including Mr. Robert Ferguson, a member of our Board of Directors) an earn-out amount upon meeting certain conditions for each measurement year ended June 30, 2008 to June 30, 2011, with the aggregate of the full earn-out amount not to exceed \$4,552,000, pursuant to the Merger Agreement, as amended (“Agreement”) (See “Related Party Transactions” in this section for further information regarding Mr. Ferguson). Under the Agreement, the earn-out amount to be paid for any particular measurement year is to be an amount equal to 10% of the amount that the revenues for our nuclear business (as defined) for such measurement year exceeds the budgeted amount of revenues for our nuclear business for that particular period. No earn-out was required to be paid for measurement year 2008, and we paid \$734,000 in earn out for measurement year 2009 in 2009. We were required to pay \$2,978,000 in earn-out prior to the Offset Amounts as discussed below for measurement year ended June 30, 2010. Pursuant to the Agreement, any indemnification obligations payable to the Company by the former shareholders of Nuvotec will be deducted (“Offset Amount”) from any earn-out amounts payable by the Company for the measurement year ended June 30, 2010 and June 30, 2011. Pursuant to the Agreement, the aggregate amount of any Offset Amount may total up to \$1,000,000, except an Offset Amount is unlimited as to indemnification relating to liabilities for taxes, misrepresentation or inaccuracies with respect to the capitalization of Nuvotec or PEcoS (n/k/a “PFNWR”) or for willful or reckless misrepresentation of any representation, warranty or covenant. For the \$2,978,000 in earn-out for measurement year ended June 30, 2010, we identified an Offset Amount of approximately \$93,000 relating to an excise tax issue and a refund request from a PEcoS customer in connection with services for waste treatment prior to our acquisition of PFNWR and PFNW. We also identified an anticipated Offset Amount of \$563,000 in connection with the receipt of nonconforming waste at the PFNWR facility prior to our acquisition of PFNWR and PFNW. We are currently involved in litigation with the party that delivered the nonconforming waste to the facility prior to our acquisition of PFNWR and PFNW. After the Offset Amount of \$93,000 and the anticipated Offset Amount of \$563,000, we were required to pay \$2,322,000 in earn-out amount for measurement year ended June 30, 2010. In September 2010, we paid \$1,000,000 of the \$2,322,000 in earn-out amount, with the remaining \$1,322,000 payable in a promissory note at an annual interest rate of 6.0%, as permitted under the Agreement, as amended. The promissory note provides for thirty six equal monthly payments of approximately \$40,000, consisting of interest and principal, starting October 15, 2010. The promissory note may be prepaid at any time without penalty. For measurement year ended June 30, 2011, we determined that the remaining \$840,000 in earn-out amount was earned, which we paid on October 3, 2011.

Pension Liability

We had a pension withdrawal liability of \$533,000 at December 31, 2011, based upon a withdrawal letter received from Central States Teamsters Pension Fund ("CST"), resulting from the termination of the union employees at PFMI and a subsequent actuarial study performed. In August 2005, we received a demand letter from CST, amending the liability to \$1,629,000, and provided for the payment of \$22,000 per month, including interest at 8% per annum, over an eight year period.

Insurance

The Company has a 25-year finite risk insurance policy entered into in June 2003 with Chartis, a subsidiary of American International Group, Inc. ("AIG"), which provides financial assurance to the applicable states for our permitted facilities in the event of unforeseen closure. Prior to obtaining or renewing operating permits, we are required to provide financial assurance that guarantees to the states that in the event of closure, our permitted facilities will be closed in accordance with the regulations. The policy, as amended in 2009, provides for a maximum allowable coverage of \$39,000,000 and has available capacity to allow for annual inflation and other performance and surety bond requirements. This finite risk insurance policy requires the following payments:

- an upfront payment of \$4,000,000, of which \$2,766,000 represents the full premium for the 25-year term of the policy, and the remaining \$1,234,000, is to be deposited in a sinking fund account representing a restricted cash account;
- seven annual installments of \$1,004,000 starting February 2004, of which \$991,000 is to be deposited in a sinking fund account, with the remaining \$13,000 representing a terrorism premium;
- a payment of \$2,000,000 due on March 6, 2009, of which approximately \$1,655,000 is to be deposited into a sinking fund account, with the remaining representing a fee payable to Chartis;
- three yearly payments of approximately \$1,073,000 payable starting December 31, 2009, of which \$888,000 is to be deposited into a sinking fund account, with the remaining representing a fee payable to Chartis. The second of the third payments was made in January 2011; and
- a payment of \$2,008,000 (payable in February 2011), of which \$1,982,000 is to be deposited in a sinking fund account, with the remaining \$26,000 representing a terrorism premium.

During February 2011, the \$2,008,000 and the \$1,073,000 installment payments which had remained payable on the closure policy were amended as follows: \$1,004,000 was to be paid by February 2011, of which \$991,000 was to be deposited into a sinking fund, with the remaining \$13,000 representing a terrorism premium; \$1,073,000 is payable December 2011, of which \$888,000 is to be deposited into a sinking fund account, with the remaining representing a fee payable to Chartis; and a final payment of \$1,054,000 due February 2012, of which \$991,000 is to be deposited into a sinking fund, \$13,000 representing a terrorism premium, and the remaining \$50,000 representing a fee payable to Chartis. In February 2011, we paid the \$1,004,000 under the amended terms. As a result of the revision to the payment terms, the maximum allowable coverage under this closure policy was revised to \$36,431,000 as of February 2011, with such maximum allowable coverage increased to \$37,300,000 in March 2011. The maximum allowable coverage is to be increased to \$39,000,000 upon final payment of the \$1,054,000 in February 2012.

As of December 31, 2011, our total financial coverage amount under this policy totaled \$36,541,000. We have recorded \$13,473,000 in our sinking fund related to the policy noted above on the balance sheet, which includes interest earned of \$881,000 on the sinking fund as of December 31, 2011. Interest income for the twelve months ended December 31, 2011, was approximately \$34,000. On the fourth and subsequent anniversaries of the contract inception, we may elect to terminate this contract. If we so elect, Chartis is obligated to pay us an amount equal to 100% of the sinking fund account balance in return for complete releases of liability from both us and any applicable regulatory agency using this policy as an instrument to comply with financial assurance requirements.

In August 2007, we entered into a second finite risk insurance policy for our PFNWR facility with Chartis. The policy provided an initial \$7,800,000 of financial assurance coverage with an annual growth rate of 1.5%, which at the end of the four year term policy, provides maximum coverage of \$8,200,000. We have the option to renew this policy at the end of the four year term. The policy requires total payments of \$7,158,000, consisting of an initial payment of \$1,363,000 (\$1,106,000 represented premium on the policy and the remaining was deposited into a sinking fund account), two annual payments of \$1,520,000 (for each annual payment, \$1,344,000 was deposited into a sinking fund and the remaining represented premium), and an additional \$2,755,000 payment (paid quarterly and all deposited into a sinking fund). We have made all of the payments. As of December 31, 2011, we have recorded \$5,881,000 in our sinking fund related to this policy on the balance sheet, which includes interest earned of \$181,000 on the sinking fund as of December 31, 2011. Interest income for the twelve months ended December 31, 2011 totaled approximately \$17,000. On July 31, 2011, the policy was renewed for an additional year which required a \$46,000 fee. We have the option to renew this policy annually going forward with a similar fee which will be determined at the time of renewal. All other terms of the policy remain substantially unchanged.

Operating Leases

We lease certain facilities and equipment under operating leases. Future minimum rental payments as of December 31, 2011, required under these leases for our continuing operations are \$945,000 in 2012, \$729,000 in 2013, \$643,000 in 2014, \$634,000 in 2015, \$586,000 in 2016, and \$611,000 in 2017. Future minimum rental payment as of December 31, 2011, required under leases for our discontinued operations is \$5,000 in 2012.

Total rent expense was \$1,289,000, \$1,025,000, and \$1,076,000 for 2011, 2010, and 2009, respectively for our continuing operations. These amounts included payments on non-cancelable operating leases of approximately \$762,000, \$653,000, and \$671,000 for 2011, 2010, and 2009, respectively. The remaining rent expense was for non-contractual monthly and daily rentals of specific use vehicles, machinery and equipment.

Total rent expense was \$239,000, \$269,000, and \$394,000 for 2011, 2010, and 2009, respectively for our discontinued operations. These amounts included payments on non-cancelable operating leases of approximately \$135,000, \$216,000, and \$145,000, respectively. The remaining rent expense was for non-contractual monthly and daily rentals of specific use vehicles, machinery and equipment.

NOTE 15

PROFIT SHARING PLAN

We adopted the Perma-Fix Environmental Services, Inc. 401(k) Plan (the "401(k) Plan") in 1992, which is intended to comply under Section 401 of the Internal Revenue Code and the provisions of the Employee Retirement Income Security Act of 1974. All full-time employees who have attained the age of 18 are eligible to participate in the 401(k) Plan. Participating employees may make annual pretax contributions to their accounts up to 100% of their compensation, up to a maximum amount as limited by law. We, at our discretion, may make matching contributions based on the employee's elective contributions. Company contributions vest over a period of five years. We matched up to 25% of our employees' contributions. We contributed \$432,000, \$431,000, and \$85,000, in matching funds during 2011, 2010, and 2009, respectively. The Company suspended its matching contribution effective March 1, 2009, in an effort to reduce costs in light of the downturn in the economic environment. Effective January 1, 2010, the Company re-commenced this matching contribution.

NOTE 16
RELATED PARTY TRANSACTIONS

Related Party Transactions

Mr. Robert Schreiber, Jr.

During March 2011, we entered into a new lease with Lawrence Properties LLC, a company jointly owned by Robert Schreiber, Jr., the President of Schreiber, Yonley and Associates, and Mr. Schreiber's spouse. Mr. Schreiber is a member of our executive management team. The new lease is for a term of five years starting June 1, 2011. The new lease replaced the prior five-year lease with Lawrence Properties LLC, which expired on May 31, 2011. Under the new lease, we pay monthly rent of approximately \$11,400, which we believe is lower than costs charged by unrelated third party landlords. Additional rent will be assessed for any increases over the new lease commencement year for property taxes or assessments and property and casualty insurance premiums.

Mr. David Centofanti

Mr. David Centofanti serves as our Director of Information Services. For such services, he received total compensation in 2011 of approximately \$173,000. Mr. David Centofanti is the son of our Chief Executive Officer and Chairman of our Board, Dr. Louis F. Centofanti. We believe the compensation received by Mr. Centofanti for his technical expertise which he provides to the Company is competitive and comparable to compensation we would have to pay to an unaffiliated third party with the same technical expertise.

Mr. Robert L. Ferguson

On June 13, 2007, we acquired Nuvotec (n/k/a Perma-Fix Northwest, Inc. or "PFNW") and Nuvotec's wholly owned subsidiary, PEcoS (n/k/a Perma-Fix Northwest Richland, Inc. or "PFNWR"), pursuant to the terms of the Merger Agreement, as amended, between us, Nuvotec, PEcoS, and our wholly owned subsidiary. At the time of the acquisition, Robert L. Ferguson was the Chairman, Chief Executive Officer, and individually or through entities controlled by him, the owner of approximately 21.29% of Nuvotec's outstanding common stock. In connection with the acquisition, Mr. Ferguson was nominated to serve as a Director and subsequently was elected as a director at our Annual Meeting of Stockholders. Mr. Ferguson served as a director until his resignation in February 2010. Mr. Ferguson was recommended by the Corporate Governance and Nominating Committee and the Board of Directors nominated Mr. Ferguson to stand for election as a Director at our 2011 Annual Meeting of Stockholders, at which time he was elected as a Director.

Pursuant to the terms of the Merger Agreement, as consideration for the acquisition of PFNW and PFNWR by the Company, Mr. Ferguson (or entities controlled by him):

- (a) received a total of \$224,560 cash and 192,783 shares of our Common Stock in July 2007; and
- (b) is entitled to receive 21.29% of an aggregate earn-out amount of \$4,552,000, based on the annual revenues of our nuclear business (as defined) over the four year period ended on June 30, 2011. The aggregate earn-out amount was paid as follows:
 - (i) an aggregate \$2,574,000 in earn-out amount was paid in cash; and
 - (ii) we issued a promissory note, dated September 28, 2010, in the principle amount of \$1,322,000, which provides for 36 equal monthly payments of \$40,000, consisting of interest (annual interest rate of 6%) and principal, starting October 15, 2010.

The total \$3,896,000 in earn-out amount paid to date or to be paid pursuant to the promissory note excludes approximately \$656,000 in Offset Amount, which represents potential indemnification obligations (as defined by the Merger Agreement) which may be payable to the Company by the former shareholders of Nuvotec. Pursuant to the Merger Agreement, the aggregate amount of any Offset Amount may total up to \$1,000,000, except an Offset Amount is unlimited as to indemnification relating to liabilities for taxes, misrepresentation or inaccuracies with respect to the capitalization of Nuvotec or PEcoS or for willful or reckless misrepresentation of any representation, warranty or covenant.

Mr. Ferguson acquired from Mr. William Lampson one-half of a Warrant (the "Lampson Warrant") for the purchase up to 135,000 of the Company's Common Stock at \$1.50 per share. We originally issued the Lampson Warrant to Mr. Lampson as consideration for a loan in the principal amount of \$3,000,000 on May 8, 2009 from Mr. Lampson and Mr. Diehl Rettig. The terms of the loan were amended on April 18, 2011, to provide that the remaining principal balance of \$990,000 is payable in 12 monthly principal payments plus accrued interest starting May 8, 2011. In connection with the loan amendment, the expiration date of the Lampson Warrant was extended one year to May 8, 2012. As a result of the acquisition of one-half of the Lampson Warrant by Mr. Ferguson, Mr. Ferguson and Mr. Lampson each hold a Warrant for the purchase of up to 67,500 shares of Common Stock at \$1.50 per share and with an expiration date of May 8, 2012.

Christopher Leichtweis

The Company is obligated to make lease payments of approximately \$29,000 per month through June 2018, pursuant to a Lease Agreement, dated June 1, 2008 (the "Lease"), between Leichtweis Enterprises, LLC, as lessor, and Safety and Ecology Holdings Corporation ("SEHC"), as lessee. Leichtweis Enterprises, LLC, is owned by Mr. Christopher Leichtweis, who was named as a Senior Vice President of the Company and President of SEC upon the acquisition of SEHC and its subsidiaries by the Company from Homeland on October 31, 2011. The Lease covers SEHC's principal offices in Knoxville, Tennessee.

Under an agreement of indemnity, SEC, Leichtweis and his spouse, jointly and severally, agreed to indemnify the individual surety with respect to contingent liabilities that may be incurred by the individual surety under certain of SEC's bonded projects. In addition, SEC has agreed to indemnify Leichtweis against judgments, penalties, fines, and expense associated with those SEC performance bonds that Leichtweis has agreed to indemnify in the event SEC cannot perform, which has an aggregate bonded amount of approximately \$10,900,000. The indemnification agreement provided by SEC to Leichtweis also provides for compensating Leichtweis at a rate of 0.75% of the value of bonds (60% having been paid previously and the balance at substantial completion of the contract).

Upon the closing of the acquisition of SEHC and its subsidiaries by the Company from Homeland on October 31, 2011, certain security holders of Homeland ("Management Investors") purchased 813,007 restricted shares of the Company's Common Stock for a total consideration of approximately \$1,000,000, or \$1.23 a share, which was the average of the closing prices of the Company's Common Stock as quoted on the Nasdaq during the 30 trading days ending on the trading day immediately prior to the closing of the acquisition. The purchase of the Company's Common Stock was pursuant to a private placement under Section 4(2) of the Securities Act of 1933, as amended (the "Act") or Rule 506 of Regulation D promulgated under the Act. Mr. Leichtweis purchased 747,112 of the 813,007 shares of the Company's Common Stock for the aggregate purchase price of approximately \$918,948 or \$1.23 per share. The purchase price for these shares was deducted from the consideration paid to Homeland for the acquisition of SEHC.

Employment Agreements

We have an employment agreement with each of Dr. Centofanti (our President and Chief Executive Officer), Ben Naccarato (our Chief Financial Officer), James Blankenhorn (our Chief Operating Officer) and Christopher Leichtweis (our Senior Vice President). Each employment agreement provides for annual base salaries, bonuses, and other benefits commonly found in such agreements. In addition, each employment agreement provides that in the event of termination of such officer without cause or termination by the officer for good reason (as such terms are defined in the employment agreement), the terminated officer shall receive payments of an amount equal to benefits that have accrued as of the termination but not yet paid, plus an amount equal to one year's base salary at the time of termination. In addition, the employment agreements provide that in the event of a change in control (as defined in the employment agreements), all outstanding stock options to purchase our common stock granted to, and held by, the officer covered by the employment agreement to be immediately vested and exercisable.

NOTE 17
SEGMENT REPORTING

In accordance to ASC 280, “Segment Reporting”, we define an operating segment as a business activity:

- from which we may earn revenue and incur expenses;
- whose operating results are regularly reviewed by the Chief Operating Officer to make decisions about resources to be allocated to the segment and assess its performance; and
- for which discrete financial information is available.

We currently have two reporting segments, which are based on a service offering approach. This however, excludes corporate headquarters, which does not generate revenue, and our discontinued operations, which includes all facilities as discussed in “Note 9 – Discontinued Operations and Divestitures”.

Our reporting segments are defined as follows:

TREATMENT SEGMENT which includes:

- nuclear, low-level radioactive, mixed (waste containing both hazardous and low-level radioactive constituents), hazardous and non-hazardous waste treatment, processing and disposal services primarily through four uniquely licensed and permitted treatment and storage facilities; and
- research and development activities to identify, develop and implement innovative waste processing techniques for problematic waste streams.

SERVICE SEGMENT which includes:

- On-site waste management services to commercial and government customers;
- Technical services which include:
 - o health physics and radiological control technician services providing both field support as well as professional technical support to commercial and government customers;
 - o safety and industrial hygiene services providing field support and professional technical support to commercial and government customers;
 - o staff augmentation services providing consulting, engineering, project management, waste management, environmental, and decontamination and decommissioning field personnel, technical personnel, management and services to commercial and government customers; and
 - o consulting engineering services (through our Schreiber, Yonley & Associates subsidiary – “SYA”) providing consulting environmental services to industrial and government customers:
 - § including air, water, and hazardous waste permitting, air, soil and water sampling, compliance reporting, emission reduction strategies, compliance auditing, and various compliance and training activities; and
 - § engineering and compliance support to other segments.
- A company owned equipment calibration and maintenance laboratory that services, maintains and calibrates health physics and industrial hygiene instrumentation.

The table below shows certain financial information of our reporting segments for 2011, 2010, and 2009 (in thousands).

Segment Reporting as of and for the year ended December 31, 2011

	Treatment	Services	Segments Total	Corporate And Other ⁽²⁾	Consolidated Total
Revenue from external customers	\$ 65,836 ⁽³⁾	\$ 52,774	\$ 118,610	\$ —	\$ 118,610
Intercompany revenues	1,928	585	2,513	—	—
Gross profit	21,299	7,489	28,788	—	28,788
Interest income	—	—	—	58	58
Interest expense	72	7	79	578	657
Interest expense-financing fees	—	—	—	207	207
Depreciation and amortization	4,535	337	4,872	89	4,961
Segment profit (loss)	13,725	5,885	19,610	(7,810)	11,800
Segment assets ⁽¹⁾	81,197	41,819	123,016	41,087 ⁽⁴⁾	164,103
Expenditures for segment assets	2,278	4	2,282	21	2,303
Total debt	142	12	154	18,789 ⁽⁵⁾	18,943

Segment Reporting as of and for the year ended December 31, 2010

	Treatment	Services	Segments Total	Corporate And Other ⁽²⁾	Consolidated Total
Revenue from external customers	\$ 53,363 ⁽³⁾	\$ 44,427	\$ 97,790	\$ —	\$ 97,790
Intercompany revenues	2,962	502	3,464	—	—
Gross profit	12,733	7,882	20,615	—	20,615
Interest income	—	—	—	65	65
Interest expense	138	3	141	614	755
Interest expense-financing fees	3	—	3	409	412
Depreciation and amortization	4,469	39	4,508	22	4,530
Segment profit (loss)	4,481	6,131	10,612	(7,341)	3,271
Segment assets ⁽¹⁾	91,881	2,570	94,451	30,864 ⁽⁴⁾	125,315
Expenditures for segment assets	1,601	19	1,620	22	1,642
Total debt	1,105	18	1,123	9,126 ⁽⁵⁾	10,249

Segment Reporting as of and for the year ended December 31, 2009

	Treatment	Services	Segments Total	Corporate And Other ⁽²⁾	Consolidated Total
Revenue from external customers	\$ 54,785 ⁽³⁾	\$ 37,608	\$ 92,393	\$ —	\$ 92,393
Intercompany revenues	2,349	446	2,795	—	—
Gross profit	16,670	7,811	24,481	—	24,481
Interest income	1	—	1	144	145
Interest expense	640	4	644	995	1,639
Interest expense-financing fees	—	—	—	283	283
Depreciation and amortization	4,241	40	4,281	40	4,321
Segment profit (loss)	7,640	6,911	14,551	(4,864)	9,687
Segment assets ⁽¹⁾	93,831	3,612	97,443	28,557 ⁽⁴⁾	126,000
Expenditures for segment assets	1,421	4	1,425	8	1,433
Total debt	1,993	23	2,016	10,264 ⁽⁵⁾	12,280

(1) Segment assets have been adjusted for intercompany accounts to reflect actual assets for each segment.

(2) Amounts reflect the activity for corporate headquarters, not included in the segment information.

(3) The consolidated revenues within our Nuclear Treatment and Services Segments include the CH Plateau Remediation Company (“CHPRC”) revenue of \$51,136,000 or 49.9%, \$51,929,000 or 53.1%, and \$45,169,000 or 48.8%, for 2011, 2010, and 2009, respectively, of our total consolidated revenue from continuing operations. Our M&EC facility was awarded a subcontract by CHPRC, a general contractor to the DOE in the second quarter of 2008. Operations of this subcontract officially commenced at the DOE Hanford Site on October 1, 2008. We also have three waste processing contracts with CHPRC.

(4) Amount includes assets from our discontinued operations of \$2,343,000, \$7,433,000, and \$6,352,000, as of December 31, 2011, 2010, and 2009, respectively.

(5) Net of debt discount of (\$12,000), (\$117,000), and (450,000) for 2011, 2010, and 2009, respectively, based on the estimated fair value at issuance of two Warrants and 200,000 shares of the Company’s Common Stock issued on May 8, 2009 in connection with a \$3,000,000 promissory note entered into by the Company and Mr. William Lampson and Mr. Diehl Rettig. The promissory note and the Warrants were modified on April 18, 2011. See “Note 10 – Long-Term Debt – Promissory Note and Installment Agreement” for additional information.

NOTE 18
QUARTERLY OPERATING RESULTS (UNAUDITED)

Unaudited quarterly operating results are summarized as follows (in thousands, except per share data):

	Three Months Ended (unaudited)			
	March 31	June 30	Sept 30	Dec. 31
2011				
Revenues	\$ 23,615	\$ 28,913	\$ 32,787	\$ 33,295
Gross profit	3,030	8,049	11,301	6,408
(Loss) income from continuing operations	(533)	2,552	4,421	5,360
Income (loss) from discontinued operations, net of taxes	212	(32)	(187)	784
Gain (loss) on disposal of discontinued operations, net of taxes	—	—	1,777	(268)
Net income attributable to noncontrolling interest	—	—	—	22
Net (loss) income attributable to Perma-Fix Environmental Services, Inc. common stockholders	(321)	2,520	6,011	5,854
Basic net income (loss) per common share attributable to :				
Perma-Fix Environmental Services, Inc. stockholders				
Continuing operations	(.01)	.05	.08	.09
Discontinued operations	—	—	—	.01
Gain on disposal of discontinued operations, net of taxes	—	—	.03	—
Net income (loss) per common share	(.01)	.05	.11	.10
Diluted net income (loss) per common share attributable to :				
Perma-Fix Environmental Services, Inc. stockholders				
Continued operations	(.01)	.05	.08	.09
Discontinued operations	—	—	—	.01
Gain on disposal of discontinued operations, net of taxes	—	—	.03	—
Net income (loss) per common share	(.01)	.05	.11	.10
2010				
Revenues	\$ 23,566	\$ 25,847	\$ 22,864	\$ 25,513
Gross profit	4,943	7,182	2,595	5,895
Income (loss) from continuing operations	575	2,116	(965)	1,545
Income (loss) from discontinued operations, net of taxes	63	(670)	(101)	45
Net (loss) income attributable to Perma-Fix Environmental Services, Inc. common stockholders	638	1,446	(1,066)	1,590
Basic net income (loss) per common share attributable to :				
Perma-Fix Environmental Services, Inc. stockholders				
Continuing operations	.01	.04	(.02)	.03
Discontinued operations	—	(.01)	—	—
Net income (loss) per common share	.01	.03	(.02)	.03
Diluted net income (loss) per common share attributable to :				
Perma-Fix Environmental Services, Inc. stockholders				
Continued operations	.01	.04	(.02)	.03
Discontinued operations	—	(.01)	—	—
Net income (loss) per common share	.01	.03	(.02)	.03

The sum of the quarterly earnings per common share amounts may not equal the annual amount reported because per share amounts are computed independently for each quarter and for the full year based on respective weighted-average common shares outstanding and other dilutive potential common shares.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of disclosure, controls, and procedures.

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our periodic reports filed with the Securities and Exchange Commission (the "Commission") is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the Commission and that such information is accumulated and communicated to our management, including the Chief Executive Officer (Principal Executive Officer), and Chief Financial Officer (Principal Financial Officer), as appropriate to allow timely decisions regarding the required disclosure. In designing and assessing our disclosure controls and procedures, our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their stated control objectives and are subject to certain limitations, including the exercise of judgment by individuals, the difficulty in identifying unlikely future events, and the difficulty in eliminating misconduct completely. Based on their most recent assessment, which was completed as of the end of the period covered by this Annual Report on Form 10-K, we have assessed, with the participation of our Chief Executive Officer and Chief Financial Officer, the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15 and 15d-15 of the Securities Exchange Act of 1934, as amended). Based upon this assessment, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures were effective as of December 31, 2011.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) of the Securities Exchange Act of 1934. Internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles in the United States of America. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements or fraudulent acts. A control system, no matter how well designed, can provide only reasonable assurance with respect to financial statement preparation and presentation.

Internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit the preparation of the consolidated financial statements in accordance with generally accepted accounting principles in the United States of America, and that receipts and expenditures of the Company are being made only in accordance with appropriate authorizations of management and directors of the Company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the consolidated financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements or fraudulent acts. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management, with the participation of our Chief Executive Officer and Chief Financial Officer, conducted an assessment of the effectiveness of internal control over financial reporting based on the framework in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, management concluded that the Company’s internal control over financial reporting was effective as of December 31, 2011.

Our assessment excluded the operations of SEC. Management excluded SEC from its assessment of internal controls over financial reporting (“ICFR”) because of the timing of the acquisition which was completed on October 31, 2011, and which is included in the Company’s consolidated balance sheet and the related consolidated statements of operations, stockholders’ equity, and cash flows for the year ended December 31, 2011. SEC constituted approximately 22.0% and 23.6% of total assets and net assets, respectively, as of December 31, 2011 and approximately 9.0% and (1.6)% of net revenues and net income, respectively, for the year then ended.

We have been advised that Homeland determined prior to our acquisition of SEC that SEC had a material weakness in its ICFR because material information was omitted in determining whether contracts were in a loss position and there is a reasonable possibility such missing information would have caused a material misstatement. Additionally, our initial reviews of internal controls for SEC, since its acquisition, have resulted in the identification of certain internal control deficiencies. We are taking steps to attempt to remediate these deficiencies, but there has not been enough time to fully assess the effectiveness of SEC’s ICFR.

BDO USA, LLP, an independent registered public accounting firm, audited the effectiveness of the Company’s internal control over financial reporting as of December 31, 2011, and based on that audit, issued their report which is included herein.

Changes in Internal Control over Financial Reporting

There have been no changes in our internal controls over financial reporting (as defined in Rule 13a-15(f) under the Securities Exchange Act of 1934) during the fiscal quarter ended December 31, 2011 that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

Report of Independent Registered Public Accounting Firm

Board of Directors and Stockholders
Perma-Fix Environmental Services, Inc.
Atlanta, Georgia

We have audited Perma-Fix Environmental Services, Inc. and subsidiaries' (the "Company") internal control over financial reporting as of December 31, 2011, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Item 9A, "Management's Report on Internal Control Over Financial Reporting". Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

As indicated in the accompanying Item 9A, "Management's Report on Internal Control over Financial Reporting", management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of Safety and Ecology Holdings Corporation and its subsidiaries (collectively, "SEC") which were acquired on October 31, 2011, and are included in the consolidated balance sheet as of December 31, 2011, and the related consolidated statements of operations, stockholders' equity and cash flows for the year then ended. SEC constituted 22.0% and 23.6% of the total assets and net assets, respectively, as of December 31, 2011, and 9% and (1.6)% of revenues and net income, respectively, for the year then ended. Management did not assess the effectiveness of internal control over financial reporting of SEC because of the timing of the acquisition which was completed on October 31, 2011. Our audit of internal control over financial reporting of the Company also did not include an evaluation of the internal control over financial reporting of SEC.

In our opinion, Perma-Fix Environmental Services, Inc. and subsidiaries maintained, in all material respects, effective internal control over financial reporting as of December 31, 2011, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of the Company as of December 31, 2011 and 2010, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2011 and our report dated March 15, 2012 expressed an unqualified opinion thereon.

/s/BDO USA, LLP

Atlanta, Georgia
March 15, 2012

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

DIRECTORS

The following table sets forth, as of the date hereof, information concerning our Directors:

<u>NAME</u> ⁽¹⁾	<u>AGE</u>	<u>POSITION</u>
Dr. Louis F. Centofanti	68	Chairman of the Board, President and Chief Executive Officer
Mr. Robert L. Ferguson ⁽¹⁾	79	Director
Mr. Jack Lahav	63	Director
Honorable Joe R. Reeder	64	Director
Mr. Larry M. Shelton	58	Director
Dr. Charles E. Young	80	Director
Mr. Mark A. Zwecker	61	Director

Each director is elected to serve until the next annual meeting of stockholders.

⁽¹⁾ Mr. Jon Colin served as a Director since December 1996. He did not stand for re-election at the Company's 2011 Annual Meeting of Stockholders (the "Meeting") held on August 24, 2011. Mr. Robert L. Ferguson was elected as Mr. Colin's successor at the Meeting.

Director Information

Dr. Louis F. Centofanti

Dr. Centofanti has served as Board Chairman since joining the Company in February 1991. Dr. Centofanti also served as Company President and Chief Executive Officer (February 1991 to September 1995) and again in March 1996 was elected Company President and Chief Executive Officer. From 1985 until joining the Company, Dr. Centofanti served as Senior Vice President of USPCI, Inc., a large hazardous waste management company, where he was responsible for managing the treatment, reclamation and technical groups within USPCI. In 1981 he founded PPM, Inc. (later sold to USPCI), a hazardous waste management company specializing in treating PCB contaminated oils. From 1978 to 1981, Dr. Centofanti served as Regional Administrator of the U.S. Department of Energy for the southeastern region of the United States. Dr. Centofanti has a Ph.D. and a M.S. in Chemistry from the University of Michigan, and a B.S. in Chemistry from Youngstown State University.

As founder of Perma-Fix, PPM, Inc., and senior executive leader at USPCI, Dr. Centofanti combines extensive business experience in the waste management industry with a drive for innovative technology which is critical for a waste management company. In addition, his service in the government sector provides a solid foundation for the continuing growth of the Company, particularly within the Company's Nuclear business. Dr. Centofanti's mastery of all aspects of the Company and his extensive knowledge of its history, coupled with his drive for innovation and excellence, positions our Board Chairman, President and Chief Executive Officer, to optimize our role in this competitive, evolving market.

Mr. Robert L. Ferguson

Mr. Ferguson was elected to serve as a Board member at the Company's Annual Meeting of Stockholders held on August 24, 2011. Mr. Ferguson previously served as a member of the Company's Board from August 2007 to February 2010, following his nomination and subsequent election as a board member in connection with the acquisition by the Company of our Perma-Fix Northwest Richland, Inc. ("PFNWR") facility (formerly Nuvotec and its wholly owned subsidiary, PEcoS) (See "Certain Relationships and Related Party Transactions and Director Independence – Mr. Robert L. Ferguson"). Mr. Ferguson served as President of Columbia Nuclear, LLC from 2008 to 2009. He has served as a director of Vivid Learning System, a publicly traded company specializing in on-line safety training, compliance programs and learning solutions, since 1995. Mr. Ferguson also has served as a director for Plasma Biofuel, Inc., a privately held corporation, since 2008. Mr. Ferguson served as Chief Executive Officer and Chairman of the Board of Directors of Nuvotec and PEcoS from December 1998 until its acquisition by us in June 2007. Mr. Ferguson has over 45 years of management and technical experience in the government and private sectors. He served as Chairman of the Board of Technical Resources International, Inc. from 1995 to 1998, Chairman of the Board for UNC Nuclear Industries, Inc. from 1983 to 1985, and CEO for Washington Public Power Supply System from 1980 to 1983. His government experience from 1961 to 1980 includes various roles for the Atomic Energy Commission, the Energy Research and Development Administration, and the U.S. Department of Energy, including his last assignment as Deputy Assistant Secretary of Nuclear Reactor Programs. Mr. Ferguson also served on the Board of British Nuclear Fuels Inc. He was a founder of Columbia Trust Bank, where he served as a director prior to its acquisition by American West Bank. Mr. Ferguson received his B.S. in Physics from Gonzaga University and attended the US Army Ordnance Guided Missile School, the Oak Ridge School of Reactor Technology, and the Federal Executive Institute.

Mr. Ferguson's previous experience and demonstrated abilities as a member of the Company's Board and his extensive experience in both the government and public sectors will provide valuable insight to the Company's growth, particularly within the Company's Nuclear Segment business.

Mr. Jack Lahav

Jack Lahav, a director since September 2001, is a private investor, specializing in launching and growing businesses. Mr. Lahav devotes much of his time to charitable activities, serving as president as well as board member of several charities. Previously, Mr. Lahav founded Remarkable Products Inc. and served as its president from 1980 to 1993. Mr. Lahav co-founded Lamar Signal Processing, Inc., a digital signal processing company, was president of Advanced Technologies, Inc., a robotics company, and director of Vocaltec Communications, Ltd., a publicly-traded telecom equipment provider. From 2001 to 2004, Mr. Lahav served as Chairman of Quigo Technologies, Inc., a private search-engine marketing company acquired by AOL in December 2007. Mr. Lahav currently serves as Chairman of Phoenix Audio Technologies, a private company that provides audio communication solutions for VoIP and other internet applications, and Doclix Inc, a privately-held internet marketing company.

Having launched a number of successful businesses, Mr. Lahav has established a record of success in developing and growing a business. His "know how" enables him to provide important perspectives to the Board relating to a variety of business challenges. His commitment to charitable organizations provides a unique component of a well-rounded Board.

Honorable Joe R. Reeder

Mr. Reeder, a director since April 2003, served as the Shareholder-in-Charge of the Mid-Atlantic Region (1999-2008) for Greenberg Traurig LLP, one of the nation's largest law firms, with 29 offices and over 1,800 attorneys worldwide. He is currently a shareholder in the law firm. His clientele includes sovereign nations, international corporations, and law firms throughout the U.S. As the 14th Undersecretary of the U.S. Army (1993-97), Mr. Reeder also served for three years as Chairman of the Panama Canal Commission's Board of Directors where he oversaw a multibillion-dollar infrastructure program. He serves on the boards of the National Defense Industry Association (NDIA) (and chairs NDIA's Ethics Committee), the Armed Services YMCA, the USO, and many other private companies and charitable organizations. Following successive appointments by Governors Mark Warner and Tim Kaine, Mr. Reeder served seven years as Chairman of two Commonwealth of Virginia military boards. Mr. Reeder is also a frequent television commentator on legal and national security issues. Among other corporate positions, he has been a director since September 2005 for ELBIT Systems of America, LLC, a NASDAQ company that provides product and system solutions focusing on defense, homeland security, and commercial aviation. Mr. Reeder also was a member of the Corporate Advisory Board for ICX Technologies, a publicly traded company specializing in development and integration of advanced sensor technologies for homeland security and commercial applications, from April 2007 to July 2008. A graduate of West Point who served in the 82d Airborne Division following Ranger School, Mr. Reeder earned his J.D. from the University of Texas and his L.L.M. from Georgetown University.

Mr. Reeder has a distinguished career in providing solutions to complex issues involving substantial domestic and international concerns. He has demonstrated extensive knowledge and problem-solving background, particularly related to our Nuclear Segment, which skills enhance the Board's ability to address challenging issues in the nuclear market.

Mr. Larry M. Shelton

Mr. Shelton, a director since July 2006, currently is the chief financial officer of S K Hart Management, LC, an investment holding company. He has held this position since 1999. Mr. Shelton has over 18 years of experience as financial executive officer for several waste management companies. He was Chief Financial Officer of Envirocare of Utah, Inc. (1995–1999), and Chief Financial Officer of USPCI, Inc. (1982–1987). Mr. Shelton has served on the Board of Directors of Subsurface Technologies, Inc., a privately-held company specializing in providing environmentally sound innovative solutions for water well rehabilitation and development, since July 1989, and Pony Express Land Development, Inc., a privately-held land development company, since December 2005. Mr. Shelton has a B.A. in accounting from the University of Oklahoma.

With his years of accounting experience as Chief Financial Officer for various companies, including a number of waste management companies, Mr. Shelton combines extensive knowledge and understanding of accounting principles, financial reporting requirements, evaluating and overseeing financial reporting processes and business savvy.

Dr. Charles E. Young

Dr. Charles E. Young, a director since July 2003, currently serves as a director (since September 2011) of SteriMed, Inc., a privately held company in the medical waste business. He was president of the University of Florida from November 1999 to January 2004 and chancellor of the University of California, Los Angeles (UCLA) for 29 years until his retirement in 1997. He also was the President of Qatar Foundation from 2004 to November 2005. In addition, from December 2009 to June 2010, he served as the Chief Executive Officer of the Los Angeles Museum of Contemporary Art. Dr. Young has chaired the Association of American Universities, and served on numerous commissions, including the American Council on Education, the National Association of State Universities and Land-Grant Colleges, and the Business-Higher Education Forum. Dr. Young has served on the Board of Directors of I-MARK, Inc., a privately held software and professional services company since 1997. He previously served on the Board of Directors of Intel Corp. and Nicholas-Applegate Growth Equity Fund, Inc., as well as Fiberspace, Inc., a privately-held company that designs and manufacturers stabilized laser products, Student Advantage, Inc., an integrated media and commerce company, and AAFL Enterprises, a sports development company. Dr. Young has a Ph.D. and M.A. in political science from UCLA and a B.A. from the University of California at Riverside.

Having presided over two major universities with multi-billion budgets and myriad educational foundations, and as a board member for a publicly-held multi-billion dollar corporation, Dr. Young brings unique perspectives and extensive experience to our Board. His savvy in the process of policy making and long-term leadership development provides a valuable component of a well-rounded Board.

Mr. Mark A. Zwecker

Mark Zwecker, a director since the Company's inception in January 1991, assumed the position of Director of Finance in 2006 for Communications Security and Compliance Technologies, Inc., a software company developing security products for the mobile workforce, and also serves as an advisor to Plum Combustion, Inc., an engineering and manufacturing company developing high performance combustion technology. From 1997 to 2006, Mr. Zwecker served as president of ACI Technology, LLC, an IT services provider, and from 1986 to 1998, he served as vice president of finance and administration for American Combustion, Inc., a combustion technology solution provider. In 1983, with Dr. Centofanti, Mr. Zwecker co-founded a start-up, PPM, Inc., a hazardous waste management company. He remained with PPM, Inc. until its acquisition in 1985 by USPCI. Mr. Zwecker has a B.S. in Industrial and Systems Engineering from the Georgia Institute of Technology and an M.B.A. from Harvard University.

As a director since our inception, Mr. Zwecker's understanding of our business provides valuable insight to the Board. With years of experience in operations and finance for various companies, including a number of waste management companies, Mr. Zwecker combines extensive knowledge of accounting principles, financial reporting rules and regulations, the ability to evaluate financial results, and understanding of financial reporting processes. He has an extensive background in operating complex organizations. Mr. Zwecker's experience and background positions him well to serve as a member of our Audit Committee.

BOARD LEADERSHIP STRUCTURE

Dr. Louis Centofanti, the Company's President and Chief Executive Officer, is also Board Chairman. The Company believes such structure currently promotes the best interests of our stockholders. Dr. Centofanti's extensive knowledge of the history of the Company, its customers, and his background in our complex and unique core Nuclear Segment, enables him to provide guidance to our Board with day to day and long-term strategic business recommendations and decisions which ultimately enhance shareholder value.

Although the Company's by-laws do not formally require the designation of a independent Lead Director when the positions of Chairman and Chief Executive Officer are held by the same person, Mr. Mark Zwecker was appointed by our Board of Directors on February 25, 2010 to serve as an independent Lead Director to enhance the Board's ability to fulfill its responsibilities independently in the best interests of the Company's stockholders. As an independent Lead Director, Mr. Zwecker's role includes:

- convening and chairing meetings of the non-employee directors as necessary from time to time and Board meetings in the absence of the Chairman of the Board;
- acting as liaison between directors, committee chairs and management;
- serving as information sources for directors and management; and
- carrying out responsibilities as the Board may delegate from time to time.

AUDIT COMMITTEE

We have a separately designated standing Audit Committee of our Board of Directors established in accordance with Section 3(a)(58)(A) of the Exchange Act. The members of the Audit Committee are: Mark A. Zwecker, Larry M. Shelton, and Dr. Charles E. Young, who replaced Mr. Jon Colin on August 24, 2011.

Our Board of Directors has determined that each of our Audit Committee members is an "audit committee financial expert" as defined by Item 407(d)(5)(ii) of Regulation S-K of the Securities Exchange Act of 1934, as amended (the "Exchange Act").

BOARD INDEPENDENCE

The Board has determined that each director, other than Dr. Centofanti, is "independent" within the meaning of the applicable rules of the NASDAQ Stock Market, Inc. ("NASDAQ") on which the Company's Common Stock is listed. Dr. Centofanti is not deemed to be an "independent director" because of his employment as a senior executive of the Company. The Board also does not consider Mr. Ferguson to be "independent" based on the transactions between Mr. Ferguson and us which are described under "Certain Relationships and Related Transactions, and Director Independence – Mr. Robert L. Ferguson."

CORPORATE GOVERNANCE AND NOMINATING COMMITTEE

We have a separately-designated standing Corporate Governance and Nominating Committee (the "Nominating Committee"). Members of the Nominating Committee during 2011 were Joe R. Reeder (Chairperson, who replaced Dr. Charles E. Young as the Chairperson, effective August 24, 2011), Jack Lahav, and Larry Shelton. Effective August 24, 2011, Dr. Charles E. Young was no longer a member of the Corporate Governance and Nominating Committee. All members of the Corporate Governance and Nominating Committee were and are "independent" as that term is defined by current NASDAQ listing standards.

The Corporate Governance and Nominating Committee recommends to the Board of Directors candidates to fill vacancies on the Board, as well as the nominees for election as the Company's Directors by the stockholders at each annual meeting of stockholders. In making such recommendation, the Nominating Committee takes into account information provided to them from the candidate, as well as the Nominating Committee's own knowledge and information obtained through inquiries to third parties to the extent the Nominating Committee deems appropriate. Although no formal criteria are established in evaluating a candidate for board recommendation, each candidate's qualifications are reviewed to include:

- standards of integrity, personal ethics and value, commitment, and independence of thought and judgment;
- ability to represent the interests of the Company's shareholders;
- ability to dedicate sufficient time, energy and attention to fulfill the requirements of the position; and
- diversity of skills and experience with respect to accounting and finance, management and leadership, business acumen, vision and strategy, charitable causes, business operations, and industry knowledge.

The Nominating Committee does not assign specific weights to any particular criteria and no particular criterion is necessarily applicable to all perspective nominees. The Nominating Committee does not have a formal policy for the consideration of diversity in identifying nominees for directors. However, the Company believes that the backgrounds and qualifications of the directors, considered as a group, should provide a significant composite mix of experience, knowledge, and abilities that will allow the Board to fulfill its responsibilities.

RESEARCH AND DEVELOPMENT COMMITTEE

Effective August 24, 2011, we established a separately-designated standing Research and Development Committee (the "R&D Committee") which members include Mr. Robert L. Ferguson (Chairperson) and Dr. Louis Centofanti.

The R&D Committee outlines the structures and functions of the Company's research and development strategies, the acquisition and protection of the Company's intellectual property rights and assets, and provides its perspective on such matter to the Board of Directors. The R&D Committee does not have a charter.

EXECUTIVE OFFICERS

See Item 4A – "Executive Officers of the Registrant" in Part I of this report for information concerning our executive officers, as of the date hereof.

There are no family relationships between any of the directors or executive officers.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act, and the regulations promulgated thereunder require our executive officers and directors and beneficial owners of more than 10% of our Common Stock to file reports of ownership and changes of ownership of our Common Stock with the Securities and Exchange Commission, and to furnish us with copies of all such reports. Based solely on a review of the copies of such reports furnished to us and written information provided to us, we believe that during 2011 none of our executive officers, directors, or beneficial owners of more than 10% of our Common Stock failed to timely file reports under Section 16(a), except Mr. Joe Reeder, who inadvertently failed to timely file two Form 4's to report two transactions.

Capital Bank–Grawe Gruppe AG ("Capital Bank") has advised us that it is a banking institution regulated by the banking regulations of Austria, which holds shares of our Common Stock as agent on behalf of numerous investors. Capital Bank has represented that all of its investors are accredited investors under Rule 501 of Regulation D promulgated under the Act. In addition, Capital Bank has advised us that none of its investors, individually or as a group, beneficially own more than 4.9% of our Common Stock. Capital Bank has further informed us that its clients (and not Capital Bank) maintain full voting and dispositive power over such shares. Consequently, Capital Bank has advised us that it believes it is not the beneficial owner, as such term is defined in Rule 13d-3 of the Exchange Act, of the shares of our Common Stock registered in the name of Capital Bank because it has neither voting nor investment power, as such terms are defined in Rule 13d-3, over such shares. Capital Bank has informed us that it does not believe that it is required (a) to file, and has not filed, reports under Section 16(a) of the Exchange Act or (b) to file either Schedule 13D or Schedule 13G in connection with the shares of our Common Stock registered in the name of Capital Bank.

If the representations of, or information provided by Capital Bank are incorrect or Capital Bank was historically acting on behalf of its investors as a group, rather than on behalf of each investor independent of other investors, then Capital Bank and/or the investor group would have become a beneficial owner of more than 10% of our Common Stock on February 9, 1996, as a result of the acquisition of 1,100 shares of our Preferred Stock that were convertible into a maximum of 1,282,798 shares of our Common Stock. If either Capital Bank or a group of Capital Bank's investors became a beneficial owner of more than 10% of our Common Stock on February 9, 1996, or at any time thereafter, and thereby required to file reports under Section 16(a) of the Exchange Act, then Capital Bank has failed to file a Form 3 or any Forms 4 or 5 since February 9, 1996. (See "Item 12 - Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matter – Security Ownership of Certain Beneficial Owners" for a discussion of Capital Bank's current record ownership of our securities).

Code of Ethics

Our Code of Ethics applies to all our executive officers and is available on our website at www.perma-fix.com. If any amendments are made to the Code of Ethics or any grants of waivers are made to any provision of the Code of Ethics to any of our executive officers, we will promptly disclose the amendment or waiver and nature of such amendment or waiver on our website.

ITEM 11. EXECUTIVE COMPENSATION

Compensation Discussion and Analysis

Our long-term success depends on our ability to efficiently operate our facilities, evaluate strategic acquisitions, and to continue to research and develop innovative technologies in the treatment of nuclear waste, mixed waste, and industrial waste. To achieve these goals, it is important that we be able to attract, motivate, and retain highly talented individuals who are committed to our values and goals.

The Compensation and Stock Option Committee (for purposes of this analysis, the "Compensation Committee") of the Board has responsibility for establishing, implementing and continually monitoring adherence with our compensation philosophy. The Compensation Committee ensures that the total compensation paid to Dr. Louis F. Centofanti, our Chief Executive Officer or "CEO," Ben Naccarato, our Chief Financial Officer or "CFO," Jim Blankenhorn, our Chief Operating Officer or "COO," Robert Schreiber, President of SYA or "SYA President", and Christopher Leichtweis, our Senior Vice President and President of SEC or "SEC President" (together, our named executive officers or "NEOs") is fair, reasonable and competitive. Generally, the types of compensation and benefits provided to the NEOs are similar to those provided to other executive officers at similar sized companies and industries.

Compensation Philosophy and Objectives

The Compensation Committee bases its executive compensation program on our performance objectives. The Compensation Committee evaluates both executive performance and compensation to ensure that we maintain our ability to attract superior employees in key positions and to remain competitive relative to the compensation paid to similarly situated executives of our peer companies. The Compensation Committee believes executive compensation packages provided to our executives, including the NEOs, should include both cash and equity-based compensation that provide rewards for performance. The Compensation Committee bases its executive compensation program on the following philosophy:

- Compensation should be based on the level of job responsibility, executive performance, and company performance.
- Executive officers' pay should be more closely linked to company performance than that of other employees because the executive officers have a greater ability to affect our results.
- Compensation should be competitive with compensation offered by other companies (subject to size and revenues) that compete with us for talented individuals.
- Compensation should reward performance.
- Compensation should motivate executives to achieve our strategic and operational goals.

Role of Executive Officers in Compensation Decisions

The Compensation Committee makes all compensation decisions for the NEOs and equity awards to all of our officers. Decisions regarding the non-equity compensation of other officers are made by the Compensation Committee, based on the recommendations of CEO.

The CEO annually reviews the performance of each of the NEOs (other than the CEO whose performance is reviewed by the Compensation Committee). Based on such reviews, the CEO presents a recommendation to the Compensation Committee, which may include salary adjustments, bonus and equity-based awards. The Compensation Committee considers such recommendation in light of the compensation philosophy and objectives described above and the processes described below. Based on its analysis, the Compensation Committee exercises its discretion in accepting or modifying all such recommendations. The CEO is not present during the voting or deliberations of the Compensation Committee with respect to the CEO's compensation.

The Compensation Committee's Processes

The Compensation Committee has established certain processes designed to achieve our executive compensation objectives. These processes include the following:

- *Company Performance Assessment; MIP.* The Compensation Committee assesses our performance in order to establish compensation ranges and, as described below, to establish specific performance measures that determine incentive compensation under the Management Incentive Plan ("MIP") established for each of our named executive officers. For this purpose, the Compensation Committee considers numerous measures of performance of both us and industries with which we compete, including but not limited to revenue, net income, gross profit, and unbilled receivables.
- *Individual Performance Assessment.* Because the Compensation Committee believes that an individual's performance should effect an individual's compensation, the Compensation Committee seeks to encourage and reward each NEO based on achievement of individual performance goals, in addition to overall company performance measures mentioned above. With respect to the CEO and COO, compensation is also awarded based on qualitative measures such as maintaining the safety of our facilities as well maintaining permit compliance. With respect to the CFO, the Compensation Committee takes into account improvements made in accounting and financial processes such as maintaining Sarbanes-Oxley Act of 2002 ("SOX") and Securities and Exchange Commission compliance, improving accounts receivable ("AR") targets, system integration, and centralization of the Company's systems. In designing the compensation plan for the NEO, the Compensation Committee believes individual measures result in short and long term value to stockholders. The Compensation Committee also considers input of, and the performance analysis provided by, the CEO when designing the compensation plan for the other NEOs. The Compensation Committee believes that the CEO's daily interactions with the other NEOs provide valuable insight regarding the contributions made by the other NEOs. With respect to all NEOs, the Compensation Committee also exercises its judgment based on its interactions with the particular NEO, such officer's contribution to our performance and other leadership achievements.

- *Peer Group Assessment.* The Compensation Committee compares our compensation program with a group of companies against which the Compensation Committee believes we compete for talented individuals (the “Peer Group”). The composition of the Peer Group is periodically reviewed and updated by the Compensation Committee. The companies currently comprising the Peer Group are Clean Harbors, Inc., American Ecology Corporation, and EnergySolutions, Inc., each of which is a waste disposal/management company. The Compensation Committee considers the Peer Group’s executive compensation programs as a whole and the compensation of individual officers in the Peer Group, if job responsibilities are meaningfully similar. When comparing the Peer Group’s executive compensation programs to our programs, the Compensation Committee considers that the companies within this Peer Group have substantially greater revenues than our Company, as well as subjective factors with respect to each of our NEOs. These individual subjective factors include the relative level of experience of each executive officer, the general responsibilities of each executive officer, and the relative capitalization and revenues of the Peer Group members.

The Compensation Committee believes that the Peer Group comparison assists it in attempting to structure an executive compensation program that is competitive with other companies in the industry, subject to size and revenues of companies within the Peer Group. This process was undertaken in 2011 to assist the Compensation Committee in determining the base salary for our CEO, COO, and CFO. Although our Compensation Committee makes a comparison to the Peer Group compensation, the Compensation Committee does not use the Peer Group as a benchmark for compensation of the NEOs. Instead, the Compensation Committee considers the following when reviewing the Peer Group compensation information:

- The Compensation Committee understands that our competitors generally have greater capital resources than we do and are larger businesses than we are; as a result, the Compensation Committee does not attempt to match the compensation packages offered by the Peer Group or to set our compensation packages at a certain percentage or other objective target level as compared to members of the Peer Group;
- The Compensation Committee considers what compensation package is expected to enable us to compete for talented individuals given the opportunities and compensation offered by us; and
- Our executive compensation will necessarily fall below (and sometimes significantly below) the compensation offered by members of the Peer Group due to our limited resources as compared to the resources of members of the Peer Group.

As described above, the Compensation Committee (along with our CEO) reviews the publicly available compensation disclosures of the Peer Group. However, when making its own annual compensation decisions, the Compensation Committee currently has no policy for setting our compensation levels based on or as compared to the compensation practices of such Peer Group members. Accordingly, the Company does not believe that benchmarking is currently material to the Company's compensation policies and decisions.

The executive compensation program for our SEC President was negotiated as part of our acquisition of SEC in October 2011. The SEC President’s base salary is currently the same that he earned prior to the acquisition. The MIP for the SEC President was also part of the negotiation and provides specific performance targets, which if achieved, are expected to positively impact our results of operations (See “Management Incentive Plans – SEC President” below).

2011 Executive Compensation Components

For the fiscal year ended December 31, 2011, the principal components of compensation for executive officers were:

- base salary;
- performance-based incentive compensation;
- long term incentive compensation;
- retirement and other benefits; and
- perquisites.

Based on the amounts set forth in the Summary Compensation Table, during 2011, salary accounted for approximately 46.8% of the total compensation of our NEOs, while equity option awards, bonus, MIP compensation, and other compensation accounted for approximately 53.2% of the total compensation of the NEOs.

Base Salary

The NEOs, other executive officers, and other employees of the Company receive a base salary during the fiscal year. Base salary ranges for executive officers are determined for each executive based on his or her position and responsibility by using market data and comparisons to the Peer Group.

During its review of base salaries for executives, the Compensation Committee primarily considers:

- market data and Peer Group comparisons;
- internal review of the executive's compensation, both individually and relative to other officers; and
- individual performance of the executive.

Salary levels are typically considered annually as part of the performance review process as well as upon a promotion or other change in job responsibility. Merit based salary increases for executives are based on the Committee's assessment of the individual's performance. The base salary and potential annual base salary adjustments for the CEO, COO, CFO, and the SEC President for 2011 are set forth in their respective Employment Agreements. The base salary of the COO and SEC President for 2011 was pro-rated from July 1, 2011 and October 31, 2011, their respective dates of first employment with us.

Performance-Based Incentive Compensation

The Compensation Committee has the latitude to design cash and equity-based incentive compensation programs to promote high performance and achievement of our corporate objectives by directors and the NEOs, encourage the growth of stockholder value and enable employees to participate in our long-term growth and profitability. The Compensation Committee may grant stock options and/or performance bonuses. In granting these awards, the Compensation Committee may establish any conditions or restrictions it deems appropriate. In addition, the CEO has discretionary authority to grant stock options to certain high-performing executives or officers, subject to the approval of the Compensation Committee.

The exercise price for each stock options granted is at or above the market price of our common stock on the date of grant. Stock options may be awarded to newly hired or promoted executives at the discretion of the Compensation Committee. Grants of stock options to eligible newly hired executive officers are generally made at the next regularly scheduled Compensation Committee meeting following the hire date.

Employment Agreements

On August 24, 2011, we entered into employment agreements with our CEO, COO, and CFO, which were approved by the Compensation Committee and Board. These agreements provide that (a) Dr. Centofanti will serve as our CEO and President, with an annual base salary of \$263,218; (b) Mr. Blankenhorn will serve as our COO, with an annual base salary of \$245,000 and an effective employment date of June 1, 2011 (Mr. Blankenhorn was provided a 30-day personal leave of absence prior to his start date of July 1, 2011); and (c) Mr. Naccarato will continue to serve as our CFO, with an annual base salary of \$208,000. In connection with the closing of our acquisition of SEC, on October 31, 2011, we entered into an employment agreement with Mr. Leichtweis, which was approved by the Compensation Committee and Board. Mr. Leichtweis, who prior to the acquisition was an officer and director of SEC's former parent company, was appointed as our Senior Vice President and SEC President. Mr. Leichtweis' employment agreement provides that he will receive an annual base salary of \$324,480. The employment agreements with our CEO, COO, CFO and SEC President are collectively referred to as the "Employment Agreements."

In addition to base salary, each of these executive officers is entitled to participate in the Company's benefits plans and to any performance compensation payable under an individual Management Incentive Plan ("MIP") for the CEO, CFO, COO, and SVP. (See "Management Incentive Plans," below.)

Each of the Employment Agreements is effective for three years, except the term for the SEC President four years. Each Employment Agreement may be terminated prior to its expiration by the Company with or without "cause" (as defined below) or by the executive officer for "good reason" (as defined below) or any other reason. If the NEO's employment is terminated due to death, disability or for cause, we will pay to the NEO or to his estate a lump sum equal to the sum of any unpaid base salary through the date of termination and any benefits otherwise due at that time under any employee benefit plan, excluding any severance program or policy (the "Accrued Amounts").

If the NEO terminates his employment for "good reason" or is terminated without cause, we will pay the NEO a sum equal to the total Accrued Amounts, plus one year of full base salary. If the NEO terminates his employment for a reason other than for good reason, we will pay to him the amount equal to the Accrued Amounts. If there is a Change in Control (as defined below), all outstanding stock options to purchase common stock held by the NEO will immediately become vested and exercisable in full. The amounts payable with respect to a termination (other than base salary and amounts otherwise payable under any Company employee benefit plan) are payable only if the termination constitutes a "separation from service" (as defined under Treasury Regulation Section 1.409A-1(h)).

"Cause" is generally defined in each of the Employment Agreements as follows:

- the ultimate conviction (after all appeals have been decided) of the executive by a court of competent jurisdiction, or a plea of nolo contendere or a plea of guilty by the executive, to a felony involving a moral practice or act;
- willful or gross misconduct or gross neglect of duties by the executive, which is injurious to the Company. Failure of the executive to perform his duties due to disability shall not be considered gross misconduct or gross neglect of duties;
- act of fraud or embezzlement against the Company; and
- willful breach of any material provision of the employment agreement.

"Good reason" is generally defined in each of the Employment Agreements as follows:

- assignment to the executive of duties inconsistent with his responsibilities as they existed during the 90-day period preceding the date of the employment agreement, including status, office, title, and reporting requirement;
- any other action by the Company which results in a reduction in (i) the compensation payable to the executive, or (ii) the executive's position, authority, duties, or other responsibilities without the executive's prior approval;
- the relocation of the executive from his base location on the date of the employment agreement, excluding travel required in order to perform the executive's job responsibilities;
- any purported termination by the Company of the executive's employment otherwise than as permitted by the agreement; and

- any material breach by the Company of any provision of the employment agreement, except that an insubstantial or inadvertent breach by the Company which is promptly remedied by the Company after receipt of notice by the executive is not considered a material breach.

“Change in Control” is generally defined in each of the Employment Agreements as follows:

- a transaction in which any person, entity, corporation, or group (as such terms are defined in Sections 13(d)(3) and 14(d)(2) of the Exchange (other than the Company, or a profit sharing, employee ownership or other employee benefit plan sponsored by the Company or any subsidiary of the Company): (i) will purchase any of the Company’s voting securities (or securities convertible into such voting securities) for cash, securities or other consideration pursuant to a tender offer, or (ii) will become the “beneficial owner” (as such term is defined in Rule 13d-3 under the Exchange Act, directly or indirectly (in one transaction or a series of transactions), of securities of the Company representing 50% or more of the total voting power of the then outstanding securities of the Company ordinarily having the right to vote in the election of directors; or
- a change, without the approval of at least two-thirds of the Board of Directors then in office, of a majority of the Company’s Board of Directors; or
- the Company’s execution of an agreement for the sale of all or substantially all of the Company’s assets to a purchaser which is not a subsidiary of the Company; or
- the Company’s adoption of a plan of dissolution or liquidation; or
- the Company’s closure of the facility where the executive works; or
- the Company’s execution of an agreement for a merger or consolidation or other business combination involving the Company in which the Company is not the surviving corporation, or, if immediately following such merger or consolidation or other business combination, less than fifty percent (50%) of the surviving corporation’s outstanding voting stock is held by persons who are stockholders of the Company immediately prior to such merger or consolidation or other business combination; or
- such event that is of a nature that is required to be reported in response to Item 5.01 of Form 8-K.

Potential Payments

The following table sets forth the potential (estimated) payments and benefits to which our NEOs would be entitled under the Employment Agreements upon termination of employment or following a Change in Control, assuming each circumstance described below occurred on December 31, 2011.

The following table sets forth the potential (estimated) payments and benefits to which Dr. Centofanti, Mr. Jim Blankenhorn, Mr. Leichtweis, and Mr. Naccarato would be entitled upon termination of employment or following a Change in Control of the Company, as specified under each employment agreement with the Company, assuming each circumstance described below occurred on December 31, 2011, the last day of our fiscal year.

Name and Principal Position	Disability, Death, or For Cause	Termination by Executive for Good Reason or by Company Without Cause	Change in Control of the Company
Dr. Louis Centofanti Chairman of the Board, President and Chief Executive Officer			
Severance	\$ —	\$ 263,000	\$ —
Stock Options	\$ —	\$ —	\$ —
Ben Naccarato Chief Financial Officer			
Severance	\$ —	\$ 208,000	\$ —
Stock Options	\$ 8,700 ⁽¹⁾	\$ 8,700 ⁽¹⁾	\$ 12,000 ⁽²⁾
Jim Blankenhorn Chief Operating Officer			
Severance	\$ —	\$ 245,000 ⁽³⁾	\$ —
Stock Options	\$ —	\$ —	\$ —
Christopher Leichtweis SVP and President of SEC			
Severance	\$ —	\$ 324,480 ⁽³⁾	\$ —
Stock Options	\$ —	\$ — ⁽¹⁾	\$ 50,000 ⁽²⁾

⁽¹⁾ Benefit is estimated based on the number of stock options vested as of December 31, 2011 that are in-the-money. Amount represents the

difference between the exercise price and the closing price of our Common Stock as reported on NASDAQ on December 31, 2011.

- (2) Benefit is estimated based on the number of stock options outstanding as of December 31, 2011 that are in-the-money. Amount represents the difference between the exercise price and the closing price of our Common Stock as reported on NASDAQ on December 31, 2011.

No performance compensation under the NEO's MIP would have been payable at December 31, 2011 under any of the circumstances described in the table above. Pursuant to each MIP, if the participant's employment with the Company is voluntarily or involuntarily terminated prior to the annual payment of the MIP compensation payment period, no MIP payment is payable. The payment is otherwise payable under each MIP on or about 90 days after year-end, or sooner, based on finalization of our financial statements for year-end. See, "Management Incentive Plans," below.

The amounts payable with respect to a termination (other than base salary and amounts otherwise payable under any Company employee benefit plan) are payable only if the termination constitutes a "separation from service" (as defined under Treasury Regulation Section 1.409A-1(h)).

Management Incentive Plans

On March 17, 2011, the Compensation Committee approved individual MIPs for our CEO, CFO and COO. The MIPs for our CEO and CFO are effective as of January 1, 2011, and the MIP for our COO is effective as of his employment date, June 1, 2011. On October 31, 2011, the Compensation Committee also approved an MIP for our SEC President, effective November 1, 2011.

Each MIP provides guidelines for the calculation of annual cash incentive based compensation. The MIP awards cash compensation based on achievement of performance thresholds, with the amount of such compensation established as a percentage of base salary. The potential target performance compensation for our CEO, CFO, COO, and SEC President under the MIPs are as follows, assuming minimum performance target threshold is achieved for each objectives under the MIPs:

- 50% to 87% of the 2011 base salary of our CEO, or \$131,608 to \$230,315;
- 25% to 44% of the 2011 base salary of our CFO, or \$52,000 to \$91,000;
- 50% to 87% of the prorated 2011 base salary for the COO, or \$61,250 to \$107,187; and
- 185% to 222% of the prorated 2011 base salary for the SEC President, or \$100,000 to \$120,000.

Based on our actual results during 2011, and the various components of each MIP described below, the bonus compensation earned under the MIP for our CEO, CFO, COO, and SEC President, as a percentage of base salary, was 76.6%, 42.3%, 76.6%, and 0%, respectively.

Performance compensation is paid on or about 90 days after year-end, or sooner, based on finalization of our audited financial statements for 2011. If the MIP participant's employment with the Company is voluntarily or involuntarily terminated prior to a regularly scheduled MIP compensation payment period, no MIP payment will be payable for and after such period. The Compensation Committee retains the right to modify, change or terminate each MIP at anytime and may adjust the various targets in the MIPs at any time and for any reason.

The following describes the principal terms of each MIP:

CEO:

2011 CEO performance compensation was based upon meeting corporate financial pre-tax net income, revenue, health and safety, and environmental compliance objectives during fiscal year 2011 from our continuing operations. Of the total potential performance compensation, 55% was based on pre-tax net income goals, 15% on revenue goals, 15% on the number of health and safety claim incidents that occurred during fiscal year 2011, and the remaining 15% on the number of notices alleging environmental, health or safety violations under our permits or licenses that occurred during the fiscal year. Each of the revenue and pre-tax net income components was based on our board approved target (referred to as "Revenue Target" and "Net Income Target"), which was \$99,993,000 and \$6,269,000, respectively. See "2011 MIP Targets" below for further discussion of these targets. The specific components of the 2011 MIP for our CEO were as follows:

CEO MIP COMPENSATION COMPONENTS

Annualized Base Pay:	\$ 263,218
Performance Incentive Compensation Target (at 100% of Plan):	\$ 131,608
Total Annual Target Compensation (at 100% of Plan):	\$ 394,826

The Performance Incentive Compensation Target was based on the schedule below.

Target Objectives	Weights	Performance Target Thresholds						
		85%- 100%	101%- 120%	121%- 130%	131%- 140%	141%- 160%	151%- 160%	161%+
Revenue ⁽¹⁾	15%	\$ 19,741	\$ 23,690	\$ 25,664	\$ 27,638	\$ 29,612	\$ 31,586	\$ 34,547
Net Income ⁽²⁾	55%	72,385	86,862	94,100	101,339	108,577	115,816	126,674
Health & Safety ⁽³⁾	15%	19,741	23,690	25,664	27,638	29,612	31,586	34,547
Permit & License Violations ⁽⁴⁾	15%	19,741	23,690	25,664	27,638	29,612	31,586	34,547
Unbilled Receivable	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
Potential Maximum ⁽⁵⁾⁽⁶⁾	100%	131,608	157,932	171,092	184,253	197,413	210,574	230,315

- 1) Revenue was defined as the total consolidated third party top line revenue from continuing operations as publicly reported in the Company's financial statements. The percentage achieved was determined by comparing the actual consolidated revenue from continuing operations to the Board approved Revenue Target from continuing operations.
- 2) Net income was defined as the total consolidated pre-tax net income from continuing operations as publicly reported in the Company's financial statements. Net income included all subsidiaries, corporate charges, and dividends from continuing operations. The percentage achieved was determined by comparing the actual pre-tax net income to the Board approved Net Income Target.
- 3) The Health and Safety Incentive target was based upon the actual number of Worker's Compensation Lost Time Accidents, as provided by the Company's Worker's Compensation carrier. The Corporate Treasurer submitted a report on a quarterly basis documenting and confirming the number of Worker's Compensation Lost Time Accidents, supported by the AIG Worker's Compensation Loss Report. Such claims were identified on the loss report as "indemnity claims." The following number of Worker's Compensation Lost Time Accidents and corresponding Performance Target Thresholds were established for the annual Incentive Compensation Plan calculation for 2011.

Work Comp. Claim Number	Performance Target
7	85% - 100%
6	101% - 120%
5	121% - 130%
4	131% - 140%
3	141% - 150%
2	151% - 160%
1	161% Plus

- 4) Permits or License Violations incentive was earned/determined according to the scale set forth below: An "official notice of non-compliance" was defined as an official communication from a local, state, or federal regulatory authority alleging one or more violations of an otherwise applicable environmental, health or safety requirement or permit provision, which resulted in a facility's implementation of corrective action(s).

Permit and License Violations	Performance Target
7	85% - 100%
6	101% - 120%
5	121% - 130%
4	131% - 140%
3	141% - 150%
2	151% - 160%
1	161% Plus

- 5) Unbilled trade receivables was the amount of unbilled reported per Form 10-Q or Form 10-K combining both the long term and current portion of unbilled. The objective for unbilled trade receivables balances older than 12/31/08 was to reduce such balances by \$2,987,000, from \$3,318,000 as of 12/31/10 to \$331,000 by 12/31/11. If this objective was not met, the bonus was reduced by 15%.
- 6) No performance incentive compensation was payable for achieving the health and safety and permit and license violation targets unless a minimum of 70% of the Net Income Target was achieved.

CFO:

The CFO's 2011 performance compensation was based upon achievement of pre-tax net income, administrative expense, financial oversight, centralization of accounting and information technology ("IT") functions objectives, as well as the Company's timely Securities and Exchange Commission filing of annual and quarterly reports and Form 8-Ks. Of the total potential performance compensation, 25% was based on achievement of pre-tax net income goals, 15% on maintaining or reducing our targeted administrative expense, 10% on the timeliness of the Company's annual, quarterly, and Form 8-K report filings with the Securities and Exchange Commission, 10% on financial oversight, 10% on compliance with the requirements of SOX, and 30% on accounting centralization and IT objectives. Each of the pre-tax net income and administrative expense component was based on the Net Income Target and the board approved "Administrative Expense Target", which was \$6,269,000 and \$10,947,000, respectively. See "2011 MIP Targets" below for further discussion of these targets. The specific components of the 2011 MIP for our CFO were as follows:

CFO MIP COMPENSATION COMPONENTS

Annualized Base Pay:	\$ 208,000
Performance Incentive Compensation Target (at 100% of Plan):	\$ 52,000
Total Annual Target Compensation (at 100% of Plan):	\$ 260,000

The Performance Incentive Compensation Target was based on the schedule below.

Target Objectives	Performance Target Thresholds							
	Weights	100% or less	98%-99%	96%-97%	94%-95%	92%-93%	90%-91%	88%-89%
Administrative Expenses ⁽¹⁾	15%	\$ 7,800	\$ 9,360	\$ 9,751	\$ 10,531	\$ 11,700	\$ 12,480	\$ 13,650
		85%-100%	101%-120%	121%-130%	131%-140%	141%-150%	151%-160%	161%+
Net Income ⁽²⁾	25%	\$ 13,000	\$ 15,600	\$ 16,900	\$ 18,200	\$ 19,500	\$ 20,800	\$ 22,750
Accounting ⁽³⁾	10%	5,200	6,240	6,760	7,280	7,800	8,320	9,100
Accounts Receivable ("AR") ⁽⁴⁾	10%	5,200	6,240	6,760	7,280	7,800	8,320	9,100
SOX Compliance ⁽⁵⁾	10%	5,200	6,240	6,760	7,280	7,800	8,320	9,100
Centralization & IT Objectives ⁽⁶⁾	30%	15,600	18,720	20,280	21,840	23,400	24,960	27,300
Unbilled Receivable	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)
Potential Maximum ⁽⁷⁾	100%	52,000	62,400	67,211	72,411	78,000	83,200	91,000

- Administrative Expense was defined as the total consolidated administrative expenses from continuing operations as publicly reported in the Company's financial statements. Administrative Expense was inclusive of all subsidiaries from continuing operations, and excludes marketing expenses and interest expense.
- Net Income was defined as the total consolidated pre-tax net income from continuing operations as publicly reported in the Company's financial statements. Net income included all subsidiaries, corporate charges, and dividends from continuing operations. The percentage achieved was determined by comparing the actual pre-tax Net Income to the Board approved Net Income Target.
- The accounting objective focused on the timely filing of Forms 10-K, 10-Q, and 8-K and the issuance of press releases, containing complete and accurate information.

Securities and Exchange Commission Filings	Performance Target
10K – filed timely or	3%
10K – extension	1.5%
1 st quarter 10Q – filed timely or	2%
1 st quarter 10Q – extension	1%
2 nd quarter 10Q – filed timely or	2%
2 nd quarter 10Q – extension	1%
3 rd quarter 10Q – filed timely or	2%
3 rd quarter 10Q - extension	1%
All 8K’s Filed	1%
Total Achievable	10%

- 4) The AR objective focused on achieving certain AR targets from continuing operations.

Accounts Receivable	Performance Target
25% or less of AR > than 60 days	5.0%
30% or less of AR > than 60 days	2.5%
9% or less of AR > than 120 days	5.0%
10% or less of AR > than 120 days	2.5%
Total Achievable	10.0%

AR was defined as outstanding AR, as shown on the Company’s AR sub-ledger of continuing operations, collectable within the control of the financial and operational staff.

Adjustments for this objective included but were not be limited to:

- i) Accounts fully reserved when calculating bad debt allowance;
 - ii) Accounts that were in litigations; and
 - iii) Accounts not receivable due to a legitimate operational delay. Note this will only be excluded if invoicing was appropriate despite the operational delay.
- 5) The SOX compliance target was based on maintaining good internal controls and minimizing material weaknesses similar to “Permit and License” violations in the CEO Plan.

SOX Deficiencies	Performance Target
0	10%
1	9%
2	8%
3	5%
4	2%
	0%

- 6) Centralization and IT Objective - _ Completion of the following milestones related to the planned centralization of the accounting function to the Corporate Office. Completion of each objective earns 3% with a maximum target achievable of 30%.

Accounting Centralization Objectives	Performance Target
Install Multi-Company Software at Corporate Office.	3.0%
Improve forecasting model from facilities including new software if cost effective.	3.0%
PO implementation Phase II – Automated requisition process.	3.0%
Automated Fixed Asset and Capital Tracking.	3.0%
Cost accounting initiatives to support Field Services initiative and DCAA audit requirements.	3.0%
AP – Automate weekly cash requirement process.	3.0%
Treasury – Automated cash management tracking process.	3.0%
Waste Tracking – Complete East Tennessee Material & Energy Corporation (“M&EC”) and Perma-Fix of Florida (“PFF”) upgrade to Perma-Fix of Northwest (“PFNW”) model.	3.0%
On-Site Service (“OSS”) – Project Controller operation tracking system.	3.0%
Business Portal – to support Time and Entry tracking for Schreiber, Yonley & Associates (“SYA”) and On-Site Services (“OSS”).	3.0%
Sales – Sales and Opportunity Tracking System.	3.0%
Human Resources (“HR”) – Time Management improvements (Timeclocks)	3.0%

- 7) Unbilled trade receivables was the amount of unbilled reported per Form 10-Q or Form 10-K combining both the long term and current portion of unbilled. The objective for unbilled trade receivables balances older than 12/31/08 was to reduce such balances by \$2,987,000, from \$3,318,000 as of 12/31/10 to \$331,000 by 12/31/11. If this objective was not met, the bonus was reduced by 15%.

Under the CFO 2011 MIP, each of the Accounting, Accounts Receivable, SOX Compliance, and Centralization & IT Objectives (each known as “Non-Net Income component”) noted above was calculated as the applicable percentage achieved of the amount as set forth under the Net Income Performance Target Threshold column; therefore, each of the Non-Net Income components was payable only if the Net Income Target Threshold component of at least 85% was achieved.

COO:

2011 COO performance compensation was based upon meeting corporate financial pre-tax net income, revenue, health and safety, and environmental compliance objectives during fiscal year 2011 from our continuing operations. Of the total potential performance compensation, 55% was based on pre-tax net income goal, 15% on revenue goal, 15% on the number of health and safety claim incidents that occur during fiscal year 2011, and the remaining 15% on the number of notices alleging environmental, health or safety violations under our permits or licenses that occurred during the fiscal year 2011. Each of the revenue and pre-tax net income components was based on the Revenue Target and Net Income Target. See “2011 MIP Targets” below for further discussion of these targets. The specific components of the 2011 MIP for the COO are as follows:

COO MIP COMPENSATION COMPONENTS

Annualized Base Pay:	\$ 245,000
Performance Incentive Compensation Target (at 100% of Plan):	\$ 122,500
Total Annual Target Compensation (at 100% of Plan):	\$ 367,500

The Performance Incentive Compensation Target was based on the schedule below.

Target Objectives	Performance Target Thresholds							
	Weights	85%- 100%	101%- 120%	121%- 130%	131%- 140%	141%- 150%	151%- 160%	161%+
Revenue ⁽¹⁾	15%	\$ 18,375	\$ 22,050	\$ 23,891	\$ 25,800	\$ 27,561	\$ 29,400	\$ 32,156
Net Income ⁽²⁾	55%	67,375	80,850	87,591	94,329	101,061	107,800	117,906
Health & Safety ⁽³⁾	15%	18,375	22,050	23,891	25,800	27,561	29,400	32,156
Permit & License Violations ⁽⁴⁾	15%	18,375	22,050	23,891	25,800	27,561	29,400	32,156
Unbilled Receivable	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
Potential Maximum ⁽⁵⁾⁽⁶⁾	100%	122,500	147,000	159,264	171,729	183,744	196,000	214,374

- Revenue was defined as the total consolidated third party top line revenue from continuing operations as publicly reported in the Company's financial statements. The percentage achieved was determined by comparing the actual consolidated revenue from continuing operations to the Board approved Revenue Target from continuing operations.
- Net Income was defined as the total consolidated pre-tax net income from continuing operations as publicly reported in the Company's financial statements. Net income included all subsidiaries, corporate charges, and dividends from continuing operations. The percentage achieved was determined by comparing the actual pre-tax Net Income to the Board approved Net Income Target.
- The Health and Safety Incentive Target was based upon the actual number of Worker's Compensation Lost Time Accidents, as provided by the Company's Worker's Compensation carrier. The Corporate Treasurer submitted a report on a quarterly basis documenting and confirming the number of Worker's Compensation Lost Time Accidents, supported by the AIG Worker's Compensation Loss Report. Such claims were identified on the loss report as "indemnity claims." The following number of Worker's Compensation Lost Time Accidents and corresponding Performance Target Thresholds were established for the annual Incentive Compensation Plan calculation for 2011.

Work Comp. Claim Number	Performance Target
7	85% - 100%
6	101% - 120%
5	121% - 130%
4	131% - 140%
3	141% - 150%
2	151% - 160%
1	161% Plus

- Permits or License Violations incentive was earned/determined according to the scale set forth below: An "official notice of non-compliance" was defined as an official communication from a local, state, or federal regulatory authority alleging one or more violations of an otherwise applicable environmental, health or safety requirement or permit provision, which resulted in a facility's implementation of corrective action(s).

Permit and License Violations	Performance Target
7	85% - 100%
6	101% - 120%
5	121% - 130%
4	131% - 140%
3	141% - 150%
2	151% - 160%
1	161% Plus

- 5) Unbilled trade receivables was the amount of unbilled reported per Form 10-Q or Form 10-K combining both the long term and current portion of unbilled. The objective for unbilled trade receivables balances older than 12/31/08 was to reduce such balances by \$2,987,000, from \$3,318,000 as of 12/31/10 to \$331,000 by 12/31/11. If this objective was not met, the bonus was reduced by 15%.
- 6) No performance incentive compensation was payable for achieving the health and safety and permit and license violation targets unless a minimum of 70% of the Net Income Target was achieved.

SEC President:

Performance compensation under the MIP for our SEC President is based upon SEC realizing gross profit target for a particular fiscal year of at least \$18,500,000 (which has been set for each of four years) and the Company realizing pre-tax net income target for such fiscal year of \$6,296,000 (which company pre-tax Net Income Target for fiscal year 2011 was \$6,296,000 and is subject to change each year as determined by the Compensation Committee).

The Performance Incentive Compensation Target is based on the schedule below:

Target Objective	Performance Target	Actual Performance as % of Target	Performance Incentive Compensation
SEC Gross Profit ⁽¹⁾	\$ 18,500,000	100% or greater	\$ 360,000
Net Income ⁽²⁾	\$ 6,269,000	85%-100%	\$ 240,000
		101%-120%	\$ 288,000
		121%-150%	\$ 360,000

- 1) SEC Gross Profit is defined, for any fiscal period from and after the effective date, as the total consolidated gross profit for Safety and Ecology Holdings Corporation for such period plus depreciation and amortization expense included in the gross profit.
- 2) Net Income is defined, for any fiscal period from and after the effective date, as the total consolidated pre-tax net income of the Company from continuing operations as publicly reported in the Company’s financial statements. Net income included all subsidiaries, corporate charges, and dividends from continuing operations. The percentage achieved is determined by comparing the actual pre-tax Net Income to the Board approved Net Income Target.

With respect to the two months beginning November 1, 2011 and ending December 31, 2011 (the “Short Year”), the respective SEC gross profit target, the Company’s pre-tax Net Income Target, and the performance compensation payable, were pro-rated for the two months of the Short Year. As a result, for the Short Year, the SEC gross profit target was \$3,083,333, and the Company’s pre-tax Net Income Target was \$1,044,833.

Pursuant to Mr. Leichtweis’s Employment Agreement, if, during the term of the Employment Agreement and during the term of Mr. Leichtweis’ employment with the Company, the MIP is terminated for any reason or not renewed in substantially similar form, with certain adjustments, or if Mr. Leichtweis’ employment with the Company is terminated by the Company without cause, or if Mr. Leichtweis terminates his employment for good reason, and as a result of any such termination, the Employment Agreement and MIP are terminated, then Mr. Leichtweis will be entitled for each year during the remaining term of the Employment Agreement to a special bonus based on the terms of the MIP in effect as of the date of such termination, with certain exceptions; provided, the amount of special bonus payable to Mr. Leichtweis for any calendar year after such termination may not exceed \$600,000. No special bonus for any particular year shall be payable to Mr. Leichtweis if the gross profit performance target for SEC set forth in the MIP is not met for that particular year.

2011 MIP Targets

As discussed above, 2011 MIPs approved for the CEO, CFO, COO, and the SEC President by the Compensation Committee award cash compensation based on achievement of performance targets which included Revenue, Net Income, and Administrative Expenses as approved by our Board. The Revenue Target of \$99,993,000 and the Administrative Expense Target of \$10,947,000 set forth in the 2011 MIPs were based on our board approved 2011 budget. In formulating the Net Income Target of \$6,269,000 (which is pre-tax), the Board considered 2010 results, current economic conditions, forecasts for 2011 government (DOE) spending under continuing resolution, and the potential for significant spending cuts in the government (DOE) 2012 budget. The Compensation Committee believed the Net Income Target set was likely to be achieved, but was not assured. With regard to the SEC Gross Profit Target of \$18,500,000, such target was determined by the Compensation Committee as the financial performance level which merits incentive compensation for financial performance.

The following table sets forth the MIP compensation earned by the CEO, CFO, COO, and the SEC President in fiscal year 2011 under each MIP. We anticipate paying the compensation earned under each of the MIPs by March 31, 2012:

CEO MIP:

Target Objectives:	Performance Target Threshold Achieved	MIP Compensation Earned
Revenue	108%	\$ 23,690
Net Income	208%	126,674
Health & Safety	121%-130%	25,664
Permit & License Violations	121%-130%	25,664
Unbilled Receivables	109%	— ⁽¹⁾
Total Performance Compensation		<u>\$ 201,692</u>

⁽¹⁾ Unbilled trade receivable balances older than 12/31/08 was reduced by \$3,253,000 which was more than the budgeted amount of \$2,987,000 from \$3,318,000 as of 12/31/10 to \$331,000; therefore, compensation for the four components shown above was not subject to reduction by 15%.

CFO MIP:

<u>Target Objectives:</u>	<u>Performance Target Threshold Achieved</u>	<u>MIP Compensation Earned</u>
Administrative	94%	\$ 10,531
Net Income	208%	22,750
Accounting	100%	9,100
Accounts Receivable	100%	9,100
SOX Compliance	100%	9,100
Centralization & IT Objective	100%	27,300
Unbilled Receivables	109%	—
Total Performance Compensation		<u>\$ 87,881</u>

⁽¹⁾ Unbilled trade receivable balances older than 12/31/08 was reduced by \$3,253,000 which was more than the budgeted amount of \$2,987,000 from \$3,318,000 as of 12/31/10 to \$331,000; therefore, compensation for the six components shown above was not subject to reduction by 15%.

COO MIP:

Target Objectives:	Performance Target Threshold Achieved	MIP Compensation Earned ⁽¹⁾
Revenue	108%	\$ 11,025
Net Income	208%	58,953
Health & Safety	121%-130%	11,944
Permit & License Violations	121%-130%	11,944
Unbilled Receivables	109%	—
Total Performance Compensation		\$ 93,866

⁽¹⁾ Amount earned was pro-rated based on date of employment of July 1, 2011.

⁽²⁾ Unbilled trade receivable balances older than 12/31/08 was reduced by \$3,253,000 which was more than the budgeted amount of \$2,987,000 from \$3,318,000 as of 12/31/10 to \$331,000; therefore, compensation for the four components shown above was not subject to reduction by 15%.

President of SEC MIP:

Target Objectives:	Performance Target Threshold Achieved(1)	MIP CEcompensation Earned (2)
SEC Gross Profit	10%	\$ —
Net Income	56%	—
Total Performance Compensation		\$ —

⁽¹⁾ Pursuant to the MIP, the SEC gross profit target and the pre-tax Net Income Target were pro-rated for the two months of the “Short Year” (See discussion of “Short Year” under the MIP above), which was \$3,083,333 and \$1,044,833, respectively.

⁽²⁾ Performance compensation was pro-rated for the two months of the “Short Year” (November 1, 2011 to December 31, 2011).

Mr. Robert Schreiber-Schreiber, Yonley, & Associates (“SYA”)-Bonus Plan

Mr. Robert Schreiber, Jr., the President of our environmental engineering and regulatory compliance consulting services firm, SYA, is eligible to be awarded a bonus based on an allocation of a portion of a bonus pool applicable only to SYA employees. The amount of the bonus pool is equal to 40% of the net income of SYA, minus 5% of SYA’s total revenues for 2011. In 2011, the bonus pool was determined to be \$0. The Compensation Committee believes that this formula ties any bonus awarded to employees of SYA directly to SYA’s performance, rewards performance, and motivates the SYA employees to achieve our operational goals (although such formula is not linked to specific targets or benchmarks). The Board delegated to our CEO the authority to determine what portion, if any, of the SYA bonus pool is allocated to Mr. Schreiber for his performance. Our CEO considered the following factors when reviewing Mr. Schreiber’s performance for the purpose of determining Mr. Schreiber’s bonus compensation as a portion of the SYA bonus pool:

- SYA’s performance as a segment of our Company;
- Effectiveness of Mr. Schreiber’s leadership;
- Mr. Schreiber’s role and participation as a member of our executive management team; and
- Our overall performance, based on a subjective analysis of our revenues and net income in the applicable business environment.

The determination of Mr. Schreiber's bonus is a subjective determination, with the maximum amount of such bonus being 100% of the SYA bonus pool. In 2010 and 2009, Mr. Schreiber's bonus represented 0% and 40%, respectively, of the SYA bonus pool. Accordingly, Mr. Schreiber's compensation is not based on objective metrics, but a subjective assessment of his performance, with the maximum amount of such bonus compensation defined by the Compensation Committee's formula. Although the bonus pool was determined to be \$0 in 2011, Mr. Schreiber received a \$40,000 discretionary bonus as a result of his management of corporate matters and his contribution to the Company's research and development program.

Long-Term Incentive Compensation

Employee Stock Option Plan

The 2004 Stock Option Plan (the "2004 Option Plan") and 2010 Stock Option Plan (the "2010 Option Plan") encourage participants to focus on long-term performance and provides an opportunity for executive officers and certain designated key employees to increase their stake in the Company. Stock options succeed by delivering value to the executive only when the value of our stock increases. Both plans authorize the grant of Non-Qualified Stock Options ("NQSOs") and Incentive Stock Options ("ISOs") for the purchase of Common Stock. Except as described below, the Company did not grant any other options to its employees in 2011.

The 2004 Option Plan and 2010 Option Plan assist the Company to:

- enhance the link between the creation of stockholder value and long-term executive incentive compensation;
- provide an opportunity for increased equity ownership by executives; and
- maintain competitive levels of total compensation.

Stock option award levels are determined based on market data, vary among participants based on their positions with us and are granted generally at the Compensation Committee's regularly scheduled July or August meeting. Newly hired or promoted executive officers who are eligible to receive options are generally awarded such options at the next regularly scheduled Compensation Committee meeting following their hire or promotion date.

Options are awarded with an exercise price equal to or not less than the closing price of the Company's Common Stock on the date of the grant as reported on the NASDAQ. In certain limited circumstances, the Compensation Committee may grant options to an executive at an exercise price in excess of the closing price of the Company's Common Stock on the grant date.

On July 25, 2011, the Compensation Committee, with the approval of our Board of Directors, authorized the grant to our COO of ISOs from the 2010 Stock Option Plan for the purchase of up to 300,000 shares of our common stock. The exercise price is \$1.57 per share, which was the fair market value of our common stock on the grant date. The ISOs have a term of six years and vest one-third each year over a three year period.

Upon the closing of the acquisition of SEC, we granted our SEC President NQSOs to purchase up to 250,000 shares of our common stock pursuant to the terms of a Non-Qualified Stock Option Agreement, dated October 31, 2011. The exercise price is \$1.35 per share, which was the fair market value of our common stock on the grant date. The option has a term of 10 years and vest one-fourth each year over a four-year period.

Pursuant to the 2004 Stock Option Plan and the 2010 Stock Option plan, vesting of option awards ceases upon termination of employment and exercise right of the vested option amount ceases upon three months from termination of employment except in the case of death or retirement (subject to a six month limitation), or disability (subject to a one year limitation). Prior to the exercise of an option, the holder has no rights as a stockholder with respect to the shares subject to such option.

Our 1993 Non-Qualified Stock Option Plan (“1993 Plan”) expired on September 13, 2003. No new options are issued under this plan, but the options issued under the 1993 Plan prior to the expiration date will remain in effect until their respective dates. Dr. Centofanti and Mr. Robert Schreiber, NEOs, each holds NQSOs to purchase up to 100,000 and 50,000 of the Company’s common stock, respectively, under the 1993 Plan, which will expire on February 27, 2013, if not exercised prior to the expiration date.

In the event of a “change of control” (as defined in the 1993 Non-Qualified Stock Option Plan, the 2004 Stock Option Plan, and the 2010 Stock Option Plan) of the Company, each outstanding option and award granted under the plans shall immediately become exercisable in full notwithstanding the vesting or exercise provisions contained in the stock option agreement.

Accounting for Stock-Based Compensation

We account for stock-based compensation in accordance with ASC 718, “Compensation – Stock Compensation.” ASC 718 establishes accounting standards for entity exchanges of equity instruments for goods or services. It also addresses transactions in which an entity incurs liabilities in exchange for goods or services that are based on the fair value of the entity’s equity instruments or that may be settled by the issuance of those equity instruments. ASC 718 requires all stock-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values. The Company uses the Black-Scholes option-pricing model to determine the fair-value of stock-based awards which requires subjective assumptions. Assumptions used to estimate the fair value of stock options granted include the exercise price of the award, the expected term, the expected volatility of the Company’s stock over the option’s expected term, the risk-free interest rate over the option’s expected term, and the expected annual dividend yield.

We recognize stock-based compensation expense using a straight-line amortization method over the requisite period, which is the vesting period of the stock option grant. As ASC 718 requires that stock-based compensation expense be based on options that are ultimately expected to vest, our stock-based compensation expense is reduced at an estimated forfeiture rate. Our estimated forfeiture rate is generally based on historical trends of actual forfeitures. Forfeiture rates are evaluated, and revised as necessary. See impact of ASC 718 on our operating results in “Note 3 – Stock-Based Compensation” to “Notes to Consolidated Financial Statements.”

Retirement and Other Benefits

401(k) Plan

We adopted the Perma-Fix Environmental Services, Inc. 401(k) Plan (the “401(k) Plan”) in 1992, which is intended to comply with Section 401 of the Internal Revenue Code and the provisions of the Employee Retirement Income Security Act of 1974. All full-time employees who have attained the age of 18 are eligible to participate in the 401(k) Plan. Eligibility is immediate upon employment but enrollment is only allowed during two yearly open periods of January 1 and July 1. Participating employees may make annual pretax contributions to their accounts up to 100% of their compensation, up to a maximum amount as limited by law. We, at our discretion, may make matching contributions based on the employee’s elective contributions. Company contributions vest over a period of five years. We have matched 25% of our employees’ contributions since inception of the Plan. In 2011, the Company contributed \$432,000 in matching funds, of which approximately \$16,476 was for our named executive officers (See the Summary Compensation Table in this section for information about our matching contributions to the named executive officers). Our new employees from our acquisition of SEHC and its subsidiaries on October 31, 2011 were not eligible to participate in the Company’s 401(k) Plan until January 1, 2012.

Perquisites and Other Personal Benefits

The Company provides executive officers with limited perquisites and other personal benefits that the Company and the Compensation Committee believe are reasonable and consistent with its overall compensation program to better enable the Company to attract and retain superior employees for key positions. The Compensation Committee periodically reviews the levels of perquisites and other personal benefits provided to executive officers. The executive officers are provided an auto allowance.

Consideration of Stockholder Say-On-Pay Advisory Vote.

At our annual meeting of stockholders held in August 2011, our stockholders voted, on a non-binding, advisory basis, on the compensation of our named executive officers for 2010. A substantial majority (more than 97%) of the total votes cast on our say-on-pay proposal at that meeting approved the compensation of our named officers for 2010 on a non-binding, advisory basis. The Compensation Committee and the Board believes that this affirms our stockholders' support of our approach to executive compensation, and, accordingly, the Compensation Committee did not materially change its approach to executive compensation in 2011 in connection with the say-on-pay proposal. The Compensation Committee expects to consider the results of future stockholder say-on-pay advisory votes when making future compensation decisions for our named executive officers. We will hold an advisory vote on the compensation of named executive officers at our 2012 annual meeting of stockholders.

Compensation Committee Report

The Compensation Committee of the Company has reviewed and discussed the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K with management and, based on such review and discussions, the Compensation Committee recommended to the Board that the Compensation Discussion and Analysis be included in this Form 10-K.

THE COMPENSATION AND STOCK OPTION COMMITTEE

Jack Lahav, Chairman
Joe Reeder
Dr. Charles E. Young

Summary Compensation

The following table summarizes the total compensation paid or earned by each of the executive officers for the fiscal years ended December 31, 2011, 2010, and 2009.

<u>Name and Principal Position</u>	<u>Year</u>	<u>Salary</u> (<u>\$</u>)	<u>Bonus</u> (<u>\$</u>) ⁽⁴⁾	<u>Option</u> <u>Awards</u> (<u>\$</u>) ⁽⁵⁾	<u>Non-Equity</u> <u>Incentive Plan</u> <u>Compensation</u> (<u>\$</u>) ⁽⁶⁾	<u>All other</u> <u>Compensation</u> (<u>\$</u>) ⁽⁸⁾	<u>Total</u> <u>Compensation</u> (<u>\$</u>)
Dr. Louis Centofanti	2011	263,218	—	—	201,692 ⁽⁷⁾	13,125	478,035
Chairman of the Board,	2010	263,218	—	—	16,780	13,125	293,123
President and Chief	2009	253,094	—	—	145,575	10,217	408,886
Executive Officer							
Ben Naccarato ⁽¹⁾	2011	208,000	—	—	87,881 ⁽⁷⁾	13,125	309,006
Vice President and Chief	2010	207,996	—	—	8,951	13,125	230,072
Financial Officer	2009	196,110	—	59,475	57,963	8,492	322,040
Jim Blankenhorn ⁽²⁾	2011	122,500	25,000	265,721	93,866 ⁽⁷⁾	24,601	531,688
Vice President and Chief							
Operating Officer							
Robert Schreiber, Jr.	2011	199,140	40,000	—	—	14,503	253,643
President of SYA	2010	197,685	1,000	—	—	18,023	216,708
	2009	191,894	69,130	—	—	8,400	269,424
Christopher Leichtweis ⁽³⁾	2011	54,000	—	184,305	— ⁽⁷⁾	—	238,305
Senior Vice President and							
President of SEC							

(1) Named as Chief Financial Officer and Secretary of the Board of Directors by the Company's Board of Directors on February 26, 2009. Mr. Naccarato was named as Interim Chief Financial Officer and Secretary of the Board of Directors effective November 1, 2008. Mr. Naccarato served as the Vice President, Corporate Controller/Treasurer prior to being named Interim Chief Financial Officer and Secretary of the Board of Directors.

(2) Appointed as the Company's Chief Operating Officer by the Company's Board of Directors on February 18, 2011. Mr. Blankenhorn's employment with the Company became effective on June 1, 2011; however, his actual date of employment was July 1, 2011 as he took a personal leave of absence through June 30, 2011.

(3) Named as Senior Vice President of the Company and President of SEC on October 31, 2011 upon the Company's acquisition of SEHC and its subsidiaries on October 31, 2011 from Homeland Security Capital Corporation ("Homeland"). Mr. Leichtweis was a former officer and director of Homeland.

(4) The \$1,000 earned by Mr. Schreiber for 2010 represents a bonus paid to him for 25 years of service with the Company. Amounts earned by Mr. Schreiber for 2009 represents an allocation of a portion of bonus pool applicable to SYA employees. The portion of bonus allocated to Mr. Schreiber is approved by our Chief Executive Officer. The bonus pool for 2011 was \$0; however, Mr. Schreiber received a \$40,000 discretionary bonus in 2011 approved by our Chief Executive Officer resulting from Mr. Schreiber's management of corporate matters and his contribution to the Company's research and development program. See "Mr. Robert Schreiber-Schreiber, Yonley & Associates ("SYA") - Bonus Plan" in the "Compensation and Discussion Analysis" for further information regarding this bonus plan. See footnotes (6) and (7) for bonus earned by the named executive officers under the Company's MIP. The \$25,000 bonus earned by Mr. Blankenhorn represents a sign on bonus upon employment as the Company's Chief Operating Officer.

- (5) This amount reflects the aggregate grant date fair value of awards computed in accordance with ASC 718, “Compensation – Stock Compensation”, excluding the effect of forfeitures. No options were granted to any employees and the other named executives in 2011 with the exception of Mr. Leichtweis and Mr. Blankenhorn.
- (6) Represents performance compensation earned under the Company’s MIP. The MIP is described under the heading “Management Incentive Plan.”
- (7) Represents 2011 performance compensation earned in 2011 under the Company’s MIP. Amount to be paid by first quarter of 2012. MIP earned by Jim Blankenhorn and Christopher Leichtweis were pro-rated based on date of employment of July 1, 2011 and November 1, 2011 (effective date of MIP), respectively.
- (8) The amount shown includes a monthly automobile allowance of \$750 or the use of a company car, and our 401(k) matching contribution, where applicable. In addition, amount also includes gross up of the \$25,000 sign on bonus paid to our Chief Operating Officer, Mr. Blankenhorn (see footnote (4) above).

Name	401(k) match	Auto Allowance or Company Car		Other	Total
Dr. Louis Centofanti	\$ 4,125	\$ 9,000	∞	—	\$ 13,125
Ben Naccarato	\$ 4,125	\$ 9,000	∞	—	\$ 13,125
Jim Blankenhorn	\$ 2,726	\$ 4,154	\$	17,720	\$ 24,601
Robert Schreiber, Jr.	\$ 5,500	\$ 9,003	∞	—	\$ 14,503
Christopher Leichtweis	∞	—	∞	—	∞

The compensation plan under which the awards in the following table were made are generally described in the Compensation Discussion and Analysis in this section and include the Company’s MIP, which is a non-equity incentive plan, and the Company’s 2004 Stock Option Plan and 2010 Stock Option Plan, which provides for grant of stock options to our employees.

Grant of Plan-Based Awards

Name	Grant Date	Estimated Future Payouts Under Non-Equity Incentive Plan Awards			All other Option Awards: Number of Securities Underlying Options (#)	Exercise or Base Price of Option Awards (\$/Sh)	Grant Date Fair Value of Option Awards (\$)
		Threshold \$	Target \$	Maximum \$			
Dr. Louis Centofanti	N/A	—	131,609 ⁽¹⁾	230,316 ⁽¹⁾	—	—	—
Ben Naccarato	N/A	—	52,000 ⁽¹⁾	91,000 ⁽¹⁾	—	—	—
Jim Blankenhorn	N/A 7/25/2011	—	61,250 ⁽¹⁾	107,187 ⁽¹⁾	— 300,000	— 1.57	— 265,721 ⁽³⁾
Robert Schreiber, Jr.	N/A	—	—	—	—	—	—
Christopher Leichtweis	N/A 10/31/2011	—	100,000 ⁽²⁾	120,000 ⁽²⁾	— 250,000	— 1.35	— 184,305 ⁽³⁾

- (1) The amount shown in “Target” reflects the minimum payment level under the Company’s MIP for the NEO which is paid with the achievement of 85% to 100% of the target amount. The amount shown in “Maximum” reflects the maximum payment level of reaching 161% of the target amount. These amounts are based on the individual’s current salary and position. The “Target” and “Maximum” amounts noted for Mr. Jim Blankenhorn was pro-rated based on date of employment, which was July 1, 2011.
- (2) The amount shown in “Target” reflects the minimum payment level under the MIP approved on October 31, 2011 (which became effective November 1, 2011), which is paid with the achievement of 85% to 100% of the Net Income target and 100% or greater of the SEC Gross Profit target. The “Maximum” reflects the maximum payment level of reaching 150% or more of the Net Income target and 100% or greater of the SEC Gross Profit target. The Target and Maximum amounts were pro-rated for the “Short Year” (effective November 1, 2011 to December 31, 2011) for 2011 pursuant to the MIP (see “SEC President MIP” in “Management Incentive Plans” for further discussion of Chris Leichtweis’s MIP).
- (3) Calculated using the fair value of approximately \$.886 and \$.737 per share as determined on the date of grant in accordance with ASC 718, “Compensation – Stock Compensation” for options granted to Jim Blankenhorn and Christopher Leichtweis, respectively.

Outstanding Equity Awards at Fiscal Year

The following table sets forth unexercised options held by the NEOs as of the fiscal year-end.

Outstanding Equity Awards at December 31, 2011

Name	Option Awards				
	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) ⁽¹⁾ Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unearned Options (#)	Option Exercise Price (\$)	Option Expiration Date
Dr. Louis Centofanti	100,000	—	—	2.19	2/27/2013
	100,000	—	—	1.86	3/2/2012
	150,000	—	—	2.28	8/5/2014
Ben Naccarato	20,000	—	—	1.44	10/28/2014
	5,000	—	—	1.86	3/2/2012
	40,000	—	—	2.28	8/5/2014
	50,000	25,000 ⁽²⁾	—	1.42	2/26/2015
Jim Blankenhorn	—	300,000 ⁽³⁾	—	1.57	7/25/2017
Robert Schreiber, Jr.	50,000	—	—	2.19	2/27/2013
	25,000	—	—	1.86	3/2/2012
	25,000	—	—	2.28	8/5/2014
Christopher Leichtweis	—	250,000 ⁽⁴⁾	—	1.35	10/31/2021

⁽¹⁾ In the event of a change in control (as defined in the Option Plan) of the Company, each outstanding option and award shall immediately become exercisable in full notwithstanding the vesting or exercise provisions contained in the stock option agreement.

⁽²⁾ Incentive stock option granted on February 26, 2009 under the Company's 2004 Stock Option Plan. The option is for a six year term and vests over a three year period, at one third increments per year.

⁽³⁾ Incentive stock option granted on July 25, 2011 under the Company's 2010 Stock Option Plan. The option is for a six year term and vests over a three year period, at one third increments per year.

⁽⁴⁾ Non-qualified stock option granted on October 31, 2011, pursuant to a Non-Qualified Stock Option Agreement, dated October 31, 2011. The option is for a ten year term and vests over a four year period, at one fourth increments per year.

None of the Company's NEOs exercised options during 2011.

Compensation of Directors

Directors who are employees receive no additional compensation for serving on the Board of Directors or its committees. In 2011, we provided the following annual compensation to directors who are not employees:

- on the date of our 2011 Annual Meeting, each of our five continuing non-employee directors was awarded options to purchase 12,000 shares of our Common Stock. Our one newly elected non-employee director was awarded options to purchase 30,000 shares of our Common Stock. The grant date fair value of each option award received by our non-employee directors was \$0.94 per share, based on the date of grant, pursuant to ASC 718, “Compensation – Stock Compensation”;
- a quarterly director fee of \$6,500;
- an additional quarterly fee of \$1,000 to our Research and Development Chair (a newly formed committee on August 24, 2011);
- an additional quarterly fee of \$5,500 to our Audit Committee Chair; and
- a fee of \$1,000 for each board meeting attendance and a \$500 fee for each telephonic conference call attendance.

Each director may elect to have 65% or 100% of such fees payable in Common Stock under the 2003 Outside Director Plan, with the remaining payable in cash.

The table below summarizes the director compensation expenses recognized by the Company for the director option and stock (resulting from fees earned) awards for the year ended December 31, 2011. The terms of the 2003 Outside Directors Plan are further described below under “2003 Outside Directors Plan.”

Director Compensation

Name	Fees Earned or Paid In Cash (\$) ⁽¹⁾	Stock Awards (\$) ⁽²⁾	Option Awards (\$) ⁽³⁾	Non-Equity Incentive Plan Compensation (\$)	Change in Pension Value and Nonqualified Deferred Compensation Earnings (\$)	All Other Compensation (\$)	Total (\$)
Mark Zwecker	18,900	46,800	11,280	—	—	—	76,980
Jon Colin ⁽⁵⁾	—	27,181	—	—	—	—	27,181
Robert L. Ferguson ⁽⁴⁾	4,585	11,352	28,200	—	—	—	44,137
Jack Lahav	—	42,000	11,280	—	—	—	53,280
Joe R. Reeder	10,500	26,001	11,280	—	—	—	47,781
Charles E. Young	11,200	27,734	11,280	—	—	—	50,214
Larry M. Shelton	11,200	27,734	11,280	—	—	—	50,214

⁽¹⁾ Under the 2003 Outside Directors Plan, each director elects to receive 65% or 100% of the director’s fees in shares of our Common Stock. The amounts set forth above represent the portion of the director’s fees paid in cash and excludes the value of the director’s fee elected to be paid in Common Stock under the 2003 Outside Director Plan, which value is included under “Stock Awards.”

⁽²⁾ The number of shares of Common Stock comprising stock awards granted under the 2003 Outside Directors Plan is calculated based on 75% of the closing market value of the Common Stock as reported on the NASDAQ on the business day immediately preceding the date that the quarterly fee is due. Such shares are fully vested on the date of grant. The value of the stock award is based on the market value of our Common Stock at each quarter end times the number of shares issuable under the award. The amount shown is the fair value of the Common Stock on the date of the award.

⁽³⁾ Options granted under the Company’s 2003 Outside Director Plan resulting from re-election and election to the Board of Directors on August 24, 2011. Options are for a 10 year period with an exercise price of \$1.41 per share and are fully vested in six months from grant date. The value of the option award for each outside director is calculated based on the fair value of the option per share (\$0.94) on the date of grant times the number of options granted, which was 12,000 for each director with the exception of 30,000 for Robert L. Ferguson and none for Mr. Jon Colin, pursuant to ASC 718, “Compensation – Stock Compensation.” The following is the aggregate number of outstanding non-qualified stock options held by non-employee directors at December 31, 2011:

Name	Options outstanding as of December 31, 2011
Mark Zwecker	113,000
Jon Colin ⁽⁵⁾	101,000
Robert L. Ferguson	84,000
Jack Lahav	113,000
Joe R. Reeder	123,000
Charles E. Young	126,000
Larry M. Shelton	90,000

(4) Elected as a Board member at the Company's 2011 Annual Meeting of Stockholders held on August 24, 2011.

(5) Elected not to stand for re-election at the Company's 2011 Annual Meeting of Stockholders held on August 24, 2011.

2003 Outside Directors Plan

We believe that it is important for our directors to have a personal interest in our success and growth and for their interests to be aligned with those of our stockholders. Therefore, under our 2003 Outside Directors Stock Plan ("2003 Directors Plan"), each outside director is granted a 10 year option to purchase up to 30,000 shares of Common Stock on the date such director is initially elected to the Board of Directors, and receives on each reelection date an option to purchase up to another 12,000 shares of Common Stock, with the exercise price being the fair market value of the Common Stock preceding the option grant date. No option granted under the 2003 Directors Plan is exercisable until after the expiration of six months from the date the option is granted and no option shall be exercisable after the expiration of ten years from the date the option is granted. Options to purchase 756,000 shares of Common Stock have been granted and are outstanding under the 2003 Directors Plan, of which 66,000 were vested as of December 31, 2011.

We periodically review compensation paid to our outside directors against compensation paid by our Peer Group (see companies comprising the Peer Group in "Item 11 – Executive Compensation – The Committee's Process – Peer Group Assessment") to their outside directors to insure that our outside directors are adequately compensated. As a member of the Board of Directors, each director elects to receive either 65% or 100% of the director's fee in shares of our Common Stock. The shares received by each director is calculated based on 75% of the fair market value of the Common Stock determined on the business day immediately preceding the date that the quarterly fee is due. The balance of each director's fee, if any, is payable in cash. In 2011, the fees earned by our outside directors totaled approximately \$265,000. Reimbursements of expenses for attending meetings of the Board are paid in cash at the time of the applicable Board meeting. As a management director, Dr. Centofanti is not eligible to participate in the 2003 Directors Plan. Although Dr. Centofanti is not compensated for his services provided as a director, Dr. Centofanti is compensated for his services rendered as an officer of the Company. See "EXECUTIVE COMPENSATION — Summary Compensation Table."

As of December 31, 2011, we have issued 944,189 shares of our Common Stock in payment of director fees since the inception of the 2003 Directors Plan.

In the event of a "change of control" (as defined in the 2003 Outside Directors Stock Plan), each outstanding stock option and stock award shall immediately become exercisable in full notwithstanding the vesting or exercise provisions contained in the stock option agreement.

Compensation Committee Interlocks and Insider Participation

During 2011, the Compensation and Stock Option Committee of our Board of Directors was composed of Jack Lahav (Chairperson), Jon Colin (who did not stand for re-election at our Annual Meeting of Shareholders on August 24, 2011), Joe Reeder, and Dr. Charles E. Young. None of the members of the Compensation and Stock Option Committee has been an officer or employee of the Company or has had any relationship with the Company requiring disclosure under applicable Securities and Exchange Commission regulations.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS**Security Ownership of Certain Beneficial Owners**

The table below sets forth information as to the shares of Common Stock beneficially owned as of February 29, 2012, by each person known by us to be the beneficial owners of more than 5% of any class of our voting securities.

Name of Beneficial Owner	Title Of Class	Amount and Nature of Ownership	Percent Of Class ⁽¹⁾
Heartland Advisors, Inc. ⁽²⁾	Common	8,764,700	15.63%
Rutabaga Capital Management ⁽³⁾	Common	3,794,027	6.77%

⁽¹⁾ The number of shares and the percentage of outstanding Common Stock shown as beneficially owned by a person are based upon 56,062,919 shares of Common Stock outstanding (excludes 38,210 shares held in treasury) on February 29, 2012, and the number of shares of Common Stock which such person has the right to acquire beneficial ownership of within 60 days. Beneficial ownership by our stockholders has been determined in accordance with the rules promulgated under Section 13(d) of the Exchange Act.

⁽²⁾ This information is based on the Schedule 13G/A, filed with the Securities and Exchange Commission (the "Commission") on February 10, 2012, which provides that Heartland Advisors, Inc., an investment advisor, shares voting power over 8,257,600 of such shares and shares dispositive power over all of the shares, and no sole voting or sole dispositive power over any of the shares. The address of Heartland Advisors, Inc. is 789 North Water Street, Suite 500, Milwaukee, WI 53202.

⁽³⁾ This information is based on the Schedule 13G/A, filed with the Commission on February 10, 2012, which provides that Rutabaga Capital Management, an investment advisor, has sole voting power over 3,233,394 shares and shared voting power over 560,633 shares and sole dispositive power over all of these shares. The address of Rutabaga Capital Management is 64 Broad Street, 3rd Floor, Boston, MA 02109.

Capital Bank represented to us that:

- As of February 29, 2012, Capital Bank holds of record as a nominee for, and as an agent of, certain accredited investors, 6,817,261 shares of our Common Stock.;
- All of our shares of Common Stock held in the name of Capital Bank, as agent of and nominee for its investors, that were acquired directly from us in private placement transactions, or as a result of conversions of our preferred stock or exercise of our warrants (collectively, "Private Placement Transactions"), and all of our shares acquired in Private Placement Transactions by Capital Bank were acquired for and on behalf of accredited investors;
- During 2011 and the first two months of 2012, it acquired, as agent for and nominee of, certain of its investors, shares of our Common Stock in open market transactions ("Open Market Transactions");
- None of Capital Bank's investors beneficially own more than 4.9% of our Common Stock and to its best knowledge, as far as stocks held in accounts with Capital Bank, none of Capital Bank's investors act together as a group or otherwise act in concert for the purpose of voting on matters subject to the vote of our stockholders or for purpose of dispositive or investment of such stock;
- Capital Bank's investors maintain full voting and dispositive power over the Common Stock beneficially owned by such investors;
- Capital Bank has neither voting nor investment power over the shares of Common Stock owned by Capital Bank, as agent for its investors;
- Capital Bank believes that it is not required to file reports under Section 16(a) of the Exchange Act or to file either Schedule 13D or Schedule 13G in connection with the shares of our Common Stock registered in the name of Capital Bank; and
- Capital Bank is not the beneficial owner, as such term is defined in Rule 13d-3 of the Exchange Act, of the shares of Common Stock registered in Capital Bank's name because (a) Capital Bank holds the Common Stock as a nominee only, (b) Capital Bank has neither voting nor investment power over such shares, and (c) Capital Bank has not nominated or sought to nominate, and does not intend to nominate in the future, any person to serve as a member of our Board of Directors.

Notwithstanding the previous paragraph, if Capital Bank's representations to us described above are incorrect or if Capital Bank's investors are acting as a group, then Capital Bank or a group of Capital Bank's investors could be a beneficial owner of more than 5% of our voting securities. If Capital Bank is deemed the beneficial owner of such shares, the following table sets forth information as to the shares of voting securities that Capital Bank may be considered to beneficially own on February 29, 2012.

Name of Record Owner	Title Of Class	Amount and Nature of Ownership	Percent Of Class ⁽¹⁾
Capital Bank Grawe Gruppe ⁽²⁾	Common	6,817,261 ⁽²⁾	12.16%

⁽¹⁾ This calculation is based upon 56,062,919 shares of Common Stock outstanding on February 29, 2012 plus the number of shares of Common Stock which Capital Bank, as agent for certain accredited investors has the right to acquire within 60 days, which is none.

⁽²⁾ This amount is the number of shares that Capital Bank has represented to us that it holds of record as nominee for, and as an agent of, certain of its accredited investors. As of the date of this report, Capital Bank has no warrants or options to acquire, as agent for certain investors, additional shares of our Common Stocks. Although Capital Bank is the record holder of the shares of Common Stock described in this note, Capital Bank has advised us that it does not believe it is a beneficial owner of the Common Stock or that it is required to file reports under Section 16(a) or Section 13(d) of the Exchange Act. Because Capital Bank (a) has advised us that it holds the Common Stock as a nominee only and that it does not exercise voting or investment power over the Common Stock held in its name and that no one investor of Capital Bank for which it holds our Common Stock holds more than 4.9% of our issued and outstanding Common Stock and (b) has not nominated, and has not sought to nominate, and does not intend to nominate in the future, any person to serve as a member of our Board of Directors, we do not believe that Capital Bank is our affiliate. Capital Bank's address is Burgring 16, A-8010 Graz, Austria.

Security Ownership of Management

The following table sets forth information as to the shares of voting securities beneficially owned as of February 29, 2012, by each of our Directors and NEOs and by all of our directors and executive officers as a group. Beneficial ownership has been determined in accordance with the rules promulgated under Section 13(d) of the Exchange Act. A person is deemed to be a beneficial owner of any voting securities for which that person has the right to acquire beneficial ownership within 60 days.

Name of Beneficial Owner ⁽²⁾	Number of Shares of Common Stock	Percentage of Common Stock ⁽¹⁾
Dr. Louis F. Centofanti ⁽³⁾	1,302,024 ⁽³⁾	2.31%
Jack Lahav ⁽⁴⁾	927,307 ⁽⁴⁾	1.65%
Joe R. Reeder ⁽⁵⁾	916,340 ⁽⁵⁾	1.63%
Larry M. Shelton ⁽⁶⁾	168,718 ⁽⁶⁾	*
Dr. Charles E. Young ⁽⁷⁾	200,576 ⁽⁷⁾	*
Mark A. Zwecker ⁽⁸⁾	492,995 ⁽⁸⁾	*
Robert L. Ferguson ⁽⁹⁾	472,924 ⁽⁹⁾	*
Robert Schreiber, Jr. ⁽¹⁰⁾	205,292 ⁽¹⁰⁾	*
Ben Naccarato ⁽¹¹⁾	140,000 ⁽¹¹⁾	*
Christopher Leichtweis ⁽¹²⁾	747,112 ⁽¹²⁾	1.33%
James Blankenhorn	-	0.00%
Directors and Executive Officers as a Group (11 persons)	5,573,288 ⁽¹³⁾	9.71%

*Indicates beneficial ownership of less than one percent (1%).

- (1) See footnote (1) of the table under “Security Ownership of Certain Beneficial Owners.”
- (2) The business address of each person, for the purposes hereof, is c/o Perma-Fix Environmental Services, Inc., 8302 Dunwoody Place, Suite 250, Atlanta, Georgia 30350.
- (3) These shares include (i) 638,024 shares held of record by Dr. Centofanti, (ii) options to purchase 350,000 shares, which are immediately exercisable, and (iii) 314,000 shares held by Dr. Centofanti's wife. Dr. Centofanti has sole voting and investment power of these shares, except for the shares held by Dr. Centofanti's wife, over which Dr. Centofanti shares voting and investment power.
- (4) Mr. Lahav has sole voting and investment power over these shares which include: (i) 814,307 shares of Common Stock held of record by Mr. Lahav, and (ii) options to purchase 113,000 shares of Common Stock, which are immediately exercisable.
- (5) Mr. Reeder has sole voting and investment power over these shares which include: (i) 777,090 shares of Common Stock held of record by Mr. Reeder, (ii) options to purchase 123,000 shares, which are immediately exercisable, and (iii) 16,250 shares held in a custodian account for Mr. Reeder's grandchildren.
- (6) Mr. Shelton has sole voting and investment power over these shares which include: (i) 78,718 shares of Common Stock held of record by Mr. Shelton, and (ii) options to purchase 90,000 shares, which are immediately exercisable.
- (7) Dr. Young has sole voting and investment power over these shares which include: (i) 74,576 shares held of record by Dr. Young; and (ii) options to purchase 126,000 shares, which are immediately exercisable.
- (8) Mr. Zwecker has sole voting and investment power over these shares which include: (i) 379,995 shares of Common Stock held of record by Mr. Zwecker, and (ii) options to purchase 113,000 shares, which are immediately exercisable.
- (9) Mr. Ferguson has sole voting and investment power over these shares which include: (i) 270,360 shares of Common Stock held of record by Mr. Ferguson, (ii) 27,046 shares held in Mr. Ferguson's individual retirement account, (iii) 24,018 shares held by Ferguson Financial Group LLC (“FFG LLC”), of which Mr. Ferguson is the manager, (iv) options to purchase 84,000 shares, which are immediately exercisable, and (v) a warrant to purchase 67,500 shares, which are immediately exercisable.
- (10) Mr. Schreiber has joint voting and investment power, with his spouse, over 105,292 shares of Common Stock beneficially held and sole voting and investment power over options to purchase 100,000 shares, which are immediately exercisable.
- (11) Mr. Naccarato has sole voting and investment power over these shares which include: options to purchase 140,000 shares, which are immediately exercisable.
- (12) Mr. Leichtweis has sole voting and investment power over these shares of Common Stock held of record by Mr. Leichtweis.
- (13) Amount includes 1,239,000 options, which are immediately exercisable to purchase 1,239,000 shares of Common Stock, and a warrant which is immediately exercisable to purchase up to 67,500 shares of Common Stock.

Equity Compensation Plans

The following table sets forth information as of December 31, 2011, with respect to our equity compensation plans.

Plan Category	Equity Compensation Plan		
	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
	(a)	(b)	(c)
Equity compensation plans Approved by stockholders	2,789,833	\$ 2.03	1,254,143
Equity compensation plans not Approved by stockholders ⁽¹⁾	250,000	\$ 1.35	—
Total	3,039,833	\$ 1.98	1,254,143

⁽¹⁾These shares are issuable pursuant to options granted to Mr. Christopher Leichtweis pursuant to a Non-Qualified Stock Option Agreement dated October 31, 2011. Mr. Leichtweis was named as Senior Vice President of the Company and President of SEC on October 31, 2011 upon the Company's acquisition of SEHC and its subsidiaries on October 31, 2011 from Homeland Security Capital Corporation ("Homeland"). Mr. Leichtweis was a former officer and director of Homeland.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE**Review of Related Party Transactions**

Our Audit Committee Charter provides for the review of any related party transactions, other than transactions involving an employment relationship with the Company, which are reviewed by the Compensation and Stock Option Committee. Although the Company does not have written policies for the review of related party transactions, the Audit Committee reviews transactions between the Company and its directors, executive officers, and their respective immediate family members. In approving or rejecting a proposed transaction, the Audit Committee takes into account, among other factors it deems appropriate: (1) the extent of the related person's interest in the transaction; (2) whether the transaction is on terms generally available to an unaffiliated third-party under the same or similar circumstances; (3) the cost and benefit to the Company; (4) the impact or potential impact on a director's independence in the event the related party is a director, an immediate family member of a director or an entity in which a director is a partner, stockholder or executive officer; (5) the availability of other sources for comparable products or services; (5) the terms of the transaction; and (6) the risks to the Company. Related party transactions are reviewed at Audit Committee Meetings (which is held at least quarterly) prior to the consummation of the transaction. With respect to a related party transaction arising between Audit Committee meetings, the Chief Financial Officer may present it to the Audit Committee Chairman, who will review and may approve the related party transaction subject to ratification by the Audit Committee at the next scheduled meeting. Our Audit Committee shall approve only those transactions that, in light of known circumstances, are not inconsistent with the Company's best interest.

Related Party Transactions*Mr. Robert Schreiber, Jr.*

During March 2011, we entered into a new lease with Lawrence Properties LLC, a company jointly owned by Robert Schreiber, Jr., the President of Schreiber, Yonley and Associates, and Mr. Schreiber's spouse. Mr. Schreiber is a member of our executive management team. The new lease is for a term of five years starting June 1, 2011. The new lease replaced the prior five-year lease with Lawrence Properties LLC, which expired on May 31, 2011. Under the new lease, we pay monthly rent of approximately \$11,400, which we believe is lower than costs charged by unrelated third party landlords. Additional rent will be assessed for any increases over the new lease commencement year for property taxes or assessments and property and casualty insurance premiums.

Mr. David Centofanti

Mr. David Centofanti serves as our Director of Information Services. For such services, he received total compensation in 2011 of approximately \$173,000. Mr. David Centofanti is the son of our Chief Executive Officer and Chairman of our Board, Dr. Louis F. Centofanti. We believe the compensation received by Mr. Centofanti for his technical expertise which he provides to the Company is competitive and comparable to compensation we would have to pay to an unaffiliated third party with the same technical expertise.

Mr. Robert L. Ferguson

On June 13, 2007, we acquired Nuvotec (n/k/a Perma-Fix Northwest, Inc. or "PFNW") and Nuvotec's wholly owned subsidiary, PEcoS (n/k/a Perma-Fix Northwest Richland, Inc. or "PFNWR"), pursuant to the terms of the Merger Agreement, as amended, between us, Nuvotec, PEcoS, and our wholly owned subsidiary. At the time of the acquisition, Robert L. Ferguson was the Chairman, Chief Executive Officer, and individually or through entities controlled by him, the owner of approximately 21.29% of Nuvotec's outstanding common stock. In connection with the acquisition, Mr. Ferguson was nominated to serve as a Director and subsequently was elected as a director at our Annual Meeting of Stockholders. Mr. Ferguson served as a director until his resignation in February 2010. Mr. Ferguson was recommended by the Corporate Governance and Nominating Committee and the Board of Directors nominated Mr. Ferguson to stand for election as a Director at our 2011 Annual Meeting of Stockholders, at which time he was elected as a Director.

Pursuant to the terms of the Merger Agreement, as consideration for the acquisition of PFNW and PFNWR by the Company, Mr. Ferguson (or entities controlled by him):

- (a) received a total of \$224,560 cash and 192,783 shares of our Common Stock in July 2007; and
- (b) is entitled to receive 21.29% of an aggregate earn-out amount of \$4,552,000, based on the annual revenues of our nuclear business (as defined) over the four year period ended on June 30, 2011. The aggregate earn-out amount was paid as follows:
 - (i) an aggregate \$2,574,000 in earn-out amount was paid in cash; and
 - (ii) we issued a promissory note, dated September 28, 2010, in the principle amount of \$1,322,000, which provides for 36 equal monthly payments of \$40,000, consisting of interest (annual interest rate of 6%) and principal, starting October 15, 2010.

The total \$3,896,000 in earn-out amount paid to date or to be paid pursuant to the promissory note excludes approximately \$656,000 in Offset Amount, which represents potential indemnification obligations (as defined by the Merger Agreement) which may be payable to the Company by the former shareholders of Nuvotec. Pursuant to the Merger Agreement, the aggregate amount of any Offset Amount may total up to \$1,000,000, except an Offset Amount is unlimited as to indemnification relating to liabilities for taxes, misrepresentation or inaccuracies with respect to the capitalization of Nuvotec or PEcoS or for willful or reckless misrepresentation of any representation, warranty or covenant.

Mr. Ferguson acquired from Mr. William Lampson one-half of a Warrant (the "Lampson Warrant") for the purchase up to 135,000 of the Company's Common Stock at \$1.50 per share. We originally issued the Lampson Warrant to Mr. Lampson as consideration for a loan in the principal amount of \$3,000,000 on May 8, 2009 from Mr. Lampson and Mr. Diehl Rettig. The terms of the loan were amended on April 18, 2011, to provide that the remaining principal balance of \$990,000 is payable in 12 monthly principal payments plus accrued interest starting May 8, 2011. In connection with the loan amendment, the expiration date of the Lampson Warrant was extended one year to May 8, 2012. As a result of the acquisition of one-half of the Lampson Warrant by Mr. Ferguson, Mr. Ferguson and Mr. Lampson each hold a Warrant for the purchase of up to 67,500 shares of Common Stock at \$1.50 per share and with an expiration date of May 8, 2012.

Christopher Leichtweis

The Company is obligated to make lease payments of approximately \$29,000 per month through June 2018, pursuant to a Lease Agreement, dated June 1, 2008 (the "Lease"), between Leichtweis Enterprises, LLC, as lessor, and Safety and Ecology Holdings Corporation ("SEHC"), as lessee. Leichtweis Enterprises, LLC, is owned by Mr. Christopher Leichtweis, who was named as a Senior Vice President of the Company and President of SEC upon the acquisition of SEHC and its subsidiaries by the Company from Homeland on October 31, 2011. The Lease covers SEHC's principal offices in Knoxville, Tennessee.

Under an agreement of indemnity, SEC, Leichtweis and his spouse, jointly and severally, agreed to indemnify the individual surety with respect to contingent liabilities that may be incurred by the individual surety under certain of SEC's bonded projects. In addition, SEC has agreed to indemnify Leichtweis against judgments, penalties, fines, and expense associated with those SEC performance bonds that Leichtweis has agreed to indemnify in the event SEC cannot perform, which has an aggregate bonded amount of approximately \$10,900,000. The indemnification agreement provided by SEC to Leichtweis also provides for compensating Leichtweis at a rate of 0.75% of the value of bonds (60% having been paid previously and the balance at substantial completion of the contract).

Upon the closing of the acquisition of SEHC and its subsidiaries by the Company from Homeland on October 31, 2011, certain security holders of Homeland ("Management Investors") purchased 813,007 restricted shares of the Company's Common Stock for a total consideration of approximately \$1,000,000, or \$1.23 a share, which was the average of the closing prices of the Company's Common Stock as quoted on the Nasdaq during the 30 trading days ending on the trading day immediately prior to the closing of the acquisition. The purchase of the Company's Common Stock was pursuant to a private placement under Section 4(2) of the Securities Act of 1933, as amended (the "Act") or Rule 506 of Regulation D promulgated under the Act. Mr. Leichtweis purchased 747,112 of the 813,007 shares of the Company's Common Stock for the aggregate purchase price of approximately \$918,948 or \$1.23 per share. The purchase price for these shares was deducted from the consideration paid to Homeland for the acquisition of SEHC.

Employment Agreements

We have an employment agreement with each of Dr. Centofanti (our President and Chief Executive Officer), Ben Naccarato (our Chief Financial Officer), James Blankenhorn (our Chief Operating Officer) and Christopher Leichtweis (our Senior Vice President and President of SEC). Each employment agreement provides for annual base salaries, bonuses, and other benefits commonly found in such agreements. In addition, each employment agreement provides that in the event of termination of such officer without cause or termination by the officer for good reason (as such terms are defined in the employment agreement), the terminated officer shall receive payments of an amount equal to benefits that have accrued as of the termination but not yet paid, plus an amount equal to one year's base salary at the time of termination. In addition, the employment agreements provide that in the event of a change in control (as defined in the employment agreements), all outstanding stock options to purchase our common stock granted to, and held by, the officer covered by the employment agreement to be immediately vested and exercisable.

ITEM 14. PRINCIPAL ACCOUNTANTS' FEES AND SERVICES

Audit Fees

The aggregate fees and expenses billed by BDO USA, LLP ("BDO") for professional services rendered for the audit of the Company's annual financial statements for the fiscal years ended December 31, 2011 and 2010, for the reviews of the financial statements included in the Company's Quarterly Reports on Form 10-Q for those fiscal years, and for review of documents filed with the Securities and Exchange Commission for those fiscal years were approximately \$602,000 and \$433,000, respectively. Audit fees for 2011 and 2010 include approximately \$105,000 and \$120,000, respectively, in fees related to the audit of internal control over financial reporting.

Audit-Related Fees

The aggregate fees and expenses billed by BDO for audit-related services for the fiscal years ended December 31, 2011 and 2010 totaled \$43,000 and \$24,000, respectively. Fees for 2011 and 2010 included consulting on various accounting and reporting matters and audit of the Company's 401(K) Plan.

Tax Services

BDO was engaged to provide tax services to the Company for the fiscal years ended December 31, 2011 and 2010, resulting in fees totaling approximately \$35,000 and \$53,000, respectively.

The Audit Committee of the Company's Board of Directors has considered whether BDO's provision of the services described above for the fiscal years ended December 31, 2011 and 2010 is compatible with maintaining its independence.

Engagement of the Independent Auditor

The Audit Committee approves in advance all engagements with BDO and any members of the BDO Alliance network of firms to perform audit or non-audit services for us. All services under the headings Audit Fees, Audit Related Fees, and Tax Services were approved by the Audit Committee pursuant to paragraph (c)(7)(i)(C) of Rule 2-01 of Regulation S-X of the Exchange Act. The Audit Committee's pre-approval policy provides as follows:

- The Audit Committee will review and pre-approve on an annual basis all audits, audit-related, tax and other services, along with acceptable cost levels, to be performed by BDO and any member of the BDO Alliance network of firms, and may revise the pre-approved services during the period based on later determinations. Pre-approved services typically include: Audits, quarterly reviews, regulatory filing requirements, consultation on new accounting and disclosure standards, employee benefit plan audits, reviews and reporting on management's internal controls and specified tax matters.
- Any proposed service that is not pre-approved on the annual basis requires a specific pre-approval by the Audit Committee, including cost level approval.
- The Audit Committee may delegate pre-approval authority to one or more of the Audit Committee members. The delegated member must report to the Audit Committee, at the next Audit Committee meeting, any pre-approval decisions made.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULE

The following documents are filed as a part of this report:

(a)(1) Consolidated Financial Statements

See Item 8 for the Index to Consolidated Financial Statements.

(a)(2) Financial Statement Schedule

See Item 8 for the Index to Consolidated Financial Statements (which includes the Index to the Financial Statement Schedule)

(a)(3) Exhibits

The Exhibits listed in the Exhibit Index are filed or incorporated by reference as a part of this report.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Perma-Fix Environmental Services, Inc.

By	<u>/s/ Dr. Louis F. Centofanti</u> Dr. Louis F. Centofanti Chairman of the Board Chief Executive Officer	Date	<u>March 15, 2012</u>
By	<u>/s/ Ben Naccarato</u> Ben Naccarato Chief Financial Officer and Chief Accounting Officer	Date	<u>March 15, 2012</u>

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in capacities and on the dates indicated.

By	<u>/s/ Dr. Louis F. Centofanti</u> Dr. Louis F. Centofanti, Director	Date	<u>March 15, 2012</u>
By	<u>/s/ Robert L. Ferguson</u> Robert L. Ferguson, Director	Date	<u>March 15, 2012</u>
By	<u>/s/ Jack Lahav</u> Jack Lahav, Director	Date	<u>March 15, 2012</u>
By	<u>/s/ Joe R. Reeder</u> Joe R. Reeder, Director	Date	<u>March 15, 2012</u>
By	<u>/s/ Larry M. Shelton</u> Larry M. Shelton, Director	Date	<u>March 15, 2012</u>
By	<u>/s/ Charles E. Young</u> Charles E. Young, Director	Date	<u>March 15, 2012</u>
By	<u>/s/ Mark A. Zwecker</u> Mark A. Zwecker, Director	Date	<u>March 15, 2012</u>

SCHEDULE II

PERMA-FIX ENVIRONMENTAL SERVICES, INC.

VALUATION AND QUALIFYING ACCOUNTS
For the years ended December 31, 2011, 2010, and 2009
(Dollars in thousands)

Description	Balance at Beginning of Year	Additions Charged to Costs, Expenses and Other	Additions Due to Acquisition	Deductions	Balance at End of Year
Year ended December 31, 2011:					
Allowance for doubtful accounts-continuing operations	\$ 215	\$ 83	\$ 47	\$ 117	\$ 228
Allowance for doubtful accounts-discontinued operations	\$ 97	\$ 175	\$ —	\$ 224	\$ 48
Allowance for deferred tax assets	\$ 11,944	\$ —	\$ 503	\$ 5,087	\$ 7,360
Year ended December 31, 2010:					
Allowance for doubtful accounts-continuing operations	\$ 226	\$ 59	\$ —	\$ 70	\$ 215
Allowance for doubtful accounts-discontinued operations	\$ 70	\$ 75	\$ —	\$ 48	\$ 97
Allowance for deferred tax assets	\$ 10,339	\$ 1,917	\$ —	\$ 312	\$ 11,944
Year ended December 31, 2009:					
Allowance for doubtful accounts-continuing operations	\$ 272	\$ 343	\$ —	\$ 389	\$ 226
Allowance for doubtful accounts-discontinued operations	\$ 61	\$ 9	\$ —	\$ —	\$ 70
Allowance for deferred tax assets	\$ 14,130	\$ —	\$ —	\$ 3,791	\$ 10,339

EXHIBIT INDEX

Exhibit No.	Description
2.1	Agreement and Plan of Merger dated April 27, 2007, by and among Perma-Fix Environmental Services, Inc., Nuvotec USA, Inc., Pacific EcoSolutions, Inc. and PESI Transitory, Inc., which is incorporated by reference from Exhibit 2.1 to the Company's Form 8-K, filed May 3, 2007. The Company will furnish supplementally a copy of any omitted exhibits or schedule to the Commission upon request.
2.2	First Amendment to Agreement and Plan of Merger, dated June 13, 2007, by and among Perma-Fix Environmental Services, Inc., Nuvotec USA, Inc., Pacific EcoSolutions, Inc., and PESI Transitory, Inc., which is incorporated by reference from Exhibit 2.2 to the Company's Form 8-K, filed June 19, 2007. The Company will furnish supplementally a copy of any omitted exhibits or schedule to the Commission upon request.
2.3	Stock Purchase Agreement by and between Triumvirate Environmental, Inc., and Perma-Fix Environmental Services, Inc., dated June 13, 2011, which is incorporated by reference from Exhibit 2.1 to the Company's Form 10-Q for the quarter ended June 30, 2011. The Company will furnish supplementally a copy of any omitted exhibits or schedule to the Commission upon request.
2.4	Stock Purchase Agreement dated July 15, 2011, by and among Perma-Fix Environmental Services, Inc., Homeland Security Capital Corporation, and Safety and Ecology Holdings Corporation, which is incorporated by references from Exhibit 2.1 to the Company's Form 8-K filed on July 20, 2011.
2.5	Asset Purchase Agreement by and among Triumvirate Environmental, Inc., Triumvirate Environmental (Florida), Inc. and Perma-Fix Environmental Services, Inc., and Perma-Fix of Orlando, Inc., dated August 12, 2011 which was filed as Exhibit 99.1 to the Company's 8-K filed on August 17, 2011 and incorporated herein by reference..
2.6	Escrow Agreement, dated October 31, 2011, between the Company, Homeland Security Capital Corporation, and Suntrust Bank, which was filed as Exhibit 2.3 to the Company's 8-K filed on November 4, 2011 and incorporated herein by reference.
2.7	Letter Agreement (Net Working Capital Adjustments), dated October 31, 2011, between the Company, Safety & Ecology Holdings Corporation and Homeland Security Capital Corporation, which was filed as Exhibit 2.4 to the Company's 8-K filed on November 4, 2011 and incorporated herein by reference.
2.8	Letter Agreement (Escrow), dated October 31, 2011, between the Company, Safety & Ecology Holdings Corporation and Homeland Security Capital Corporation, which was filed as Exhibit 2.5 to the Company's 8-K filed on November 4, 2011 and incorporated herein by reference.
2.9	Letter Agreement (Note Prepayment), dated October 31, 2011, between the Company, Safety & Ecology Holdings Corporation and Homeland Security Capital Corporation, which was filed as Exhibit 2.6 to the Company's 8-K filed on November 4, 2011 and incorporated herein by reference.
3(i)	Restated Certificate of Incorporation, as amended, is incorporated by reference from Exhibit 3(i) to the Company's 2008 Form 10-K filed on March 31, 2009.
3(ii)	Bylaws of Perma-Fix Environmental Services, Inc., as amended on October 30, 2007, as incorporated by reference from Exhibit 3(ii) to the Company's Form 10-Q for the quarter ended September 30, 2007.
4.1	Specimen Common Stock Certificate as incorporated by reference from Exhibit 4.3 to the Company's Registration Statement, No. 33-51874.
4.2	Rights Agreement dated as of May 2, 2008 between the Company and Continental Stock Transfer & Trust Company, as Rights Agent, as incorporated by reference from Exhibit 4.1 to the Company's Form 8-K filed on May 8, 2008.
4.3	Letter Agreement dated September 29, 2008, between the Company and Continental Stock Transfer & Trust Company, as incorporated by reference from Exhibit 4.3 to the Company's Form 8-A/A filed on October 2, 2008.
4.4	Loan and Securities Purchase Agreement, dated May 8, 2009 between William N. Lampson, Diehl Rettig, and Perma-Fix Environmental Services, Inc. as incorporated by reference from Exhibit 4.1 to the Company Form 10-Q filed on May 11, 2009.

- 4.5 Promissory Note dated May 8, 2009 between William N. Lampson, Diehl Rettig, and Perma-Fix Environmental Services, Inc. as incorporated by reference from Exhibit 4.2 to the Company Form 10-Q filed on May 11, 2009.
- 4.6 Common Stock Purchase Warrant, dated May 8, 2009, for William N. Lampson, as incorporated by reference from Exhibit 4.3 to the Company Form 10-Q filed on May 11, 2009.
- 4.7 Common Stock Purchase Warrant, dated May 8, 2009, for Diehl Rettig, as incorporated by reference from Exhibit 4.4 to the Company Form 10-Q filed on May 11, 2009.
- 4.8 First Amendment to Loan and Securities Purchase Agreement, dated April 18, 2011, between Perma-Fix Environmental Services, Inc., William N. Lampson, and Anne Rettig, the fully appointed and acting Personal Representative of the Estate of Diehl Rettig, Deceased, as incorporated by reference from Exhibit 4.1 to the Company's Form 8-K filed on April 22, 2011.
- 4.9 First Amendment to Promissory Note, dated April 18, 2011, between Perma-Fix Environmental Services, Inc., William N. Lampson, and Anne Rettig, the fully appointed and acting Personal Representative of the Estate of Diehl Rettig, Deceased, as incorporated by reference from Exhibit 4.2 to the Company's Form 8-K filed on April 22, 2011.
- 4.10 First Amendment to Common Stock Purchase Warrant, dated April 18, 2011, between Perma-Fix Environmental Services, Inc., and William N. Lampson, as incorporated by reference from Exhibit 10.1 to the Company's Form 8-K filed on April 22, 2011.
- 4.11 First Amendment to Common Stock Purchase Warrant, dated April 18, 2011, between Perma-Fix Environmental Services, Inc., and Anne Rettig, the fully appointed and acting Personal Representative of the Estate of Diehl Rettig, Deceased, as incorporated by reference from Exhibit 10.2 to the Company's Form 8-K filed on April 22, 2011.
- 4.12 Non-negotiable Promissory Note issued by Perma-Fix Environmental Services, Inc., to Homeland Security Capital Corporation, dated October 31, 2011, which was filed as Exhibit 2.2 to the Company's 8-K filed on November 4, 2011 and incorporated herein by reference.
- 4.13 Amended and Restated Revolving Credit, Term Loan and Security Agreement between Perma-Fix Environmental Services, Inc. and PNC Bank, National Association (as Lender and as Agent), dated October 31, 2011, which was filed as Exhibit 99.4 to the Company's 8-K filed on November 4, 2011.
- 10.1 1992 Outside Directors' Stock Option Plan of the Company as incorporated by reference from Exhibit 10.4 to the Company's Registration Statement, No. 33-51874.
- 10.2 First Amendment to 1992 Outside Directors' Stock Option Plan as incorporated by reference from Exhibit 10.1 to the Company's Form 10-Q for the quarter ended year ended June 30, 2010, filed on August 6, 2010.
- 10.3 Second Amendment to the Company's 1992 Outside Directors' Stock Option Plan, as incorporated by reference from Exhibit 10.2 to the Company's Form 10-Q for the quarter ended year ended June 30, 2010, filed on August 6, 2010.
- 10.4 Third Amendment to the Company's 1992 Outside Directors' Stock Option Plan.
- 10.5 Fourth Amendment to the Company's 1992 Outside Directors' Stock Option Plan.
- 10.6 1993 Non-qualified Stock Option Plan as incorporated by reference from Exhibit 10.3 to the Company's Form 10-Q for the quarter ended June 30, 2010, filed on August 6, 2010.
- 10.7 401(K) Profit Sharing Plan and Trust of the Company as incorporated by reference from Exhibit 10.5 to the Company's Registration Statement, No. 33-51874.
- 10.8 2003 Outside Directors' Stock Plan of the Company.
- 10.9 First Amendment to 2003 Outside Directors Stock Plan, as incorporated by reference from Appendix "A" to the Company's 2008 Proxy Statement dated July 3, 2008.
- 10.10 2004 Stock Option Plan of the Company
- 10.11 Consent Decree, dated December 12, 2007, between United States of America and Perma-Fix of Dayton, Inc., as incorporated by reference from Exhibit 10.29 to the Company's Form 10-K for the year ended December 31, 2007 filed with the SEC on April 1, 2008.
- 10.12 Subcontract between CH2M Hill Plateau Remediation Company, Inc. ("CHPRC") and East Tennessee Materials & Energy Corporation, dated May 27, 2008., as incorporated by reference from Exhibit 10.4 to the company's Form 10-Q for the quarter ended June 30, 2010 filed on August 6, 2010.

- 10.13 Consent Agreement dated September 26, 2008 between Perma-Fix Northwest Richland, Inc. and the U.S. Environmental Protection Agency, as incorporated by reference from Exhibit 10.1 to the Company's Form 10-Q for the quarter ended September 30, 2008 filed on November 10, 2008.
- 10.14 Second Amendment to Agreement and Plan of Merger, dated November 18, 2008 by and among Perma-Fix Northwest, Inc., Perma-Fix Northwest Richland, Inc., Perma-Fix Environmental Services, Inc., and Robert L. Ferguson, an individual, and William N. Lampson, an individual, as Representatives, as incorporated by reference from Exhibit 10.1 to the Company's Form 8-K filed with the SEC on November 21, 2008.
- 10.15 2009 Incentive Compensation Plan for Vice President, Chief Financial Officer, effective January 1, 2009, as incorporated by reference from Exhibit 10.3 to the Company's Form 8-K filed on May 7, 2009.
- 10.16 2009 Incentive Compensation Plan for Chief Operating Officer, effective January 1, 2009, as incorporated by reference from Exhibit 10.2 to the Company's Form 8-K filed on May 7, 2009.
- 10.17 2009 Incentive Compensation Plan for Chief Executive Officer, effective January 1, 2009, as incorporated by reference from Exhibit 10.1 to the Company's Form 8-K filed on May 7, 2009.
- 10.18 Employment Agreement dated May 6, 2009 between Louis Centofanti, Chief Executive Officer, and Perma-Fix Environmental Services, Inc., which is incorporated by reference from Exhibit 10.4 to the Company's Form 8-K filed on May 7, 2009.
- 10.19 Employment Agreement dated May 6, 2009 between Larry McNamara, Chief Operating Officer, and Perma-Fix Environmental Services, Inc., which is incorporated by reference from Exhibit 10.5 to the Company's Form 8-K filed on May 7, 2009.
- 10.20 Employment Agreement dated May 6, 2009 between Ben Naccarato, Chief Financial Officer, and Perma-Fix Environmental Services, Inc., which is incorporated by reference from Exhibit 10.6 to the Company's Form 8-K filed on May 7, 2009.
- 10.21 Third Amendment to Agreement and Plan of Merger; Second Amendment to Paying Agent Agreement, and Termination of Escrow Agreement, dated September 29, 2009 by and among Perma-Fix Northwest, Inc. (f/k/a Nuvotec USA, Inc.); Perma-Fix Northwest Richland, Inc. (f/n/a Pacific EcoSolutions, Inc.); Perma-Fix Environmental Services, Inc.; Nuvotrust Liquidation Trust; Nuvotrust Trustee, LLC; Robert L. Ferguson, William N. Lampson; Rettig Osborne Forgette, LLP; and The Bank of New York Company, Inc., which is incorporated by reference from Exhibit 99.1 to the Company's Form 8-K filed on October 5, 2009.
- 10.22 2010 Incentive Compensation Plan for Vice President, Chief Financial Officer, effective January 1, 2010, as incorporated by reference from Exhibit 10.2 to the Company's Form 8-K filed on March 3, 2010.
- 10.23 2010 Incentive Compensation Plan for Chief Executive Officer, effective January 1, 2010, as incorporated by reference from Exhibit 10.1 to the Company's Form 8-K filed on March 3, 2010.
- 10.24 Earn-Out Promissory Note, dated September 28, 2010, between the Company and Nuvotrust Northwest Liquidation Trust, as incorporated by reference from Exhibit 10.1 to the Company's Form 10-Q for quarter ended September 30, 2010, filed on November 5, 2010.
- 10.25 2010 Stock Option Plan of the Company as incorporated by reference from "Appendix A" to the Company's 2010 Proxy Statement dated August 20, 2010.
- 10.26 Offer letter for position of COO dated February 18, 2011 from the Company to Mr. James A. Blankenhorn, as incorporated by reference from Exhibit 99.2 to the Company's Form 8-K, filed on February 22, 2011.
- 10.27 2011 Incentive Compensation Plan for President and Chief Executive Officer, effective January 1, 2011, as incorporated by reference from Exhibit 10.1 to the Company's Form 8-K filed on March 23, 2011.

- 10.28 2011 Incentive Compensation Plan for Vice President, Chief Financial Officer, effective January 1, 2011, as incorporated by reference from Exhibit 10.2 to the Company's Form 8-K filed on March 23, 2011.
- 10.29 2011 Incentive Compensation Plan for Vice President, Chief Operating Officer, effective January 1, 2011, as incorporated by reference from Exhibit 10.3 to the Company's Form 8-K filed on March 23, 2011.
- 10.30 Employment Agreement dated August 24, 2011 between Louis Centofanti, Chief Executive Officer, and Perma-Fix Environmental Services, Inc., which is incorporated by reference from Exhibit 99.1 to the Company's Form 8-K filed on August 30, 2011.
- 10.31 Employment Agreement dated August 24, 2011 between Ben Naccarato, Chief Financial Officer, and Perma-Fix Environmental Services, Inc., which is incorporated by reference from Exhibit 99.2 to the Company's Form 8-K filed on August 30, 2011.
- 10.32 Employment Agreement dated August 24, 2011 between Jim Blankenhorn, Chief Operating Officer, and Perma-Fix Environmental Services, Inc., which is incorporated by reference from Exhibit 99.3 to the Company's Form 8-K filed on August 30, 2011.
- 10.33 Employment Agreement between Perma-Fix Environmental Services, Inc. and Christopher Leichtweis, dated October 31, 2011, which was filed as Exhibit 99.1 to the Company's 8-K filed on November 4, 2011 and incorporated herein by reference.
- 10.34 Management Incentive Plan for Christopher Leichtweis, dated November 1, 2011, which was filed as Exhibit 99.3 to the Company's 8-K filed on November 4, 2011 and incorporated herein by reference.
- 10.35 Non-Qualified Stock Option Agreement between Perma-Fix Environmental Services, Inc. and Christopher Leichtweis, dated October 31, 2011, which was filed as Exhibit 99.2 to the Company's 8-K filed on November 4, 2011 and incorporated herein by reference.
- 10.36 Indemnification Agreement, dated February 21, 2011, between Safety and Ecology Holdings Corporation, Safety and Ecology Corporation, Inc., and Christopher P. Leichtweis and Myra Leichtweis, which was filed as Exhibit 99.5 to the Company's 8-K filed on November 4, 2011 and incorporated herein by reference.
- 10.37 Incentive Stock Option Agreement between Perma-Fix Environmental Services, Inc., and Mr. Jim Blankenhorn, which was filed as Exhibit 10.1 to the Company Form 10-Q for the quarter ended June 30, 2011 and incorporated herein by reference.
- [10.38](#) Contract and Amendments entered into between Safety and Ecology Corporation and U.S. Department of Energy (Oak Ridge) dated March 30, 2010. **CERTAIN INFORMATION WITHIN THIS EXHIBIT HAS BEEN OMITTED AS IT IS THE SUBJECT OF A REQUEST BY THE COMPANY FOR CONFIDENTIAL TREATMENT BY THE SECURITIES AND EXCHANGE COMMISSION UNDER THE FREEDOM OF INFORMATION ACT. THE OMITTED INFORMATION HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION FOR PURPOSE OF SUCH REQUEST.**
- [21.1](#) List of Subsidiaries
- [23.1](#) Consent of BDO USA, LLP
- [31.1](#) Certification by Dr. Louis F. Centofanti, Chief Executive Officer of the Company pursuant to Rule 13a-14(a) or 15d-14(a).
- [31.2](#) Certification by Ben Naccarato, Chief Financial Officer and Chief Accounting Officer of the Company pursuant to Rule 13a-14(a) or 15d-14(a).
- [32.1](#) Certification by Dr. Louis F. Centofanti, Chief Executive Officer of the Company furnished pursuant to 18 U.S.C. Section 1350.
- [32.2](#) Certification by Ben Naccarato, Chief Financial Officer and Chief Accounting Officer of the Company furnished pursuant to 18 U.S.C. Section 1350.
- 101.INS XBRL Instance Document*
- 101.SCH XBRL Taxonomy Extension Schema Document*
- 101.CAL XBRL Taxonomy Extension Calculation Linkbase Document*
- 101.DEF XBRL Taxonomy Extension Definition Linkbase Document*
- 101.LAB XBRL Taxonomy Extension Labels Linkbase Document*
- 101.PRE XBRL Taxonomy Extension Presentation Linkbase Document*

*Pursuant to Rule 406T of Regulation S-T, the Interactive Data File in Exhibit 101 hereto are deemed not filed or part of a registration statement or prospectus for purposes of Section 11 or 12 of the Securities Act of 1933, as amended, are deemed not filed for purpose of Section 18 of the Securities Exchange Act of 1934, as amended, and otherwise are not subject to liability under those sections.

NOT SPECIFIED /OTHER

AWARD/CONTRACT	1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350)		RATING	PAGE OF PAGES	
				1	2
2. CONTRACT (Proc. Inst. Ident.) NO. DE-AM09-05SR22413/DE-DT0001335		3. EFFECTIVE DATE 03/30/2010	4. REQUISITION/PURCHASE REQUEST/PROJECT NO. 10EM001796		

5. ISSUED BY	CODE	00518	6. ADMINISTERED BY (If other than Item 5)	CODE	00518
Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831			Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831		

7. NAME AND ADDRESS OF CONTRACTOR (No., street, city, country, State and ZIP Code) SAFETY AND ECOLOGY CORPORATION Attn: MARK DUFF 2800 SOLWAY ROAD KNOXVILLE TN 379313015	8. DELIVERY	
	o FOB ORIGIN x OTHER (See below)	
	9. DISCOUNT FOR PROMPT PAYMENT NET 30	
10. SUBMIT INVOICES (4 copies unless otherwise specified) TO THE ADDRESS SHOWN IN		ITEM

CODE 825678758	FACILITY CODE
11. SHIP TO/MARK FOR	12. PAYMENT WILL BE MADE BY
CODE	CODE
00522	00502
Oak Ridge Office U.S. Department of Energy Oak Ridge Office 230 Warehouse Road Oak Ridge TN 37830	OR for Oak Ridge/OSTI U.S. Department of Energy Oak Ridge Office Oak Ridge Financial Service Center P.O. Box 6017 Oak Ridge TN 37831

13. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION: o 10 U.S.C. 2304(c) () o 41 U.S.C.253 (c) ()	14. ACCOUNTING AND APPROPRIATION DATA See Schedule
---	---

15A. ITEM NO	15B. SUPPLIES/SERVICES	15C. QUANTITY	15D. UNIT	15E. UNIT PRICES	15F. AMOUNT
	Continued				
15G. TOTAL AMOUNT OF CONTRACT					\$16,624,810.36

x	SEC.	DESCRIPTION	PAGE(S)	x	SEC.	DESCRIPTION	PAGE(S)
PART I -THE SCHEDULE				PART II - CONTRACT CLAUSES			
	A	SOLICITATION/CONTRACT FORM			I	CONTRACT CLAUSES	
	B	SUPPLIES OR SERVICES AND PRICES/COSTS		PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACH.			
	C	DESCRIPTION/SPECS/WORK STATEMENT			J	LIST OF ATTACHMENTS	
	D	PACKAGING AND MARKING		PART IV - REPRESENTATIONS AND INSTRUCTIONS			
	E	INSPECTION AND ACCEPTANCE			K	REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS	
	F	DELIVERIES OR PERFORMANCE			L	INSTRS., CONDS., AND NOTICES TO OFFERORS	
	G	CONTRACT ADMINISTRATION DATA			M	EVALUATION FACTORS FOR AWARD	
	H	SPECIAL CONTRACT REQUIREMENTS					

CONTRACTING OFFICER WILL COMPLETE ITEM 17 OR 18 AS APPLICABLE

17. o CONTRACTOR'S NEGOTIATED AGREEMENT	18. x AWARD (Contractor is not required to sign this document.)
---	---

(Contractor is required to sign this document and return _____ copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents: (a) this award/contract, (b) the solicitation, if any, and (c) such provisions, representation, certifications, and specifications, as are attached or incorporated by reference herein. *(Attachments are listed herein.)*

Your offer on Solicitation Number _____ including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the items listed above and on any condition sheets. This award consummates the contract which consists of the following documents: (a) the Government's solicitation and your offer, and (b) this award/contract. No further contractual document is necessary.

19A. NAME AND TITLE OF SIGNER <i>(Type or print)</i>		20A. NAME OF CONTRACTING OFFICER Karen S. Shears	
19B. NAME OF CONTRACTOR	19C. DATE SIGNED	20B. UNITED STATES OF AMERICA	20C. DATE SIGNED
<u>/s/ Christopher P. Leichtweis</u>	April 7, 2010	BY Signature on File	03/30/2010
(Signature of person authorized to sign)		(Signature of Contracting Officer)	

NSN 7540-01-152-8069
PREVIOUS EDITION IS UNUSABLE

STANDARD FORM 26 (REV. 4-85)
Prescribed by GSA
FAR (48 CFR) 53.214(a)

NOT SPECIFIED /OTHER

*****INFORMATION IN THIS DOCUMENT HAS BEEN OMITTED FROM THIS PUBLIC FILING PURSUANT TO A REQUEST BY THE COMPANY FOR CONFIDENTIAL TREATMENT BY THE SECURITIES AND EXCHANGE COMMISSION. THE OMITTED INFORMATION HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION FOR THE PURPOSES OF SUCH REQUEST.**

CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED	PAGE OF
	DE-AM09-05SR22413/DE-DT0001335	2 2

NAME OF OFFEROR OR CONTRACTOR
SAFETY AND ECOLOGY CORPORATION

ITEM NO.	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
(A)	(B)	(C)	(D)	(E)	(F)
00001	Tax ID Number: 62-1495562 DUNS Number: 825678758 TAS: : 8 9 0253: : TAS Recovery Act ORNL Hot Cells Project from Solicitation DE-SOL-0001283 Subj to Retent: NO Delivery: 03/30/2010 FOB: Destination Period of Performance: 03/30/2010 to 08/26/2011 FOR OFFICIAL USE ONLY Demolition of 3026 Hot Cell Accounting Info: 1111376 Fund: 06049 Appr Year: 2009 Allottee: 30 Report Entity: 471999 Object Class: 25200 Program: 1111376 Project: 2002101 WFO: 0000000 Local Use: 0473054 TAS Agency: 89 TAS Account: 0253 Funded: \$4,954,542.25				4,954,542.26
00002	FOR OFFICIAL USE ONLY 3038 Hot Cell material removal Accounting Info: 1111376 Fund: 06049 Appr Year: 2009 Allottee: 30 Report Entity: 471999 Object Class: 25200 Program: 1111376 Project: 2002101 WFO: 0000000 Local Use: 0473060 TAS Agency: 89 TAS Account: 0253 Funded: \$11,670,268.10				11,670,268.10

SECTION B

SUPPLIES OR SERVICES AND PRICES/COSTS

B.1 ORO B01 ITEMS BEING ACQUIRED (APR 1984) (REVISED)

The Contractor shall in accordance with the terms of this task order provide the personnel, materials, supplies, and services and do all things necessary for or incident to perform the Recovery Act work. This work is generally described as follows: completion of disposition and demolition (D&D) of Building 3026 C/D Hot Cells and to remove and dispose of legacy material from Buildings 2026 and 3038 in preparation for D&D at the Oak Ridge National Laboratory (ORNL). A detailed description of the work is found in Section C, Statement of Work.

B.2 TYPE OF TASK ORDER

This will be a Cost-Plus Award Fee (CPAF) type of task order.

B.3 TASK ORDER LINE ITEMS (TLINS) - ESTIMATED COST, BASE FEE, AND AWARD FEE (JUL 2007)

Task Order Line Items (TLINs)

*TLIN 3026 (Bldg 3026 D&D Hot Cells) - Estimated Cost	\$	***
Base Fee (Not to Exceed (NTE) *** of estimated cost)	\$	***
Total Available Award Fee (NTE *** of estimated cost)	\$	***
TLIN 3026 TOTAL COST PLUS TOTAL FEE	\$	4,954,542.25
*TLIN 3038 (Bldg 3038 Remove legacy material and prep for demo)	\$	***
Base Fee (NTE *** of estimated cost)	\$	***
Total Available Award Fee (NTE *** of estimated cost)	\$	***
TLIN 3038 TOTAL COST PLUS TOTAL FEE	\$	11,670,268.10
TOTAL COST of TLINs Plus Associated Fees	\$	16,624,810.36

*Defense Funded

**Non-Defense Funded

A base fee is payable in accordance with the clause in Section B entitled "Payment of Base Fee and Award Fee," An award fee will be payable after evaluations at the conclusion of each specified evaluation period in accordance with clause in Section B entitled, "Payment of Base Fee and Award Fee."

*****INDICATES CERTAIN INFORMATION IN THIS DOCUMENT WHICH HAS BEEN OMITTED FROM THIS PUBLIC FILING PURSUANT TO A REQUEST BY THE COMPANY FOR CONFIDENTIAL TREATMENT BY THE SECURITIES AND EXCHANGE COMMISSION. THE OMITTED INFORMATION HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION FOR THE PURPOSE OF SUCH REQUEST.**

B.4 TASK ORDER OPTIONAL LINE ITEMS (OTLINS) - ESTIMATED COST, BASE FEE, AND AWARD FEE (JUL 2007)

In accordance with FAR Clause 52.217-7, Option for Increased Quantity—Separately Priced Line Item, the Government may require the delivery of either one or more of the numbered task order optional line items, identified as "OTLINS," below. The Contracting Officer may exercise the OTLIN(s) by written notice to the Contractor no later than 30 calendar days prior to September 30, 2010, or as mutually agreed to by the parties. The Contractor agrees that the performance under the option(s) exercised shall be accomplished within the following estimated cost, base fee and award fee.

Task Order Optional Line Items (OTTIs)

OTLIN 3038.1 (D&D Bldg 3038) - Estimated Cost	\$	***
Base Fee (NTE *** of estimated cost)	\$	***
Total Available Award Fee (NTE *** of estimated cost)	\$	***
OTLIN 3038.1 TOTAL COST PLUS TOTAL FEE	\$	<u>1,226,198.77</u>
OTLIN 2026.1 (2026 Complex, remove legacy material)	\$	***
Base Fee (NTE *** of estimated cost)	\$	***
Total Available Award Fee (NTE *** of estimated cost)	\$	***
OTLIN 2026 TOTAL COST PLUS TOTAL FEE	\$	<u>8,046,031.00</u>
OTLIN 2026.2 (Prep Complex 2026 for D&D)	\$	***
Base Fee (NTE *** of estimated cost)	\$	***
Total Available Award Fee (NTE *** of estimated cost)	\$	***
OTLIN 2026.1 TOTAL COST PLUS TOTAL FEE	\$	<u>6,664,290.58</u>
OTLIN 2026.3 (D&D Complex 2026)	\$	***
Base Fee (NTE *** of estimated cost)	\$	***
Total Available Award Fee (NTE *** of estimated cost)	\$	***
OTLIN 2026.2 TOTAL COST PLUS TOTAL FEE	\$	<u>3,869,600.61</u>
OTLIN 3517 (Remove Legacy Material Bldg 3517)	\$	***
Base Fee (NTE *** of estimated cost)	\$	***
Total Available Award Fee (NTE *** of estimated cost)	\$	***
OTLIN 3517 TOTAL COST PLUS TOTAL FEE	\$	<u>13,775,585.23</u>
TOTAL COST of OTLINS Plus Associated Fees	\$	<u>33,581,703.19</u>

A base fee is payable over each of the evaluation periods in accordance with the clause in Section B entitled "Payment of Base Fee and Award Fee." An award fee will be payable after evaluations at the conclusion of each specified evaluation period in accordance with clause in Section B entitled, "Payment of Base Fee and Award Fee."

*****INDICATES CERTAIN INFORMATION IN THIS DOCUMENT WHICH HAS BEEN OMITTED FROM THIS PUBLIC FILING PURSUANT TO A REQUEST BY THE COMPANY FOR CONFIDENTIAL TREATMENT BY THE SECURITIES AND EXCHANGE COMMISSION. THE OMITTED INFORMATION HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION FOR THE PURPOSES OF SUCH REQUEST.**

B.5 TOTAL COST OF TLINS AND OTLINS PLUS ASSOCIATED FEES

TOTAL COST of TLINs AND OTLINS Plus Associated Fees **\$50,206,513.55**

B.6 OBLIGATION OF FUNDS (CPAF) (AUG 2007) (REVISED)

Pursuant to the clause in Section I (of the basic contract), FAR 52.232-22 entitled "Limitation of Funds," total funds in the amount of \$16,624,810.33 are obligated herewith and made available for payment of allowable costs and fee to be incurred from the effective date of this task order through the period estimated to end August 28, 2001.

B.7 DETERMINATION OF AWARD FEE EARNED (MAY 2009)

- (a) There shall be no negotiation of total available award fee since the total available award fee for the base TLINs and option TLINs of the task order have been established. There shall be no adjustment in the amount of total available award fee by reason of differences between any estimate of cost for performance of the work under this contract and the actual costs for performance of that work. Total available award fee is subject to adjustment only under the provisions of the clause in Section I (of the basic contract), FAR 52.243-2 entitled "Changes-Cost Reimbursement, Alternate II." The total available award fee shall be applicable to the prime Contractor and its members in a joint venture or teaming arrangement and any subcontractors.
- (b) The Government shall, at the conclusion of each specified TLIN/OTLIN evaluation period, evaluate the Contractor's performance for a determination of award fee amount in accordance with the clause in Section B entitled "Performance Evaluation Plan." The determination as to the amount of award fee earned will be made by the Fee Determination Official (FDO). The Contractor agrees that such determination is a unilateral determination made by the FDO. The Contractor shall be promptly advised in writing of the determination and the basis for the amount of award fee earned.

B.8 PAYMENT OF BASE FEE AND AWARD FEE (JUL 2007)

- (a) Base Fee- The Government will make payment of the base fee in substantially equal monthly increments. The amount payable shall be subject to any withholding as may be provided for elsewhere in this task order.
- (b) Award Fee - The Government will promptly make payment of any award fee after evaluation at the conclusion of each specified TLIN/OTLIN evaluation period and a determination is made followed by a contractor invoice submission. These determinations will be made on a semi-annual basis. Payment shall be made without the need for a task order modification. Award Fee not earned during the evaluation period shall not be allocated to future evaluation periods.

B.9 PERFORMANCE EVALUATION PLAN

- (a) The determination of award fee earned shall be based upon a Performance Evaluation Plan (PEP) which includes the performance criteria in earning award fee. The PEP will be unilaterally established by the Government. A copy of the plan shall be provided to the Contractor prior to the beginning of the evaluation period. Draft Performance Objectives are located in Section L, Attachment D.
- (b) The PEP will set forth the evaluation period and the criteria upon which the Contractor will be evaluated. The Contractor may submit a self-evaluation of performance for each evaluation period. While it is recognized that the basis for determination of the fee shall be the evaluation by the Government, the self evaluation, which should be received 15 calendar days after the end of the period being evaluated, will be given consideration as the FDO finds appropriate.
- (c) The PEP may be revised unilaterally by the Government at any time during the period of performance. Notification of such changes shall be provided to the Contractor at least 30 calendar days prior to the start of the evaluation period to which the change will apply.
- (d) The amount of award fee earned shall be based upon the Contractor's performance against the criteria established in the PEP.
- (e) While it is recognized that the basis for determination of the fee shall be the evaluation by the Government in accordance with this clause and the PEP, the FDO may also consider information available to him or her which relates to the Contractor's performance of task order requirements, regardless of whether those requirements are specifically identified. To the extent the Contractor does not perform those requirements, the FDO may, at his/her sole discretion, determine the Contractor's overall performance to be unacceptable, and accordingly may withhold the entire award fee for the evaluation period.

SECTION C

STATEMENT OF WORK (SOW)

Building 3026 D&D HOT CELL D&D Project
Building 2026 LEGACY MATERIAL DISPOSITION Project
Building 3038 LEGACY MATERIAL DISPOSITION Project

C.1 GENERAL

C.1.1 *Task Order Purpose and Overview*

The work activities and removal actions initiated through this SOW is regulated by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980. The primary objective of this Statement of Work is to complete the deactivation, demolition and disposition (D&D) of Building 3026 C/D hot cells, and to remove and disposition legacy material from Buildings 2026 and 3038 in preparation for D&D at the Oak Ridge National Laboratory (ORNL), Oak Ridge, Tennessee.

C.2 INTRODUCTION

C.2.1 *Task Background*

C.2.1.1 **Building 3026 C/D Hot Cells D&D Project**

Building 3026 was one of the original Clinton Laboratory buildings constructed to support the war effort. It was later used for a variety of processing and research activities. Building 3026 C/D is a hot cell and laboratory facility comprised of two adjoining facilities separated by a common firewall with separate air handling equipment. Building 3026-C is located on the west side and Building 3026-D is located on the eastside.

The principal structure in Building 3026-D is a two-story, 5-ft thick concrete cell block, which is divided into two connecting radioactive material handling cells (i.e., hot cells A & B). The concrete cell block extends up to a maintenance cubicle above the cells. The facility also includes a second cell bank that is connected via an underground tunnel to Hot Cell A.

The two hot cell banks, which were utilized for storage, processing, conversion, and dispensing of radioactive isotopes remain in the Building 3026-C area. The interior hot cell banks and laboratories are constructed of reinforced concrete.

The facility's main wooden structure is currently being demolished by DOE under a separate CERCLA removal action. The condition of the facility when this task order begins will be: shields over the hot cell windows to protect from damage during the removal of the wooden structures. Liquid was removed from the windows in a previous work activity. Hot cell equipment, such as the manipulators, will be removed and all hot cell penetrations will be sealed. The exterior of the hot cell structures will be sprayed with a fixative material to fix any remaining contamination in place. Interior surfaces of the hot cells and associated ventilation duct work will be fogged with a fixative material to reduce the potential for loose contamination during D&D activities.

There are a total of six structures that will be left standing following removal of the wooden structure. In 3026-C, there will be four structures, and in 3026-D, two structures.

C.2.1.2 Building 2026 Legacy Materials Disposition Project

Building 2026, the Radioactive Materials Analytical Laboratory (RMAL), was constructed in 1964 and is considered to be in good condition. It is a two-story structure with a total area of approximately 26,641 square feet (ft²). RMAL was previously dedicated to general analytical chemistry of radioactive materials. The facility is equipped with special containment and ventilation systems to handle high levels of radioactivity in hot cells (high gamma dose) and in glovebox systems (high levels of alpha).

Building 2026 is a Category 3 Nuclear Facility and is restricted to a nuclear material inventory below the ORNL Fissionable Material Control Limit. A range of fissionable radionuclides associated with analytical operations that historically occurred in the facility are identified in the Safety Analysis Report (provided under separate cover).

Also, based on historical knowledge, there is a low potential for beryllium contamination associated with the disposition of legacy materials from this facility.

Asbestos sampling has been performed in the facility and some asbestos has been remediated or marked to indicate asbestos-containing material. Most floor tile in the original building contains asbestos, but appears to be in good condition.

Vinyl tile mastic for the facility's floor tile contains polychlorinated biphenyls (PCB) and is registered in the ORNL PCB database. No other PCB-containing equipment was identified in the PCB database for Building 2026, but the potential exists for other PCB-containing material to be identified during characterization.

Positive sampling results for lead have occurred in select areas of the building. Other forms of lead have been found in the facility including lead bricks, lead pigs, as well as lead-lined drums and shipping containers. Lead in the facility has been included in the legacy material inventory. Some lead may be suitable for recycling.

Two chemical control areas are located in Building 2026. Some of these chemical can be slated for reuse. The remaining inventory of chemicals is located primarily in laboratories.

Radiological contamination that exists in Building 2026 is relatively well characterized and controlled. Current survey data exists for most equipment; including gloveboxes, fume hoods, and other ancillary equipment.

Remote-handled (RH) radiological waste is stored in the facility is estimated to be fairly limited [~ 72 cubic feet (ft^3)].

C.2.1.3 Building 3038 Legacy Material Disposition Project

Building 3038, the Isotope Development Laboratory, was constructed in 1949. It is a single-story structure with a small basement and has a total area of approximately 6,900 ft^2 . For many years, the facility was dedicated to radioisotope shipping, with the entire east portion of the building housing the analytical chemistry equipment and analyses of short-lived radioisotopes were conducted prior to shipment. The western portion of the building became the Alpha Handling Facility, used for fabrication of actinide targets. The east portion of the building was converted into both a research and development facility and an isotope production facility. The hot cell and counting room facilities were converted into a development laboratory.

Building 3038 is a Nuclear Hazard Category 3 facility, with a non nuclear hazard classification of "High." Non-standard hazards identified at Building 3038 include radioactive materials located throughout the building in hot cells, gloveboxes, and within containers located within the facility and outside along the northeastern wall of the facility. Radioactive contamination, both fixed and loose, exists throughout the facility.

The building has four laboratory rooms: the Northeast Lab, the Southeast Lab, the Hot Lab, and the Cold Lab. The Shipping/ Barricades area contains two Lazy Susan-type holders (carousels), which hold legacy materials. They are located below ground level and are covered with a lead shield when not being accessed. The Alpha Handling Facility contains five hot cells. The Alpha Handling Facility Annex contains seven glove boxes. A total of 15 glove boxes, 12 fume hoods, and six hot cells are contained within the facility.

The facility has three separate ventilation systems which are active for the various hot cells, gloveboxes, and laboratories.

C.2.1.4 Building 3517 Legacy Material Disposition Project (Optional)

The Fission Product Development Laboratory (FPDL), also designated as Building 3517, is a nuclear facility that no longer has a programmatic mission and has been transitioned to the Environmental Management Program to be deactivated and decommissioned. The facility is partially deactivated and is undergoing transitional surveillance and maintenance (S&M) and limited deactivation activities pending the final decommissioning of the facility. Although all process-related activities have been discontinued in Building 3517, the facility still contains radioactive and hazardous materials.

Building 3517 was utilized for recovery of long-lived fission products from aqueous waste, purification and pelletization of radiation source materials, and testing of new procedures for source fabrication. The facility was originally designed and built to recover fission products from waste generated in reactor fuel reprocessing operations and the processing and recovery of other reactor produced isotopes. The facility consists of administrative offices, process cells, manipulator and service cells, tank farm cells, and an electro-polisher. Legacy materials requiring disposition may include: solid mixed waste, remote-handled (RH) waste liquid mixed waste, solid low-level waste (SLLW), RH-SLLW, Greater-Than -Class-C waste, low level oils, and reuse/recycle material. Facility upgrades/modifications may be needed prior to initiating legacy material removal.

C.3 SCOPE

The CONTRACTOR shall perform all work activities in accordance with approved CONTRACTOR programs, project plans, and procedures.

C.3.1 Project management

The CONTRACTOR shall ensure effective performance of all activities necessary to execute the work to be performed which includes the following: technical management, project controls, scheduling and action tracking, estimating, procurement support, administrative support, subcontract oversight, regulatory and environmental compliance, quality assurance, risk management, safety & health, radiation protection, worker training, fire protection, and records management.

Project documents shall be updated as often as appropriate based on decisions, changes, and/or other events that affect the accomplishment of the work.

C.3.2 *D&D Readiness Evaluation*

The CONTRACTOR shall demonstrate to DOE via the Readiness Evaluation process in DOE-STD-1120 ensuring that its personnel, procedures, plans, and equipment are ready to perform the required tasks with safe/functional equipment and trained/knowledgeable personnel. The CONTRACTOR shall not mobilize until a Notice to Proceed (NTP) is issued in writing by DOE.

C.3.3 *Pre-mobilization, Mobilization, and Site Preparation*

Pre-mobilization work by the CONTRACTOR will entail preparation and submittal of all project-specific planning documents and the detailed project schedule to DOE for review, comment, and revision. CONTRACTOR mobilization will include all activities required to start work and continue in accordance with the project schedule. Mobilization may be performed in phases depending on CONTRACTOR'S technical approach for accomplishing the work scope identified in this SOW. Pre-mobilization/mobilization scope includes, but is not limited to, the following:

- Coordination/interface with DOE, UT-B, and other ORNL on-site contractors, as necessary [i.e., coordination with UT-B for the lay-down/staging of equipment and for the location of support facilities (e.g., office trailers, parking, equipment/supply storage areas, break facilities, etc.)]
- Coordination/interface with waste disposal facilities (EMWMF, ORR Landfills, off- site)
- Establishing the site construction/HAZWOPER boundaries, as applicable
- Establishing decontamination areas
- Installing site postings, as applicable
- Obtaining any other required training, approvals, agreements, documentation, etc.
- An incoming safety inspection and radiological survey for all equipment

C.3.4 *Building 3026 Hot cells D&D*

The CONTRACTOR shall complete demolition of the Building 3026 C/D Hot cells, a total of six sub-structures. The demolition of Building 3026 C would include: (1) Tritium Facility, (2) Counting Room, (3) Bank 1 Hot Cells, (4) Bank 2 Hot Cells; and for Building 3026D demolition would include: (5) Storage Cells, and (6) Hot Cells A & B. Work shall be completed in accordance with the CONTRACTOR'S approved project-specific plans and schedules.

The CONTRACTOR shall complete D&D activities that include, but not limited to, the following:

- Decontaminate, dismantle, and size reduce process and non-process equipment systems.
- Conduct contamination surveys and decontaminate hot cell structures, as necessary, prior to demolition.
- Complete demolition of hot cell structures to slab level. Demolition of tunnels is not included in the scope; however, access to/openings at the slab level shall be sealed watertight and covered with a 3/4 - in steel plate.
- Remove, stabilize, and package radioactive and hazardous materials and wastes to meet transportation and disposition requirements.
- Ship waste for disposition - including loading, performing release surveys, preparation of shipping documentation and transporting the waste for disposal.
- Collect and dispose liquid wastes in accordance with the project Waste Management Plan.
- Decontaminate/stabilize remaining slabs.
- Perform all S&M activities including maintaining the physical security and property protection of facilities.

C.3.5 *Building 3038 Legacy Material Disposition and Preparation of Building 3038 for D&D*

C.3.5.1 *Legacy Material Removal*

The CONTRACTOR shall safely identify, characterize, remove, and dispose of all legacy materials in Building 3038. Work shall be completed in accordance with the RDR/RAWP for D&D and the CONTRACTOR'S approved project-specific plans and schedules. Upon completion of characterization, if a waste is identified without a known treatment or disposal path, DOE will notify the CONTRACTOR regarding plans for the management and disposition of that waste.

Facility upgrades to Building 3038 will be required prior to removal of legacy material from the facility. The scope of these upgrades may include the following, as necessary:

- Inspect/replace in-cell hoist/crane
- Replace in-cell HEPA filters
- Replace cell lighting
- Specialized hot cell tooling and probes
- Legacy materials contained within Building 3038 include, but are not limited to, the following:
- The Barricade area carousel holders store approximately 130 glass bottles which contain isotopes that are or were dissolved in acidic solutions.
- Miscellaneous furniture (e.g. desks, chairs, filing cabinets, storage cabinets, etc).
- All miscellaneous small, detached equipment and items (motors, pumps, etc.) including those stored in hot cells, hoods, and gloveboxes.
- Large, detached equipment items.
- Miscellaneous bagged and/or otherwise contained waste, material and items.
- Containers located outside the building along the northeastern wall.

Legacy materials may include, but are not limited to, the following waste types:

- Solid Waste
- Solid Low-Level Waste
- RH Solids
- RH TRU Waste
- Contact Handled TRU Waste
- Greater-Than-Class-C Waste
- Low-Level Oils
- Low-Level Liquid
- Reuse / Recycle Material

C.3.5.2 Prepare Building 3038 for D&D

The CONTRACTOR shall prepare Building 3038 for D&D by removal and disposition of process equipment leaving the facility in a state such that no internal work is need to be completed prior to structural D&D, Preparation for D&D includes, but is not limited to, the following:

- Coordinate utility disconnections, isolations, and/or appropriate terminations (to be performed by UT-B).
- Performing abatements of asbestos and/or beryllium, as needed and Universal waste removal and disposition.
- Deactivating, stabilizing, and removing all process systems and equipment (utility disconnections to be performed by UT-B).
- Fixing/stabilizing, size reducing, packaging, removing, and transporting for disposition all process systems and equipment (e.g., fume hoods, gloveboxes, furnaces, sinks, piping, ductwork, filters & filter housing, etc.).
- Facility should be left in a state such that no internal work need be completed prior to structure D&D (with the exception of hot cells and hot cell ventilation).

C.3.6 Optional Scope: Building 3038 D&D

The CONTRACTOR shall safely complete demolition and disposition (D&D) of Building 3038. The CONTRACTOR shall update all project-specific planning documents and procedures as necessary to include optional scope. Work shall be completed in accordance with the CONTRACTOR'S approved documents and plans.

The Readiness Evaluation and pre-mobilization, mobilization, and site preparation phases for optional work shall be equivalent to that defined in Section C.3.2 and C.3.3. If the need to mobilize should arise, the CONTRACTOR shall not mobilize to execute Optional Scope until a Notice to Proceed is issued in writing by DOE for this optional scope.

The CONTRACTOR shall conduct characterization (as described in Section C.6.3) or use historical/sampling data to prepare all documentation necessary and to have the waste generated accepted for disposal at the EMWMF and other treatment and/or disposal facilities. Upon completion of characterization, if a waste is identified without a known treatment or disposal path, DOE will notify the CONTRACTOR regarding plans for the management and disposition of that waste.

D&D activities may include, but are not limited to, the following:

- Conduct contamination surveys and decontaminate, as necessary, prior to demolition.
- Complete demolition to slab level.
- Remove, stabilize, and package radioactive and hazardous materials and wastes to meet transportation and disposition requirements.
- Ship waste for disposition - including loading, performing release surveys, preparation of shipping documentation and transporting the waste for disposal.
- Collect and dispose liquid wastes in accordance with the project Waste Management Plan.
- Decontaminate/stabilize remaining slab.
- Perform all S&M activities including maintaining the physical security and property protection of facilities.

C.3.7 *Optional Scope: Building 2026*

For all executed Optional Scope, the CONTRACTOR shall update all project- specific planning documents and procedures as necessary to include optional scope. Work shall be completed in accordance with the RDR/RAWP for D&D and CONTRACTOR'S approved documents and plans. The Readiness Evaluation and pre-mobilization, mobilization, and site preparation phases for optional work shall be equivalent to that defined in Section C.3.2 and C.3.3. If the need to mobilize should arise, the CONTRACTOR shall not mobilize to execute Optional Scope until a Notice to Proceed is issued in writing by DOE for this optional scope.

The CONTRACTOR shall conduct characterization or use characterization/sampling data to prepare all documentation necessary to proceed with this action and to have the waste generated accepted for disposal at the EMWMF and other treatment and/or disposal facilities.

C.3.7.1 Legacy Material Removal

The CONTRACTOR shall safely identify, characterize, remove, and disposition of all legacy materials in Building 2026. Work shall be completed in accordance with the CONTRACTOR'S approved project-specific plans and schedules. Upon completion of characterization, if a waste is identified without a known treatment or disposal path, DOE will notify the CONTRACTOR regarding plans for the management and disposition of that waste. Legacy materials contained within Building 2026 (including porch area) include, but are not limited to, the following:

- Rooms 120 (cell access area) and 124 (airlock) contain miscellaneous bagged and/or packaged waste, manipulators, lead brick, electronics, carts, and lab equipment

- Hot Cells contain sample containers, liquids, remote handled mixed waste, lead bricks, and lab wares
- First and second floor offices contain miscellaneous office furniture (e.g. desks, chairs, filing cabinets, storage cabinets, electronics, etc)
- First and second floor labs contain lead pigs, waste containers, lab chemicals, radioactive lab waste, lab ware, containers, sample racks, packaged PPE waste, small detached equipment (motors, pumps, etc.) including those stored in, hoods, and gloveboxes
- Large, detached equipment is present throughout the facility which includes air monitoring stations, analytical equipment, power supplies, and gloveboxes

Legacy materials may include, but are not limited to, the following waste types:

- Solid Mixed Waste
- RH Solids
- Solid Low-Level Waste
- Transuranic (TRU) Waste
- Low-Level Oils
- Low-Level Liquid
- Greater-Than-Class-C
- Reuse / Recycle Material
- Diesel Fuel and Oil for Reuse

Facility upgrades to Building 2026 will be required prior to removal of legacy material from the facility. The scope of these upgrades may include the following, as necessary:

- Clean cell windows
- Inspect/replace in-cell hoist/crane
- Replace in-cell HEPA filters
- Pull and re-tape manipulators
- Replace cell lighting
- Un-plug cell hot drain(s)
- Specialized hot cell tooling and probes

C.3.7.2 *Preparation of Building 2026 for D&D*

The CONTRACTOR shall prepare Building 2026 for demolition and disposition (D&D) by the removal of process equipment, hence leaving the facility in a state such that all internal work is completed prior to structural D&D. Preparation for D&D includes, but is not limited to the following:

- Coordinate utility disconnections, isolations, and/or appropriate terminations (to be performed by UT-B).
- Performing abatements of asbestos and/or beryllium, as needed, and Universal waste removal and disposition.
- Deactivating, stabilizing, and removing all process systems and equipment (utility disconnections to be performed by UT-B).
- Fixing/stabilizing, size reducing, packaging, removing, and transporting for disposition all process systems and equipment (e.g., fume hoods, gloveboxes, furnaces, sinks, piping, ductwork, filters & filter housing, etc.).

The CONTRACTOR shall disconnect and remove for disposition process equipment identified within the facility to include, but not be limited to: gloveboxes; hoods; exhaust systems attached to glove boxes; piping and ductwork that contained/transferred chemicals or radiologically contaminated liquid and/or air; HEPA filters and filter housings; and other equipment such as pumps; compressors; and equipment that contained chemicals and radiological material needing specialized equipment for containment.

The CONTRACTOR shall segregate removed equipment and associated appurtenances and package appropriately for disposition to meet the WAC and/or waste profiles established by the anticipated disposal facility.

C.3.7.3 *Building 2026 D&D*

The CONTRACTOR shall safely complete demolition and disposition (D&D) of Building 2026. D&D activities include, but are not limited to, the following:

- Conduct contamination surveys and decontaminate, as necessary, prior to demolition.
- Complete demolition to slab level.
- Remove, stabilize, and package radioactive and hazardous materials and wastes to meet transportation and disposition requirements.
- Ship waste for disposition - including loading, performing release surveys, preparation of shipping documentation and transporting the waste for disposal.
- Collect and dispose liquid wastes in accordance with the project Waste Management Plan.
- Decontaminate/stabilize remaining slab.
- Perform all S&M activities including maintaining the physical security and property protection of facilities.

C.3.8 *Optional Scope in Building 3517 Legacy Material Disposition*

The CONTRACTOR shall safely identify, characterize, remove, and disposition all legacy materials in Building 3517.

Facility upgrades to Building 3517 will be required prior to removal of legacy materials from the facility. The scope of these upgrades may include the following, as necessary:

- Clean cell windows
- Inspect/replace in-cell hoist/crane
- Replace in-cell HEPA filters
- Pull and refurbish manipulators
- Pull and re-tape manipulators
- Reboot manipulators
- Replace cell lighting
- Un-plug one cell hot drain
- Specialized hot cell tooling and probes

Legacy materials contained within Building 3517 include, but are not limited to, the following:

- Miscellaneous cell equipment (i.e., tools, saws, presses, etc)
- Multiple 2.5-gal cans
- Lead
- In-cell HEPA filters
- Large casks
- Miscellaneous office furniture (e.g, desks, chairs, filing cabinets, storage cabinets, electronics, etc)
- Miscellaneous small tools

Legacy materials may include, but are not limited to, the following waste types:

- Solid Mixed Waste
- RH Solids
- Liquid Mixed Waste
- Solid Low-Level Waste
- RH-SLLW
- Greater-Than-Class-C
- Low-Level Oils
- Reuse / Recycle Material

The CONTRACTOR shall conduct characterization (as described in Section C.6.3) or use historical/sampling data to prepare all documentation necessary and to have the waste generated accepted for disposal at the EMWMF and other treatment and/or disposal facilities. Upon completion of characterization, if a waste is identified without a known treatment or disposal path, DOE will notify the CONTRACTOR regarding plans for the management and disposition of that waste.

C.3.9 Project Completion

End-state conditions for Task Order completion are specified in Section C.5.2 DOE may utilize an Independent Verification Contract (IVC) to perform final inspections and verifications of each facility covered by this SOW. The CONTRACTOR shall coordinate and support verification surveys and final inspections for each facility (or group of facilities) with DOE and the IVC.

C.3.10 Demobilization

Complete CONTRACTOR demobilization shall not commence until after DOE has certified completion of all required work for each project. Demobilization shall include, but not be limited to, the following:

- CONTRACTOR shall dispose of all secondary waste generated during contract activities in accordance with the project-specific plans and procedures and waste management requirements of Section C.6.5.
- CONTRACTOR shall decontaminate, decommission, and remove all CONTRACTOR-owned equipment, material, tools, supplies, and facilities brought on-site to perform this work.

C.3.11 Phased Construction Completion Report

Following completion of field activities, CONTRACTOR shall prepare and submit one Phased Construction Completion Report (PCCR) that addresses all three projects within this SOW. The PCCR will include completion of activities for optional scope if exercised.

The CONTRACTOR may conduct a formal presentation of the PCCR comprised of DOE, Environmental Protection Agency (EPA), and TDEC. Comments received from the Regulators will be resolved/incorporated into the final document.

C.4 APPLICABLE DOCUMENTS

C.4.1 Facility Information Available to Contractor

Current facility-specific information available to the CONTRACTOR (provided under separate cover) comes from a variety of sources and includes details on the history, waste types/contaminants, and current status for each D&D facility. This information will support the CONTRACTOR in developing detailed plans, packages, and procedures, and in estimating the cost of the work.

The CONTRACTOR is fully responsible for making determinations as to the suitability of the information for bidding and completing the scope of work.

C.5 PERFORMANCE REQUIREMENTS

C.5.1 General

The CONTRACTOR shall furnish all labor, equipment, materials, services and supplies necessary to complete the work in a safe, compliant, and efficient manner. The CONTRACTOR is responsible for planning, integrating, managing, and executing the scope in this SOW in accordance with the project performance baseline.

The CONTRACTOR shall comply with all applicable federal, state, and local regulations, codes and standards and orders, and perform work consistent with the following:

- Applicable or Relevant and Appropriate Requirements (ARARs) identified in the BV IROD (as revised)
- Remedial Design Report/Remedial Action Work Plan for the D&D of Non-Reactor Facilities in Bethel Valley at the Oak Ridge National Laboratory, Oak Ridge, Tennessee (RDR/RAWP for D&D) (currently being prepared by DOE and will be provided to CONTRACTOR upon regulatory approval)
- 1D/IQ Contract

The CONTRACTOR shall comply with all site permits and regulatory documents. The CONTRACTOR shall be responsible for all efforts necessary to obtain regulatory acceptance including regulatory reporting, reviews and comment resolution concerning their work and is responsible for complying with any newly promulgated and/or additional ARARs invoked (or triggered) as a result of the CONTRACTOR's method of accomplishment.

C.5.2 End-States

In order to achieve contract completion, the CONTRACTOR shall complete the following activities (including all contract and SOW requirements) no later than September 30, 2011. Project completion is achieved when the following Base Scope is completed by the CONTRACTOR:

Building 3026 C/D

- All structures (i.e. hot cells) are demolished to grade level with all debris dispositioned.
- Any slab(s) remaining in place shall be clean and free of any loose materials or debris and decontaminated (in accordance with authorized limits identified within DOE O 5400.5, chg.2) or otherwise treated to meet remediation levels defined for Structure Surfaces in the approved BV IROD.

Building 3038

- All legacy materials identified in Building 3038 are characterized, removed, transported, and properly dispositioned.
- Abatement activities are complete for Building 3038 including removal, packaging, transportation, and proper disposal of all materials.
- All process equipment and appurtenances are removed from Building 3038 and properly disposed.
- Utility isolation activities for Building 3038 in preparation for facility D&D with the exception of those utilities necessary for maintaining ventilation of the hot cells, as required.
- All contract requirements completed and required deliverables/submittals are complete and approved by DOE, and state and federal regulators, as required.

For Optional Scope, project completion is achieved when the following items are completed by the CONTRACTOR:

Building 2026

- Complete the same end state activities for 2026 as identified above as Base Scope for 3038

Buildings 2026 and 3038

- Complete physical demolition of the principle structure to grade level with all debris dispositioned. Any slab(s) remaining in place shall be clean and free of any loose materials or debris and decontaminated or otherwise treated to meet remediation levels defined for Structure Surfaces in the approved BV IROD.

- Any slab(s) remaining in place shall be clean and free of any loose materials or debris and decontaminated (in accordance with authorized limits identified within DOE O 5400.5, chg.2) or otherwise treated to meet remediation levels defined for Structure Surfaces in the approved BV IROD.
- All contract requirements completed and required deliverables/submittals are complete and approved by DOE and the Regulators, as required

Building 3517

- All legacy materials identified in Building 3517 are characterized, removed, transported, and properly dispositioned.
- Abatement activities are complete for Building 3517 including removal, packaging, transportation, and proper disposal of all materials

C.5.3 Performance Measures

Hot Cells and Legacy Material Removed

Buildings 3038 and 2026

1. Cubic Feet of LLW Material Removed
2. Cubic Feet of LLW Material Packaged for Disposal
3. Square Feet of Building Floor Space Cleaned Out

Building 3026

1. Number of Hot Cells/Structures Prepped and Demolition Ready
2. Number of Hot Cells/Structures Demolished
3. Cubic Yards of LLW Disposed

C.6 NOTES AND GUIDES

C.6.1 Interfaces

The CONTRACTOR shall coordinate with DOE, the ORNL Site Managing Contractor [University of Tennessee-Battelle (UT-B)], and other on-site contractors [i.e., Bechtel Jacobs Company, LLC (BJC), the DOE Independent Verification Contractor, and others]. Planned activities and site coordination roles, responsibilities, and interfaces shall be documented in project-specific design and planning documents. Coordination of activities not initially identified for specific interface with other contractors shall be coordinated through the DOE Designated Contracting Officer's Representative (DCOR).

Before D&D/legacy material removal work proceeds under this SOW, DOE will reassign "operational responsibility" from UT-B or BJC to the CONTRACTOR. The CONTRACTOR shall make every effort to ensure that no adverse impacts to DOE, UT-B, or BJC operations occur. Work activities in facilities adjacent or in close proximity to UT-B and BJC facilities will be coordinated with the affected managing contractor. The transportation routes and plans will also be coordinated through UT-B and/or BJC via the Traffic Control Section of the Contractor's Transportation Plan.

CONTRACTOR shall coordinate with DOE prior to any interaction with regulators and shall make available copies of all correspondence (e.g., reports, findings, records of phone conferences, meeting minutes, etc.). Representatives of DOE, BJC, the CONTRACTOR, and regulators may meet periodically, as required.

The CONTRACTOR shall provide support to the DOE concerning public involvement and stakeholder interaction activities, as requested, regarding CONTRACTOR activities.

C.6.2 Agency Agreements

Under the Federal Facility Agreement (FFA) for the Oak Ridge Reservation (ORR) (*Federal Facility Agreement for the Oak Ridge Reservation*, DOE/OR- 1014, U.S. Department of Energy, U.S. Environmental Protection Agency Region 4, and Tennessee Department of Environment and Conservation, 1992), all environmental restoration activities on the ORR will be performed in accordance with CERCLA.

C.6.3 Characterization

The CONTRACTOR shall conduct characterization and identification of all waste types and waste streams for project activities identified in this SOW. The CONTRACTOR also shall complete the WAC attainment process to facilitate the proper management and disposal of all waste to be disposed at the EMWMF, ORR Landfills, and off-site treatment/disposal facilities. The CONTRACTOR will coordinate Data Quality Objective (DQO) sessions related to WAC attainment for EMWMF, prepare Sampling and Analysis Plans (SAPs), determine waste profiles, develop Waste Handling Plans (WHPs), and satisfy all other criteria of the WAC attainment process.

The CONTRACTOR may use available historical data for each facility as an aid in developing characterization data in preparing plans and guidelines necessary for worker protection. A sample of such data is provided in Table 1 and Table 2.

The SAPs shall include QA for collecting, transferring, shipping, and data validation sufficient to meet requirements for disposition of the wastes at approved treatment and/or disposal facilities. The CONTRACTOR also shall select and use certified analysis laboratory(s) that has a verifiable QA program that meets Nuclear Quality Assurance (NQA)-I standards for analysis of chemical, radiological, and mixed chemical and radiological samples.

The CONTRACTOR shall maintain a copy of all historical data, sampling records, sampling data, data validation, data analysis and other related data and reports in project files, cataloged appropriately for retrieval electronically, and also enter into the DOE Oak Ridge Environmental Information System (OREIS) data management system data that is generated as a result of the Sampling and Analysis Plans (SAP) and subsequent data analysis and reporting in compliance with the ORR FFA, Section XXVII.

C.6.3.1 Waste Profiles

The ORR Landfills include Landfill IV, *Classified Waste Landfill*, Landfill V, *Sanitary Landfill*, and Landfill VII, *Construction/Demolition Landfill*. Each landfill has a waste profile describing the parameters of waste types and associated contaminants acceptable for disposal. The appropriateness of a waste profile is based on characterization data provided as part of the waste profile documentation. Additionally, a Special Waste Profile describes wastes that must be approved, by the Tennessee Department of Environment and Conservation (TDEC) before placing it for disposal.

The CONTRACTOR shall identify wastes to be included in waste lots and then prepare and submit to the EMWMF WAC Attainment Team a waste profile for each waste lot to be disposed in EMWMF. The EMWMF can receive low-level radioactive substances, Resource Conservation and Recovery Act (RCRA) hazardous substances, Toxic Substances Control Act of 1976 (TSCA) toxic constituents, asbestos contaminated material, and combinations of these contaminants that meet the WAC set forth in the, *Attainment Plan for Risk/Toxicity-Based Waste Acceptance Criteria at the Oak Ridge Reservation (DOE/OR/01 - 1909&D3)*.

Each grouping of waste materials in a facility that is anticipated to be placed in the EMWMF for disposal and for which the contaminant level may be considered statistically homogeneous can be designated as a "waste lot". The CONTRACTOR shall prepare a waste profile using characterization/sampling data for each waste lot and submit the waste profile to the EMWMF WAC Attainment Team.

The CONTRACTOR shall interact prior to preparing each waste profile with the EMWMF WAC Attainment Team to obtain the *Waste Profile Annotate Outline* and the *WAC Forecasting Analysis Capability System Input Sheets* and complete the waste profile and input sheets and revise if necessary until they are acceptable for approval consideration.

The CONTRACTOR shall communicate to the EMWMF WAC Attainment Team identifying the items in the Administrative WAC and Physical WAC that will be met without change and the items that will require an alternate approach or variance **from** the requirement under consideration. The CONTRACTOR will obtain approval of an alternate approach(s) or variance to obtain the waste lot approval.

The CONTRACTOR shall provide a plan for ensuring that waste not compliant with Land Disposal Requirements (LDR) will be treated in a manner that will result in the waste meeting the LDR in an acceptable manner.

C.6.3.2 Waste Handling Plan

The CONTRACTOR shall prepare a WHP for those waste streams designated disposal at the EMWMF per the *Waste Handling Plan Annotated Outline* in ORR FFA, Appendix 1-14. The WHP shall incorporate all relevant requirements identified in the *Technical Information for Delivery of Waste to the EMWMF* (23900-SC-BC008U-A001) (to be made available by the EMWMF WAC Attainment Team).

Table 1. Hot Cell D&D and Legacy Material Removal Facilities Descriptions

Building Number	Building Description	Material of Construction	Size (ft2)	Identified Radiation	Identified Chemical Hazard	Special Conditions	Scope
3026C	Krypton-85 Enrichment Facility/Radioisotope Development Lab A	Concrete	8,279	Cs, Co, C-14, Tritium	Lead	May find residual alpha, beta, tritium, krypton	Base scope is D&D of Hot Cells to Clean Slab.
3026D	Metal Segmenting Hot Cell Facility/Dismantling & Exam Hot Cells	Concrete	11,563	Cs, Eu, Am, Co	Lead	May find residual alpha, beta, tritium, krypton	Base scope is D&D of Hot Cells to Clean Slab.
3038	Isotope Development Laboratory and Support Services (IDL)	Unreinforced Masonry Brick Wall	7,773	Sr, Pu, Am, Eu, Tc, U, Pm, Y, Co, Cs	Asbestos, Lead, PCB's	Demolition of water-shielded hot cells and sample carousel area	Base scope is removal and disposition of legacy materials, abatements and preparation for D&D. D&D to clean slab is ARRA optional scope pending funding availability.
2026	Radioactive Materials Analytical Laboratory and Support Services(RMAL)	Concrete Block and Steel Frame	28,144	Th, U, Np, Pu, Am, Cm, Cf, Co, Cs, Sr, I, Eu	Asbestos, Lead, PCB's	Highly contaminated process vent & LLLW waste drain systems	Optional Scope is removal and disposition of legacy materials and abatements, D&D to clean slab is ARRA optional scope pending funding availability.
3517	Fission Product Development Laboratory and Support Services (FPDL)	Concrete Block and Corrugated Aluminum	17,028	Cs, Sr, Pm, Tc, Ce, Am, Kr, Cm, Eu	Asbestos, Lead, PCB's	Access to cells and removal of sources and other material in cells	Optional Scope. Removal and disposition of legacy materials is ARRA optional scope pending funding availability.

Table 2. Hot Cell D&D and Legacy Material - Estimated Quantities

	Estimated Volume		Solid				Liquid			Other	
	Cubic yd.	Gal.	Recycle LLW	Mixed TRU	ACM	PW	LLW	Recycle			
Building 3026C/D											
Base Action (D&D)	3092			3092							
Building 2026											
Option (Legacy Removal)	410	1806	348		62			13	1493	300	2 ¹
Option (Prep. For D&D)	1437			763		3	671				
Option (D&D)	6102			6102							
Building 3038											
Base Action (Legacy/Prep. For D&D)	168 ^a	47	8	145	9	6			12		35 ¹
Option (D&D)	1248			1248							
Building 3517											
Option (Legacy Removal)	148	60	26	114	7			55	5		1 ²

^a Excluding 6 concrete containers and metal waste boxes external to building

¹ Non-wastewater - liquid

² Greater than Class C - solid

C.6.4 *Safety Basis Document Updates/Changes*

The CONTRACTOR shall operate within the current approved Safety Basis (SB) documents applicable to all work under this contract. The CONTRACTOR shall accept the existing SB documents [e.g., Safety Analysis Report (SAR), Documented Safety Analysis (DSA), Technical Safety Requirements (TSR), and Safety Evaluation Report (SER)] and supporting documents such as a Fire Hazards Analysis (FHA) and revise them to reflect how the CONTRACTOR plans to implement the scope of work and the resulting hazards, and needed controls in accordance with the requirements of 10 CFR 830.

C.6.5 *Abatements*

The CONTRACTOR shall safely identify, characterize, and perform abatement activities. Prior to abatement work, CONTRACTOR shall identify utility systems that require shutdown for safe abatement work performance. CONTRACTOR shall conduct lockout/tagout of required utilities, as appropriate, in coordination with UT-B prior to and during abatement. CONTRACTOR shall coordinate with UT-B for the disconnection of any utility needed to perform abatement activities.

The CONTRACTOR shall use characterization/sampling data to identify asbestos and beryllium contamination and perform abatement of regulated asbestos- containing material (RACM.) and beryllium in a manner that is protective of worker health, prevents release to the environment, and meets requirements as provided by regulatory guidance approved for implementation within the facility by trained/qualified personnel. RACM or beryllium that cannot be abated because of safety issues or inaccessibility will be clearly identified by the CONTRACTOR and abatement or special handling will be implemented during future D&D. The CONTRACTOR will ensure that RACM or beryllium-contaminated equipment removed during abatement shall be containerized as provided by regulation and/or in a manner acceptable to the receiving disposal facility and transported to disposal in a manner that meets regulatory requirement, guideline, and applicable transportation requirements.

The CONTRACTOR shall remove and dispose of all universal waste from the facility. The CONTRACTOR shall remove all electrical/electronic circuit boards and anomalous wastes from wastes that are destined to be disposed at the EMWMF.

C.6.6 *Equipment Decontamination*

Before removal of equipment and tools from a facility that includes a radiological controlled area, items must be released from the site after completing a radiological release survey. The CONTRACTOR shall ensure that all equipment and tools removed from a facility for use at another location complies with a radiological release survey.

The CONTRACTOR will be responsible for decontaminating equipment and tools that cannot be released following a radiological release survey using appropriate methods to meet release criteria. If decontamination efforts are abandoned and the equipment or tool is designated as waste, subsequent disposition is the CONTRACTOR's responsibility.

C.6.7 Waste Management

C.6.7.1 Liquid Waste

CONTRACTOR shall manage all wastewaters generated during the D&D activities at all facilities addressed in this SOW, including any potentially contaminated liquids generated in the course of hazardous materials abatement/removal, conducting hazard reduction/radiological control work, decontamination activities, building demolition, or any other required activities. Wastewaters include, but are not limited to, abatement related liquids, decontamination liquids, and hazard control/reduction liquids. The CONTRACTOR shall ensure that contaminated materials removed during the D&D process are covered and/or otherwise contained and isolated from contact with uncontaminated waters or other media to prevent cross contamination.

Wastewaters shall be treated at one of the existing ORNL water treatment facilities which include the Process Wastewater Treatment Complex (Buildings 3544 and 3608) and the Liquid Low Level Waste Evaporation Facility (Building 2531). The CONTRACTOR shall coordinate with the Liquid and Gaseous Waste Operations (LGWO) subcontractor for the management, treatment (if required), and disposal of generated wastewaters.

The CONTRACTOR shall meet applicable wastewater treatment criteria for disposal of water at ORNL facilities. Transfer of liquids to treatment via existing piping is preferable when available and will be coordinated by the CONTRACTOR with UT-B and the LGWO treatment facility subcontractor. When access to existing piping is not possible, transport of liquids via tanker truck to one of the existing ORNL water treatment facilities shall be the responsibility of the CONTRACTOR in coordination with the LGWO subcontractor.

C.6.7.2 Solid Waste

The CONTRACTOR shall characterize, segregate, and obtain certifications and approvals, package, and transport D&D-generated waste for disposal. Waste minimization will be implemented to remove material that can be reused or recycled and through segregation of wastes to reduce to the extent practicable the volume placed into disposal facilities with a WAC for more highly contaminated waste.

C.6.7.3 Waste Generation Forecast

The CONTRACTOR shall prepare and submit a waste generation forecast (WGF) that includes the waste type, volume and generation timeframe for wastes generated by this D&D action. Actual waste generation records will be maintained and when values for the WGF are recognized as having changed significantly, revisions to the WGF will be submitted.

C.6.8 Regulatory Documentation

In the conduct of the work performed under this task order, the CONTRACTOR agrees to establish and/or maintain and submit regulatory documentation for DOE review and approval. These submittals would include a: Sampling and Analysis Plans (SAPs), Waste Profiles, Waste Handling Plans (WHPs), and any other documentation necessary to satisfy all other criteria of the WAC attainment process. Other regulatory documentation would include documentation needed to meet the requirements for the disposition of the wastes at a DOE approved treatment and/or disposal (TSD) facilities

The CONTRACTOR has the responsibility to perform activities in connection with DOE policies and procedures regarding at its nuclear facilities. Therefore, the CONTRACTOR shall require its subcontractors to comply with the Contractor's approved regulatory project submittals and plans.

C.6.9 Offsite Disposal

The CONTRACTOR shall be responsible for waste transportation with all transportation of wastes to meet requirements established through a transportation SB or meet DOT requirements including containment of wastes, labeling containers, and shipment placarding. The means of shipment must be compatible with the waste treatment or disposal facility's capabilities for unloading and placing wastes. For each shipment of waste, shipping documentation is required (i.e., Bill of Lading or Waste Manifest) depending on characterization of the containerized waste based on DOT guidelines.

The CONTRACTOR will inform and coordinate shipments of wastes with DOE and the waste treatment and disposal facilities to meet schedules and established milestones.

The CONTRACTOR shall complete all arrangements necessary with treatment and disposal facility organizations to ensure that waste shipped to their respective facilities are containerized acceptably, all WAC requirements are met, schedules for shipments are established and followed, and administrative requirements established by each treatment or disposal facility are met.

C.6.10 *Onsite Disposal*

The CONTRACTOR shall disposition wastes at onsite facilities unless the WAC for the onsite waste facilities cannot be met or direction is given by DOE to use an offsite treatment and/or disposal facility. The EMWWMF is the first choice for disposal of contaminated wastes. However, wastes that can be surveyed or minimally treated to meet ORR Landfills waste profiles may be diverted for disposition in the EMWWMF to instead be placed in the appropriate ORR Landfill.

When the waste lot approval is issued EMWWMF WAC Attainment Team, the CONTRACTOR will contact the EMWWMF operations management and waste scheduling and transportation organization to arrangement for beginning shipments of wastes for disposition to the EMWWMF.

The CONTRACTOR shall obtain access to and use form UNC-2109 to document the approved waste profiles for disposition of wastes at the ORR Landfills.

The CONTRACTOR shall interface with BJC for the disposition of TRU wastes or waste containing TRU constituents. Wastes will be containerized based on the interchange with BJC as will the transfer of the waste containers.

The CONTRACTOR shall interface with DOE for disposition of wastes determined to have no disposition at onsite or offsite facilities. The interaction will identify the means of containerizing the waste and/or transferring the waste from the facility in which it was located.

C.6.11 *Employee Training*

Contractor's Responsibility: The Contractor shall provide fully qualified and trained personnel from its own resources to support ORO requirements. ORO may provide training assistance at its discretion at no cost to the Contractor. All training must be approved by the DC OR.

Mandatory Training: The Contractor shall ensure that all employees attend safety and security training once within 30 calendar days of beginning performance on this task order and at least once annually thereafter. Contractor shall ensure that every employee is instructed to safely and competently perform the work. Because this work will be performed at a Company-managed-and operated facility owned or leased by the DOE, a general training requirement is applicable for all contractor/ subcontractor employees who will have unescorted site access. Access to some facilities within ORNL may require training in addition to this general training. Contractors/ Subcontractors shall contact ORNL Training Management at (865) 574-1482 for information on obtaining this general training course.

C.6.12 *Standards of Conduct*

The Contractor shall be responsible for maintaining satisfactory standards of employee competency, conduct, appearance, and integrity and shall be responsible for taking such disciplinary action with respect to its employees as may be necessary. All persons employed in the performance of this task order shall comply with the regulations and procedures pertaining to access and use of Government buildings, grounds, vehicles, equipment, and other property. Unofficial work or work unrelated to the task order cannot be performed at Government facilities.

SECTION D

PACKAGING AND MARKING

Section D of the ID/IQ Basic Contract is hereby incorporated by reference.

SECTION E

INSPECTION AND ACCEPTANCE

Section E of the ID/IQ Basic Contract is hereby incorporated by reference. In addition, the following clauses will apply.

E.1 INSPECTION

All testing and acceptance of deliverables shall be in accordance with DOE standards currently in place. Inspection of all items under this task order shall be accomplished by the DCO or the DCOR as a duly authorized representative of the Government.

E.2 ACCEPTANCE /FINAL ACCEPTANCE AND DECLARATION

(a) **Acceptance:**

Acceptance of all work and effort under this task order (including reporting requirements of section H as related to the Recovery Act and "Deliverables" in Section J, Attachment A shall be accomplished by the DCO or DCOR.

(b) **Final Acceptance—Declaration of Physical Completion:** See F.4

E.3 ACCESS AND CERTIFICATION

(a) Access -

- (1) The Comptroller General and his representatives are authorized to examine any records of the contractor or any of its subcontractors that involve transactions relating to the task order or subcontract and to interview any officer or employee of the contractor or any of its subcontractors, regarding such transactions.
- (2) Any representative of an appropriate inspector general is authorized to examine any records of the contractor or any of its subcontractors that involves transactions relating to the task order or subcontract and to interview any officer or employee of the contractor or subcontractor regarding such transactions.
- (3) The Recovery Accountability and Transparency Board (The Board) and its representatives are authorized to conduct audits and reviews of contracts that use Recovery Act funds, hi addition to having access to records of the contractor and any of its subcontractors, and the right to interview any officer or employee of the contractor or subcontractor, the Board is also authorized to issue and enforce subpoenas to compel the testimony at public hearings, or otherwise, of persons who are not Federal officers or employees.

- (b) Certification - In order for the DCO to accept any products or services funded by the Recovery Act, the Contractor shall certify that the items were delivered and/or work was performed for a purpose authorized under the Recovery Act.

SECTION F

DELIVERIES OR PERFORMANCE

F.1 PERIOD OF PERFORMANCE

The period of performance for the Recovery Act work specified in Section C, SOW, shall be for the period of performance beginning as of the effective date of this task order and not to exceed September 30, 2011 (notwithstanding Clause H.999 as related to "Covered Funds" definition). Actual period of performance will be based on the contractor's schedule of work to be performed.

F.2 PLACE OF PERFORMANCE

The place of performance for the resulting Task Order is ORNL located in Oak Ridge, Tennessee. For the specific sites within ORNL see Section C, SOW.

F.3 DELIVERABLES

The required deliverables and reporting requirements are as identified in Section J, Attachment A.

F.4 DECLARATION OF PROJECT COMPLETION

Upon physical completion of each TLIN (or OTLIN) requirements as set forth in the SOW, the contractor shall prepare a letter declaring that the work has been physically completed; the letter shall be delivered to the DCO, Following submittal of the letter, during the reasonableness review period. DOE will arrange for independent verification of the work accomplished. If DOE's independent verification does not substantiate the contractor's declaration, DOE will provide the contractor with a list of material deficiencies and a schedule for correcting those deficiencies. Following the Government's notification, the contractor shall correct all identified deficiencies, and submit an addendum to its letter of physical completion, final declaration letter. In tire event DOE determines that some deficiencies still exist, the contractor will be notified within 14 calendar days. Upon receipt of final independent verification report, DOE will approve final payment of all fees, and costs outstanding under the task order (upon Completion of Physical Completion Acceptance Period). The above procedures will continue until the DOE accepts correction of remaining deficiencies based on the Independent Verification Contractor (IVC) review. Only when DOE is certain that all material deficiencies have been corrected will final fee payment be released to the contractor.

For purposes of this task order, the following definitions will apply:

Declaration of Physical Completion: the Contractor's letter declaring the date of physical completion;

Reasonableness Review Period: the 30 calendar day DOE review following submission of Contractor's Declaration of Physical Completion Letter. If DOE determines the Declaration of Physical Completion as reasonable, then the physical completion date is fixed (as defined in the Fixed Physical Completion Date below). If DOE determines the Declaration of Physical Completion to be unreasonable, then the physical completion date is not fixed (e.g., the clock continues until a new letter declaring physical completion is submitted by the contractor and determined by DOE to be reasonable);

Fixed Physical Completion Date: (for fee calculation purposes) the date identified by Contractor in their Declaration of Physical Completion Letter AND determined by DOE to be reasonable. If a prior reasonableness review period(s) resulted in a determination that the declaration was unreasonable, the Fixed Physical Completion Date equals the date identified in the original Contractor Declaration of Physical Completion letter plus Contractor's time required to correct punch-list items identified in DOE's Reasonableness Review Period(s);

Declaration of Physical Completion Acceptance Period: thirty calendar days following completion of the Reasonableness Period to be used for DOE's generation of a punch-list of material deficiencies or acceptance of project as complete. All costs associated with the correction of punch-list items after the Fixed Physical Completion Date is unallowable;

Final Declaration Letter: Contractor's letter declaring completion of punch-list material deficiencies;

Final Declaration Letter Acceptance Period: thirty calendar day DOE review cycle following the contractor's submission of the final declaration letter, used for DOE to accept the project as complete or identify incomplete punch-list items;

Final Declaration Acceptance Letter: DOE letter accepting completion of punch-list items and Declaration of Physical Completion.

F.5 PERFORMANCE EVALUATION (JUL 2007) (REVISED)

On an annual basis, DOE will formally evaluate the Contractor's performance. The evaluation elements may include quality, cost control, timeliness of performance, business relations, customer/DOE satisfaction, key personnel performance and compliance with safety and security standards. The Contractor's performance against the performance objectives and measures will be reflected in the annual evaluation. This evaluation is in addition to the Award Fee evaluations.

SECTION G

CONTRACT ADMINISTRATION DATA

Section G of the ID/IQ Basic Contract is hereby incorporated by reference. In addition, the following clauses will apply:

G.1 DOE G1001 BILLING INSTRUCTIONS (REVISED)

Contractors will use Standard Form 1034 (Public Voucher for Purchases and Services Other Than Personal) when requesting reimbursement for work performed on cost- reimbursement type contracts.

Contractors must submit vouchers electronically through the Oak Ridge Financial Service Center's (ORFSC) Vendor Inquiry Payment Electronic Reporting System (VIPERS). VIPERS allows vendors to submit vouchers, attach supporting documentation and check the payment status of any voucher submitted to the DOE. To obtain access to and use VIPERS, please visit the web page at <http://fmweb.oro.doe.gov/vipers.htm>. Detailed instructions on how to enroll and use the system are provided on the web page. The submission of vouchers electronically will reduce correspondence and other causes for delay to a minimum and will facilitate prompt payment to the Contractor. Do not submit a paper copy of the voucher.

The voucher must include a statement of cost and supporting documentation for services rendered. This statement should include, as a minimum, a breakout by cost or price element and task order (if applicable) of all services actually provided by the Contractor, both for the current billing period and cumulatively for the entire contract.

(a) Statement of Cost

The following instructions are provided for use by the Contractor in the preparation and submission of the Statement of Cost:

- (1) Statement of Cost must be completed in accordance with the Contractor's cost accounting system.
- (2) Costs claimed must be only those recorded costs authorized for billing by the payment provisions of the contract
- (3) Indirect costs claimed must reflect the rates approved for billing purposes by the Contracting Officer.
- (4) The Direct Productive Labor Hour (DPLH) incurred during the current billing period must be shown and the DPLH Summary completed, if applicable.
- (5) The total fee billed, retainage amount, and available fee must be shown.

(6) If task orders or task assignments are issued under this contract, the Contractor must prepare a Statement of Cost for each task order work assignment and a summary for the total invoiced cost.

(b) Supporting Documentation

Direct costs (e.g., labor, equipment, travel, supplies, etc.) claimed for reimbursement on the Statement of Cost must be adequately supported. The level of detail provided must clearly indicate where the funds were expended. For example, support for labor costs must include the labor category (e.g., program manager, senior engineer, technician, etc.) the hourly rate, the labor cost per category, and any claimed overtime; equipment costs must be supported by a list of the equipment purchased, along with the item's cost; supporting data for travel must include the destination of the trip, number and labor category of travelers, transportation costs, per diem costs, and purpose of the trip; and supplies should be categorized by the nature of the items (e.g., office, lab, computer, etc.) and the dollar amount per category.

Any cost sharing or in-kind contributions incurred by the Contractor and/or third party during the billing period must be included.

Indirect rates used for billings must be clearly indicated, as well as their basis of application. When the cognizant Administrative Contracting Officer (ACO) or auditor approves a change in the billing rates, include a copy of the approval.

All claimed subcontractor costs must be supported by submitting the same detail as outlined herein.

(c) Recovery Act costs shall also be segregated in the invoice so as to identify those costs associated with each applicable appropriation at the local level of the following accounting and appropriations data as identified in Section B.3.

Accounting and Appropriations Data

Level	1	2	3	4	5	6	7	8	9
Numerical Characters	XX XX X	XXXX	XX	XXXXXX	XXXXXX	XXXXXXXX	XXXXXXXX	XXXXXXXX	XXXXXXXX
Level Name	Fund	Appropriation Year	Allottee	Reporting Entity	Object Class	Program	Project	WFO	Local Use

(Include each appropriation, as applicable, in the above table.)

The contractor shall certify in each invoice that the costs included in the invoice for Recovery Act work were incurred only to accomplish the Recovery Act work in accordance with Section C. Other existing provisions applicable to invoice submission are applicable to Recovery Act invoices.

G.2 DESIGNATED CONTRACTING OFFICER'S REPRESENTATIVE (DCOR)

The DCOR will be designated by separate letter and will represent the DCO in the technical phases of the work. A copy of this designation letter shall be furnished to the Contractor. The DCOR is not authorized to change any of the terms and conditions of this task order. Changes in the Scope of Work will be made only by the DCO by properly written modification(s) to the task order. Additional DCOR(s) for other purposes as required may be designated in writing by the DCO.

SECTION H

SPECIAL CONTRACT REQUIREMENTS

H.1 OTHER GOVERNMENT CONTRACTORS

The Government may undertake or award other contracts/task orders for additional work or services. The Contractor agrees to fully cooperate with such other contractors and Government employees and carefully fit its own work to such other work as may be directed by the DCO. The Contractor shall not commit or permit any act which will interfere with the performance of work by any other contractor or by Government employees. If DOE determines that the Contractor's activities may interfere with another DOE contractor, the DCO shall so notify the Contractor and the Contractor shall comply with any instructions the DCO may provide,

H.2 H.999 SPECIAL PROVISIONS RELATING TO WORK FUNDED UNDER AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 (APR 2009)

Preamble:

Work performed under this task order will be funded, in whole or in part, with funds appropriated by the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, (Recovery Act or Act). The Recovery Act's purposes are to stimulate the economy and to create and retain jobs. The Act gives preference to activities that can be started and completed expeditiously, including a goal of using at least 50 percent of the funds made available by it for activities that can be initiated not later than June 17, 2009.

Contractors should begin planning activities for their first tier subcontractors, including obtaining a DUNS number (or updating the existing DUNS record), and registering with the Central Contractor Registration (CCR).

Be advised that Recovery Act funds can be used in conjunction with other funding as necessary to complete projects, but tracking and reporting must be separate to meet the reporting requirements of the Recovery Act and related Guidance. For projects funded by sources other than the Recovery Act, Contractors should plan to keep separate records for Recovery Act funds and to ensure those records comply with the requirements of the Act.

The Government has not fully developed the implementing instructions of the Recovery Act, particularly concerning the how and where for the new reporting requirements. The Contractor will be provided these details as they become available. The Contractor must comply with all requirements of the Act. If the contractor believes there is any inconsistency between Recovery Act requirements and current task order requirements, the issues will be referred to the DCO for reconciliation.

Be advised that special provisions may apply to projects funded by the Act relating to:

- Reporting, tracking and segregation of incurred costs
- Reporting on job creation and preservation;
- Publication of information on the Internet;
- Protecting whistleblowers; and
- Requiring prompt referral of evidence of a false claim to the Inspector General.

Definitions:

For purposes of this clause, "Covered Funds" means funds expended or obligated from appropriations under the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5. Covered Funds will have special accounting codes and will be identified as Recovery Act funds in the task order and/or modification using Recovery Act funds. Covered Funds must be reimbursed by September 30, 2015.

Non-Federal employer means any employer with respect to Covered Funds - the contractor or subcontractor, as the case may be, if the contractor or subcontractor is an employer; and any professional membership organization, certification of other professional body, any agent or licensee of the Federal government, or any person acting directly or indirectly in the interest of an employer receiving Covered Funds; or with respect to Covered Funds received by a State or local government, the State or local government receiving the funds and any contractor or subcontractor receiving the funds and any contractor or subcontractor of the State or local government; and does not mean any department, agency, or other entity of the federal government.

- A. Flow Down Provision - This clause must be included in every first-tier subcontract.
- B. Segregation and Payment of Costs - Contractor must segregate the obligations and expenditures related to funding under the Recovery Act. Financial and accounting systems should be revised as necessary to segregate, track and maintain these funds apart and separate from other revenue streams. No part of the funds from the Recovery Act shall be commingled with any other funds or used for a purpose other than that of making payments for costs allowable for Recovery Act projects. Where Recovery Act funds are authorized to be used in conjunction with other funding to complete projects, tracking and reporting must be separate from the original funding source to meet the reporting requirements of the Recovery Act and OMB Guidance.

Invoices must clearly indicate the portion of the requested payment that is for work funded by the Recovery Act.

- C. Prohibition on Use of Funds - None of the funds provided under this agreement derived from the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, may be for any casino or other gambling establishment, aquarium, zoo, golf course, or swimming pool.

- D. Wage Rates - All laborers and mechanics employed by contractors and subcontractors on projects funded directly by or assisted in whole or in part by and through the Federal Government pursuant to the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, shall be paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code. With respect to the labor standards specified in this section, the Secretary of Labor shall have the authority and functions set forth in Reorganization Plan numbered 14 of 1950 (64 Stat. 1267, 5 U.S.C. App.) and section 3145 of title 40 United States Code. See <http://www.dol.gov/esa/whd/contracts/dbra.htm>.
- E. Publication- Information about this agreement will be published on the Internet and linked to the website www.recovery.gov, maintained by the Accountability and Transparency Board. The Board may exclude posting contractual or other information on the website on a case-by-case basis when necessary to protect national security or to protect information that is not subject to disclosure under sections 552 and 552a of title 5, United States Code.
- F. Registration Requirements - Contractor shall ensure that all first-tier subcontractors have a DUNS number and are registered in the Central Contractor Registration (CCR) no later than the date the first report is due under the Section I. clause entitled "52.204-11 American Recovery and Reinvestment Act - Reporting Requirements (MAR 2009).
- G. Utilization of Small Business - Contractor shall to the maximum extent practicable give a preference to small business in the award of subcontracts for projects funded by Recovery Act dollars.

H.3 BASELINE AND REPORT REQUIREMENTS FOR WORK PERFORMED UNDER THE RECOVERY ACT

This clause defines the unique requirements for the contractor's project management baseline and associated reporting requirements to address the modified task order performance requirements as implemented in Section C, SOW, to be performed and funded under the provisions of the Recovery Act.

Baseline Requirements

- (a) Within 30 calendar days after award of task order, the contractor shall propose a Performance Baseline (the Performance Baseline is made up of the Performance Measurement Baseline, Management Reserve [spread by fiscal year] and fee [spread by fiscal year] for each subproject specified in Section C, SOW. This Performance Baseline shall use control accounts that will be made up of work packages. The Work Breakdown Structure (WBS) elements at the lowest level should roll up within the WBS structure and clearly identify the entire work to be performed. The proposed Performance Baseline shall include the following:

- (1) The contractor shall propose a Performance Baseline, at an 80 percent confidence level, for the work to be performed. This baseline shall be based upon the work and schedule included in the task order and the contractor's cost proposal. A month-by-month baseline or budgeted cost of work scheduled (BCWS)/planned value (PV) must be developed for the complete SOW. This will be the original baseline for Recovery Act work and shall include all of the work by WBS and the contractor's defined management reserve and fee. The sum of these three items shall equal the contractor price. This Performance Baseline is subject to independent project review and certification before approval by the government.
- (2) A network logic schedule utilizing Primavera (P6) will be developed at the activity level for each control account which includes milestones. The schedule must be resource loaded and coded to allow summarization and reconciliation of lower level activity budgets through the control accounts for the Performance Measurement Baseline.
- (3) The proposed Performance Baseline shall also include the planned quarterly summary of jobs "created" or "retained" by the contractor and first tier subcontractors as defined in the Section H clause entitled "Special provisions relating to work funded under American Recovery and Reinvestment Act of 2009."

Deliverables supporting the Recovery Act Performance Baseline shall include all deliverables required under existing task requirements, those Recovery Act deliverable and reporting requirements specified in the Section H clause entitled "Special provisions relating to work funded under American Recovery and Reinvestment Act of 2009" *and those Recovery Act-unique deliverables listed below.*

- a. Work Breakdown Structure (WBS) and associated dictionary;
- b. List of planning basis and assumptions;
- c. Cost baseline description document that includes the basis of cost estimates;
- d. Schedule baseline that employs a critical path method and is resource loaded such that earned value can be measured;
- e. Organizational breakdown structure;
- f. Responsibility assignment matrix that identifies Control Account Managers;
- g. Earned value management system description and a self-assessment of compliance with ANSI/EIA-748-B, "Earned Value Management Systems;"
- h. Project controls system description document;
- i. Risk management plan with results of qualitative and quantitative analysis including S-curves, management reserve and schedule reserve determinations, risk mitigation/risk response plans, and risk register;

- j. Technical design documentation;
- k. Documented safety analysis;
- l. Safety evaluation report (if required);
- m. Safety design strategy;
- n. Integrated safety management system description document and latest annual certification;
- o. NEPA documentation (analysis of environmental impacts); and
- p. Regulatory decision documents.

These documents shall be submitted to the DCO to support DOE review and baseline approval. The DCO may identify other documents as needed to support project reviews and audits.

- (b) The contractor shall support resolution of IPR or External Independent Review (EIR) corrective actions for the Performance Baseline submitted.
 - (1) During the period preceding Performance Baseline approval by the Government, the contractor shall determine the budgeted cost of work scheduled (BCWS) and the budgeted cost of work performed (BCWP) on a monthly basis utilizing measurable units associated with each activity in the schedule (e.g., square foot reduction, foot print reduction, etc.), as appropriate, that will allow the reporting of the contractor's progress in accordance with the reporting requirements specified in the clause in Section H entitled "Special provisions relating to work funded under American Recovery and Reinvestment Act." The associated actual cost of work performed (ACWP)/actual cost (AC), cost and schedule variances and performance indices, and variance analyses shall be reported monthly.

Reporting Requirements

- (2) Within 30 calendar days of award of task order for Recovery Act work, the contractor shall begin reporting in accordance with the reporting requirements specified under existing task order requirements, those reporting requirements specified in the section H. clause entitled "Special provisions relating to work funded under American Recovery and Reinvestment Act of 2009, *and those Recovery Act-unique deliverables listed below.*
- (3) These reports shall be provided to the DCO on a monthly basis.
 - (i) Contract Performance Report (Refer to OMB No. 0704-0188 or DD FORM: 2734/1, MAR 05) : Format 1 - WBS, Format 2 - Organizational Structure, Format 3 - Baseline, Format 4 - Staffing/Manpower Forecast, and Format 5 - Explanations and Problem Analyses.

- (ii) A Milestone report from Primavera reflecting status of all milestones being reported with columns for the scope, original planned date, current planned date, and the actual date the milestone was completed.
- (iii) A funds management report by Budgeting & Reporting (B&R) codes that identifies the amount of funds obligated to the task order and the amount of funds obligated to the contractor, and committed and expended by the contractor.

H.4 ORO H1001 WORKER SAFETY AND HEALTH PROGRAM (JAN 2007)

- (a) The Contractor shall comply with all applicable safety and health requirements set forth in 10 CFR 851, Worker Safety and Health Program. The Contractor shall develop, implement, and maintain a written Worker Safety and Health Plan (WSHP) which shall describe the Contractor's method for complying with and implementing the applicable requirements of 10 CFR 851. The WSHP shall be submitted to and approved by DOE. The approved WSHP must be implemented prior to the start of work. In performance of the work, the Contractor shall provide a safe and healthful workplace, and must comply with its approved WSHP and all applicable Federal and state environmental, health, and safety regulations. The Contractor shall take all reasonable precautions to protect the environment, health, and safety of its employees, DOE personnel, and members of the public. When more than one contractor works in a shared workplace, the Contractor shall coordinate with the other contractors to ensure roles, responsibilities, and worker safety and health provisions are clearly delineated. The Contractor shall participate in all emergency response drills and exercises.
- (b) The Contractor shall take all necessary and reasonable steps to minimize the impact of its work on DOE functions and employees, and immediately report all job-related injuries and/or illnesses which occur in any DOE facility to the DCOR. Upon request, the Contractor shall provide a copy of occupational safety and health self-assessments and/or inspections of work sites for job hazards for its DOE facilities to the DCOR.
- (c) The DCO may notify the Contractor, in writing, of any noncompliance with the terms of this clause, plus the corrective action to be taken. After receipt of such notice, the Contractor shall immediately take such corrective action.
- (d) In the event that the Contractor fails to comply with the terms and conditions of this clause, the DCO may, without prejudice to any other legal or contractual rights, issue a stop work order halting all or any part of the work. Thereafter, a start order for resumption of the work may be issued at the discretion of the DCO. The Contractor shall not be entitled to an equitable adjustment of the task order amount or extension of the performance schedule on any stop work order issued under this special task order requirement.

H.5 ORO H1003 SECURITY QUALIFICATIONS CJAN 2006)

- (a) The Contractor may be required to perform work in designated security areas or work with documents or information which may require an access authorization (clearance). Additionally, the scope of their work may require enrollment into the Human Reliability Program (HRP). The Contractor shall ensure that all personnel assigned under this task order and working with classified information, matter, and/or materials possess a DOE "Q" or "L" access authorization (clearance) matching the classification level of the data and information the employee will be required to work on in the performance of their assigned tasks.
- (b) Individuals that do not require a "Q" or "L" clearance will possess, as a minimum, if required, a Limited Site Specific Only (LSSO) badge and meet all access authorization requirements per HSPD-12, DOE N 206.4, and local procedures. For employees requiring DOE "Q" or "L" security clearances and/or LSSO badge, the Contractor shall not employ anyone who is not a citizen of the United States. (Clearance-Access authorizations are granted by the DOE pursuant to 10 CFR Part 710.) Security Badges must be worn properly at all times while working at any of the DOE and NNSA facilities.
- (c) Clearances will be provided and paid for by DOE. The request for clearance and renewal of clearances must be justified based on actual job performance requirements. The DCO, in coordination with the appropriate Federal security representative, may waive the clearance requirement for personnel not involved with classified information while the appropriate access authorizations or badges are being processed, or for personnel associated with the program for short periods of time, such as consultants. In these cases, security requirements regarding these circumstances will be followed. The Contractor, on a case-by-case basis, will provide its own cleared escorts as needed. The DCOR or Designated Contract Technical Monitor (DCTM) will approve contractor personnel for escort privileges and provide escort training.
- (d) The Contractor shall be required to conduct pre-employment investigative screening of prospective employees in order to ensure trustworthiness and reliability for all individuals who do not possess a DOE "Q" access authorization. For these individuals, the Contractor shall provide certification to the COR that an investigative screening has been completed prior to employment. The certification shall include, as a minimum, verification of personal identity, previous employment and education, and the results of a credit and law enforcement check.
- (e) Requests for access authorization shall not be submitted until the task order has been awarded, and a favorable Foreign Ownership, Control, or Influence (FOCI) determination must be rendered by DOE before an access authorization will be granted, reinstated, continued, extended, or transferred for the contractor's applicant employment. Upon task order award, the Contractor is encouraged to use the DOE Accelerated Access Authorization Program (AAAP) to obtain an Interim "Q" access authorization. The request for AAAP shall include the certified results of the pre-employment investigative screening of the prospective employee and a local Federal review prior to approved submission under AAAP.

- (f) The Contractor shall turn in badges for employees: (1) who are no longer working on the task order; (2) who no longer require access; (3) when their badge expires; or (4) when the task order expires or is terminated. Badges shall be returned to the individual handling security terminations. Notification of employment terminations supporting this task order will be made in writing to the DCO and DCOR/DCTM.
- (g) In addition to the possible requirement of holding an access authorization, individuals, if the work position is identified as requiring enrollment in the Human Reliability Program (HRP) and/or maintaining currency under certain program requirements (e.g., annual HRP training) must be willing to comply with all regulatory requirements to be granted access under the HRP Federal rules and local procedures.

H.6 ORO H1002 SAFEGUARDS AND SECURITY AWARENESS PROGRAM (JAN 2007)

The Contractor shall establish and maintain a Safeguards and Security Awareness Program acceptable to the Department of Energy (DOE), which satisfies the requirements of the following directives:

DOE M 470.4-1, Chg 1, Safeguards and Security Program Planning and Management

A Safeguards Security Awareness Coordinator must be appointed and will be responsible for ensuring all employees, cleared and uncleared, who are assigned to a DOE facility or who are performing work involving access to classified facilities, classified information, or special nuclear materials are informed of their security responsibilities. Any subcontracts in support of this work shall require subcontractors to comply with the Contractor's Safeguards and Security Awareness Program.

H.7 CONTRACT ASSIGNMENT (JUL 2007)

Both parties recognize that the Government may assign this task order to another Government prime contractor to be administered as a subcontract. The contractor may not assign or novate the task order without prior approval of DOE.

H.8 CHANGES

In accordance with Section I, clause 52.243-6, the Contractor shall implement Change Order Accounting for changes exceeding \$100,000. Change Order Accounting shall be implemented in all instances when the Contractor anticipates a change.

H.9 LABOR RELATIONS

- (a) The Contractor shall respect the right of employees to organize and to form, join, or assist labor organizations, to bargain collectively through their chosen labor representatives, to engage in other concerted activities for the purpose of collective bargaining or other mutual aid or protection, and to refrain from any or all of these activities.

- (b) The Contractor shall meet with the DCO or designee(s) for the purpose of reviewing the Contractor's bargaining objectives prior to negotiations of any collective bargaining agreement or revision thereto and shall consult with and obtain the approval of the DCO regarding appropriate economic bargaining parameters, including those for pension and medical benefit costs, prior to the Contractor entering into the collective bargaining process. During the collective bargaining process, the Contractor shall notify the DCO before submitting or agreeing to any collective bargaining proposal which can be calculated to affect allowable costs under this Contract or which could involve other items of special interest to the Government. During the collective bargaining process, the Contractor shall obtain the approval of the DCO before proposing or agreeing to changes in any pension or other benefit plans.
- (c) The Contractor will seek to maintain harmonious bargaining relationships that reflect a judicious expenditure of public funds, equitable resolution of disputes and effective and efficient bargaining relationships consistent with the requirements of FAR, Subpart 22.1 and DEAR, Subpart 970.2201 and all applicable Federal and State Labor Relations laws,
- (d) The Contractor will notify the DCO or designee in a timely fashion of all labor relations issues and matters of local interest including organizing initiatives, unfair labor practice, work stoppages, picketing, labor arbitrations, and settlement agreements and will furnish such additional information as may be required from time to time by the DCO.

H.10 LOCAL LABOR RELATIONS

A project labor agreement is available to those contractors performing this SOW at the Oak Ridge National Laboratory (ORNL). Harmonious labor relations between labor and management and the various contractors working at the site are expected and encouraged.

H.II RELOCATION COSTS

Costs incurred with regard to relocating an employee to the work site are allowable in accordance with FAR 31.205-35, Relocation Costs. However, the Contractor shall keep the number of employees relocated to a minimum. The contractor shall submit apian for the first year of the base performance period, and every year thereafter, for advance written approval of the Contracting Officer regarding the temporary and permanent relocation of all employees to the local area and charging the cost, or any portion thereof, to the contract. Unless otherwise agreed, exit relocation costs are not allowable.

H.12 CONFIDENTIALITY OF INFORMATION

- (a) To the extent that the work under this contract/Task Order requires that the contractor be given access to confidential or proprietary business, technical, or financial information belonging to the Government or other companies, the contractor shall, after receipt thereof, treat such information as confidential and agree not to appropriate such information to its own use or to disclose such information to third parties unless specifically authorized by the CO or DCO in writing. The foregoing obligations, however, shall not apply to:
 - (1) Information which, at the time of receipt by the contractor, is in the public domain;
 - (2) Information which is published after receipt thereof by the contractor or otherwise becomes part of the public domain through no fault of the contractor;
 - (3) Information which the contractor can demonstrate was in his possession at the time of receipt thereof and was not acquired directly or indirectly from the Government or other companies;
 - (4) Information which the contractor can demonstrate was received by it from a third party who did not require the contractor to hold it in confidence.
- (b) The contractor shall obtain the written agreement, in a form satisfactory to the CO or DCO, of each employee permitted access, whereby the employee agrees that he will not discuss, divulge or disclose any such information or data to any person or entity except those persons within the contractor's organization directly concerned with the performance of the contract.
- (c) The contractor agrees, if requested by the Government, to sign an agreement identical, in all material respects, to the provisions of this clause, with each company supplying information to the contractor under this contract, and to supply a copy of such agreement to the CO or DCO. From time to time upon request of the CO or DCO, the contractor shall supply the Government with reports itemizing information received as confidential or proprietary and setting forth the company or companies from which the contractor received such information.
- (d) The contractor agrees that upon request by DOE it will execute a DOE-approved agreement with any party whose facilities or proprietary data it is given access to or is furnished., restricting use and disclosure of the data or the information obtained from the facilities. Upon request by DOE, such an agreement shall also be signed by contractor personnel.
- (e) This clause shall flow down to all subcontracts.

H.13 QUALITY ASSURANCE (QA) FOR WORK AFFECTING NUCLEAR SAFETY

The Contractor shall implement a DOE-approved Quality Assurance Program (QAP) (Section J, Attachment A) in accordance with the EM Quality Assurance Program, EM-QA-001, prior to commencement of work affecting nuclear safety. The EM QAP provides the basis to achieve quality across the EM complex for all mission-related work while providing a consistent approach to Quality Assurance (QA).

EM requires that American Society of Mechanical Engineers (ASME) NQA-1, 2004, *Quality Assurance Requirements for Nuclear Facility Applications*, and addenda through 2007 be implemented as part of the Contractor's QAP for work affecting nuclear safety. The required portions of NQA-1 to be implemented include: Introduction, Part I, and as applicable portions of Part II. NQA-1 Parts III and IV are to be used as guidance for the Contractor's QAP and implementing procedures.

Contractors have three options for complying with this contract requirement:

1. Develop and submit for DOE approval a new QAP;
2. Adopt the prior Contractor's DOE-approved QAP; or,
3. Modify the prior Contractor's DOE-approved QAP and submit it for DOE approval.

Development of a new QAP, or adoption of an existing or modified version of a QAP from a prior contractor, does not alter a contractor's legal obligation to comply with 10 CFR 830, other regulations affecting QA and DOE Order 414.1C.

The Contractor's QAP shall describe the overall implementation of the EM QA requirements and shall be applied to all work performed by the Contractor (e.g., research, design/engineering, construction, operation, budget, mission, safety, and health).

The Contractor shall develop and implement a comprehensive Issues Management System for the identification, assignment of significance category, and processing of nuclear safety-related issues identified within the Contractor's organization. The significance assigned to the issues shall be the basis for all actions taken by the contractor in correcting the issue from initial causal analysis, reviews for reporting to DOE, through completion of Effectiveness Reviews if required based on the seriousness of the issue.

The Contractor shall, at a minimum, annually review and update as appropriate their QAP. The review and any changes shall be submitted to DOE for approval. Changes shall be approved before implementation by the Contractor.

SECTION I

CONTRACT CLAUSES

Section I of the ID/IQ Basic Contract and the following clauses are hereby incorporated by reference.

- 52.203-13 CONTRACTOR CODE OF BUSINESS ETHICS AND CONDUCT (DEC 2008)
- 52.203-14 DISPLAY OF HOTLINE POSTER(S) (APRIL 2008)
- 52.204-9 PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL (SEPT 2007)
- 52.204-10 REPORTING SUBCONTRACT AWARDS (SEPT 2007)
- 52.222-22 PREVIOUS CONTRACTS AND COMPLIANCE REPORTS (FEB 1999)
- 52.222-25 AFFIRMATIVE ACTION COMPLIANCE (APRIL 1984)
- 52.222-26 EQUAL OPPORTUNITY (MAR 2007)
- 52.222-39 NOTIFICATION OF EMPLOYEE RIGHTS CONCERNING PAYMENT OF UNION DUES OR FEES (DEC 2004)
- 52.223-3 HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA (JAN 1997)
- 52.227-2 NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (DEC 2007)
- 52.230-6 ADMINISTRATION OF COST ACCOUNTING STANDARDS (MAR 2008)
- 52.230-7 PROPOSAL DISCLOSURE—COST ACCOUNTING PRACTICE CHANGES (APRIL 2005)
- 52.234-4 EARNED VALUE MANAGEMENT SYSTEM (JULY 2006)
- 52.242-15 STOP-WORK ORDER (AUG 1989)
- 52.246-5 INSPECTION OF SERVICES - COST-REIMBURSEMENT (APRIL 1984)
- 52.248-1 VALUE ENGINEERING (FEB 2000)
- 952.204-2 SECURITY REQUIREMENTS (JUNE 2009)
- 952.223-76 CONDITIONAL PAYMENT OF FEE OR PROFIT - SAFEGUARDING RESTRICTED DATA AND OTHER CLASSIFIED INFORMATION AND PROTECTION OF WORKER SAFETY AND HEALTH (JAN 2004)
- 952.226-74 DISPLACED EMPLOYEE HIRING PREFERENCE (JUN 1997)
- 952.242-70 TECHNICAL DIRECTION (DEC 2000)

In addition, the following clauses will apply:

I.1 52.203-15 WHISTLEBLOWER PROTECTIONS UNDER THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 (MAR 2009)

- (a) The Contractor shall post notice of employees rights and remedies for whistleblower protections provided under section 1553 of the American Recovery and Reinvestment Act of 2009 (Pub. L. 111-5).
- (b) The Contractor shall include the substance of this clause including this paragraph (b) in all subcontracts.

I.2 52.204-11 AMERICAN RECOVERY AND REINVESTMENT ACT-REPORTING REQUIREMENTS (MAR 2009)

(a) Definitions. As used in this clause-

Contract, as defined in FAR 2.101, means a mutually binding legal relationship obligating the seller to furnish the supplies or services (including construction) and the buyer to pay for them. It includes all types of commitments that obligate the Government to an expenditure of appropriated funds and that, except as otherwise authorized, are in writing. In addition to bilateral instruments, task orders include (but are not limited to) awards and notices of awards; job orders or task letters issued under basic ordering agreements; letter task orders; orders, such as purchase orders, under which the task order becomes effective by written acceptance or performance; and bilateral task order modifications. Task orders do not include grants and cooperative agreements covered by 31 U.S.C. 6301, et seq. For discussion of various types of task orders, see FAR Part 16.

First-tier subcontract means a subcontract awarded directly by a Federal Government prime contractor whose task order is funded by the Recovery Act.

Jobs created means an estimate of those new positions created and filled, or previously existing unfilled positions that are filled, as a result of funding by the American Recovery and Reinvestment Act of 2009 (Recovery Act). This definition covers only prime contractor positions established in the United States and outlying areas (see definition in FAR 2.101). The number shall be expressed as "full-time equivalent" (FTE), calculated cumulatively as all hours worked divided by the total number of hours in a full-time schedule, as defined by the contractor. For instance, two full-time employees and one part-time employee working half days would be reported as 2.5 FTE in each calendar quarter.

Jobs retained means an estimate of those previously existing filled positions that are retained as a result of funding by the American Recovery and Reinvestment Act of 2009 (Recovery Act). This definition covers only prime contractor positions established in the United States and outlying areas (see definition in FAR 2.101). The number shall be expressed as "full-time equivalent" (FTE), calculated cumulatively as all hours worked divided by the total number of hours in a full-time schedule, as defined by the contractor. For instance, two full-time employees and one part-time employee working half days would be reported as 2.5 FTE in each calendar quarter.

Total compensation means the cash and noncash dollar value earned by the executive during the contractor's past fiscal year of the following (for more information see 17 CFR 229.402(c)(2)):

- (1) Salary and bonus.
 - (2) Awards of stock, stock options, and stock appreciation rights. Use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Statement of Financial Accounting Standards No. 123 (Revised 2004) (FAS 123R), Shared Based Payments.
 - (3) Earnings for services under non-equity incentive plans does not include group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of executives, and are available generally to all salaried employees.
 - (4) Change in pension value. This is the change in present value of defined benefit and actuarial pension plans.
 - (5) Above-market earnings on deferred compensation which is not tax-qualified.
 - (6) Other compensation. For example, severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property if the value for the executive exceeds \$10,000.
- (b) This task order requires the contractor to provide products and/or services that are funded under the American Recovery and Reinvestment Act of 2009 (Recovery Act). Section 1512(c) of the Recovery Act requires each contractor to report on its use of Recovery Act funds under this task order. These reports will be made available to the public.
- (c) Reports from contractors for all work funded, in whole or in part, by the Recovery Act, and for which an invoice is submitted prior to June 30, 2009, are due no later than July 10, 2009. Thereafter, reports shall be submitted no later than the 10th day after the end of each calendar quarter.
- (d) The Contractor shall report the following information, using the online reporting tool available at <http://www.FederalReporting.gov> <[http://frwebgate.access.gpo.gov/cgi-bin/leaving.cgi?from=leavingFR.html&log=linklog&to=http://www.FederalReportin g.gov](http://frwebgate.access.gpo.gov/cgi-bin/leaving.cgi?from=leavingFR.html&log=linklog&to=http://www.FederalReportin%20g.gov)>.
- (1) The Government task order and order number, as applicable.
 - (2) The amount of Recovery Act funds invoiced by the contractor for the reporting period. A cumulative amount from all the reports submitted for this action will be maintained by the government's on-line reporting tool,
 - (3) A list of all significant services performed or supplies delivered, including construction, for which the contractor invoiced in this calendar quarter.

- (4) Program or project title, if any.
- (5) A description of the overall purpose and expected outcomes or results of the task order, including significant deliverables and, if appropriate, associated units of measure.
- (6) An assessment of the contractor's progress towards the completion of the overall purpose and expected outcomes or results of the task order (i.e., not started, less than 50 percent completed, completed 50 percent or more, or fully completed). This covers the task order (or portion thereof) funded by the Recovery Act,
- (7) A narrative description of the employment impact of work funded by the Recovery Act. This narrative should be cumulative for each calendar quarter and only address the impact on the contractor's workforce. At a minimum, the contractor shall provide—
 - (i) A brief description of the types of jobs created and jobs retained in the United States and outlying areas (see definition in FAR 2.101). This description may rely on job titles, broader labor categories, or the contractor's existing practice for describing jobs as long as the terms used are widely understood and describe the general nature of the work; and
 - (ii) An estimate of the number of jobs created and jobs retained by the prime contractor, in the United States and outlying areas. A job cannot be reported as both created and retained.
- (8) Names and total compensation of each of the five most highly compensated officers of the Contractor for the calendar year in which the task order is awarded if--
 - (i) In the Contractor's preceding fiscal year, the Contractor received—
 - (A) 80 percent or more of its annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and
 - (B) \$25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and
 - (ii) The public does not have access to information about the compensation of the senior executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)» or section 6104 of the Internal Revenue Code of 1986.

- (9) For subcontracts valued at less than \$25,000 or any subcontracts awarded to an individual, or subcontracts awarded to a subcontractor that in the previous tax year had gross income under \$300,000, the Contractor shall only report the aggregate number of such first tier subcontracts awarded in the quarter and their aggregate total dollar amount.
- (10) For any first-tier subcontract funded in whole or in part under the Recovery Act, that is over \$25,000 and not subject to reporting under paragraph 9, the contractor shall require the subcontractor to provide the information described in (i), (ix), (x), and (xi) below to the contractor for the purposes of the quarterly report. The contractor shall advise the subcontractor that the information will be made available to the public as required by section 1512 of the Recovery Act. The contractor shall provide detailed information on these first-tier subcontracts as follows:
- (i) Unique identifier (DUNS Number) for the subcontractor receiving the award and for the subcontractor's parent company, if the subcontractor has a parent company.
 - (ii) Name of the subcontractor.
 - (iii) Amount of the subcontract award.
 - (iv) Date of the subcontract award.
 - (v) The applicable North American Industry Classification System (NAICS) code.
 - (vi) Funding agency.
 - (vii) A description of the products or services (including construction) being provided under the subcontract, including the overall purpose and expected outcomes or results of the subcontract.
 - (viii) Subcontract number (the contract number assigned by the prime contractor).
 - (ix) Subcontractor's physical address including street address, city, state, and country. Also include the nine-digit zip code and congressional district if applicable.
 - (x) Subcontract primary performance location including street address, city, state, and country. Also include the nine-digit zip code and congressional district if applicable.

- (x) Names and total compensation of each of the subcontractor's five most highly compensated officers, for the calendar year in which the subcontract is awarded if - -
 - (A) In the subcontractor's preceding fiscal year, the subcontractor received - -
 - (1) 80 percent or more of its annual gross revenues in Federal contracts (and subcontracts), loans, grants (and subgrants), and cooperative agreements; and
 - (2) \$25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants), and cooperative agreements; and
 - (B) The public does not have access to information about the compensation of the senior executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the International Revenue Code of 1986.

I.3 52.215-2 AUDIT AND RECORDS—NEGOTIATION (JUNE 1999), ALTERNATIVE I (MAR 2009)

- (a) As used in this clause, "records" includes books, documents, accounting procedures and practices, and other data, regardless of type and regardless of whether such items are in written form, in the form of computer data, or in any other form.
- (b) *Examination of costs.* If this is a cost-reimbursement, incentive, time-and-materials, labor-hour, or price redeterminable contract, or any combination of these, the Contractor shall maintain and the Contracting Officer, or an authorized representative of the Contracting Officer, shall have the right to examine and audit all records and other evidence sufficient to reflect properly all costs claimed to have been incurred or anticipated to be incurred directly or indirectly in performance of this contract. This right of examination shall include inspection at all reasonable times of the Contractor's plants, or parts of them, engaged in performing the contract.
- (c) *Cost or pricing data.* If the Contractor has been required to submit cost or pricing data in connection with any pricing action relating to this contract, the Contracting Officer, or an authorized representative of the Contracting Officer, in order to evaluate the accuracy, completeness, and currency of the cost or pricing data, shall have the right to examine and audit all of the Contractor's records, including computations and projections, related to—
 - (1) The proposal for the contract, subcontract, or modification;

- (2) The discussions conducted on the proposal(s), including those related to negotiating;
 - (3) Pricing of the contract, subcontract, or modification; or
 - (4) Performance of the contract, subcontract or modification.
- (d) Comptroller General or Inspector General.
- (1) The Comptroller General of the United States, an appropriate Inspector General appointed under section 3 or 8G of the Inspector General Act of 1978 (5 U.S.C. App.), or an authorized representative of either of the foregoing officials, shall have access to and the right to—
 - (i) Examine any of the Contractor's or any subcontractor's records that pertain to and involve transactions relating to this contract or a subcontract hereunder; and
 - (ii) Interview any officer or employee regarding such transactions.
 - (2) This paragraph may not be construed to require the Contractor or subcontractor to create or maintain any record that the Contractor or subcontractor does not maintain in the ordinary course of business or pursuant to a provision of law.
- (e) *Reports.* If the Contractor is required to furnish cost, funding, or performance reports, the Contracting Officer or an authorized representative of the Contracting Officer shall have the right to examine and audit the supporting records and materials, for the purpose of evaluating—
- (1) The effectiveness of the Contractor's policies and procedures to produce data compatible with the objectives of these reports; and
 - (2) The data reported.
- (f) *Availability.* The Contractor shall make available at its office at all reasonable times the records, materials, and other evidence described in paragraphs (a), (b), (c), (d), and (e) of this clause, for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in Subpart 4.7, Contractor Records Retention, of the Federal Acquisition Regulation (FAR), or for any longer period required by statute or by other clauses of this contract. In addition—
- (1) If this contract is completely or partially terminated, the Contractor shall make available the records relating to the work terminated until 3 years after any resulting final termination settlement; and
 - (2) The Contractor shall make available records relating to appeals under the Disputes clause or to litigation or the settlement of claims arising under or relating to this contract until such appeals, litigation, or claims are finally resolved.

(g) (1) Except as provided in paragraph (g)(2) of this clause, the Contractor shall insert a clause containing all the terms of this clause, including this paragraph (g), in all subcontracts under this contract. The clause may be altered only as necessary to identify properly the contracting parties and the Contracting Officer under the Government prime contract.

(2) The authority of the Inspector General under paragraph (d)(1)(ii) of this clause does not flow down to subcontracts.

I.4 52.217-7 OPTION FOR INCREASED QUANTITY - SEPARATELY PRICED LINE ITEM (MAR 1989)

The Government may require the delivery of the numbered line item, identified in the Schedule (Section B) as an option item, in the quantity and at the price stated in the Schedule. The Contracting Officer may exercise the option by written notice to the Contractor within 30 calendar days of the date to exercise the option in Section B. Delivery of added items shall continue at the same rate that like items are called for under the contract, unless the parties otherwise agree.

I.5 52.219-6 NOTICE OF TOTAL SMALL BUSINESS SET-ASIDE (JUNE 2003)

(a) *Definition.* "Small business concern," as used in this clause, means a concern, including its affiliates that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the size standards in this solicitation.

(b) *General.*

(1) Offers are solicited only from small business concerns. Offers received from concerns that are not small business concerns shall be considered nonresponsive and will be rejected.

(2) Any award resulting from this solicitation will be made to a small business concern.

(c) *Agreement.* A small business concern submitting an offer in its own name shall furnish, in performing the contract, only end items manufactured or produced by small business concerns in the United States or its outlying areas. If this procurement is processed under simplified acquisition procedures and the total amount of this contract does not exceed \$25,000, a small business concern may furnish the product of any domestic firm. This paragraph does not apply to construction or service contracts.

I.6 52.222-38 COMPLIANCE WITH VETERAN'S EMPLOYMENT REPORTING REQUIREMENTS (PEC 2001)

By submission of its offer, the offeror represents that, if it is subject to the reporting requirements of 38 U.S.C. 4212(d) (i.e., if it has any contract containing Federal Acquisition Regulation clause 52.222-37, Employment Reports on Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans), it has submitted the most recent VETS-100 Report required by that clause.

I.7 52.222-54 EMPLOYMENT ELIGIBILITY VERIFICATION (JAN 2009)

(a) *Definitions.* As used in this clause—

"Commercially available off-the-shelf (COTS) item"—

- (1) Means any item of supply that is—
 - (i) A commercial item (as defined in paragraph (1) of the definition at 2.101);
 - (ii) Sold in substantial quantities in the commercial marketplace; and
 - (iii) Offered to the Government, without modification, in the same form in which it is sold in the commercial marketplace; and
- (2) Does not include bulk cargo, as defined in section 3 of the Shipping Act of 1984 (46 U.S.C. App. 1702), such as agricultural products and petroleum products. Per 46 CFR 525.1 (c)(2), "bulk cargo" means cargo that is loaded and carried in bulk onboard ship without mark or count, in a loose unpackaged form, having homogenous characteristics. Bulk cargo loaded into intermodal equipment, except LASH or Seabee barges, is subject to mark and count and, therefore, ceases to be bulk cargo.

"Employee assigned to the contract" means an employee who was hired after November 6, 1986, who is directly performing work, in the United States, under a contract that is required to include the clause prescribed at 22.1803. An employee is not considered to be directly performing work under a contract if the employee—

- (1) Normally performs support work, such as indirect or overhead functions; and
- (2) Does not perform any substantial duties applicable to the contract.

"Subcontract" means any contract, as defined in 2.101, entered into by a subcontractor to furnish supplies or services for performance of a prime contractor a subcontract. It includes but is not limited to purchase orders, and changes and modifications to purchase orders.

"Subcontractor" means any supplier, distributor, vendor, or firm that furnishes supplies or services to or for a prime Contractor or another subcontractor.

"United States", as defined in 8 U.S.C. 1101(a)(38), means the 50 States, the District of Columbia, Puerto Rico, Guam, and the U.S. Virgin Islands.

(b) *Enrollment and verification requirements.*

- (1) If the Contractor is not enrolled as a Federal Contractor in E-Verify at time of contract award, the Contractor shall—
 - (i) *Enroll.* Enroll as a Federal Contractor in the E-Verify program within 30 calendar days of contract award;
 - (ii) *Verify all new employees.* Within 90 calendar days of enrollment in the E-Verify program, begin to use E-Verify to initiate verification of employment eligibility of all new hires of the Contractor, who are working in the United States, whether or not assigned to the contract, within 3 business days after the date of hire (but see paragraph (b)(3) of this section); and
 - (iii) *Verify employees assigned to the contract.* For each employee assigned to the contract, initiate verification within 90 calendar days after date of enrollment or within 30 calendar days of the employee's assignment to the contract, whichever date is later (but see paragraph (b)(4) of this section).
- (2) If the Contractor is enrolled as a Federal Contractor in E-Verify at time of contract award, the Contractor shall use E-Verify to initiate verification of employment eligibility of—
 - (i) *All new employees.*
 - (A) *Enrolled 90 calendar days or more.* The Contractor shall initiate verification of all new hires of the Contractor, who are working in the United States, whether or not assigned to the contract, within 3 business days after the date of hire (but see paragraph (b)(3) of this section); or
 - (B) *Enrolled less than 90 calendar days.* Within 90 calendar days after enrollment as a Federal Contractor in E-Verify, the Contractor shall initiate verification of all new hires of the Contractor, who are working in the United States, whether or not assigned to the contract, within 3 business days after the date of hire (but see paragraph (b)(3) of this section); or

- (ii) *Employees assigned to the contract*, For each employee assigned to the contract, the Contractor shall initiate verification within 90 calendar days after date of contract award or within 30 days after assignment to the contract, whichever date is later (but see paragraph (b)(4) of this section),
- (3) If the Contractor is an institution of higher education (as defined at 20 U.S.C. 1001(a)); a State or local government or the government of a Federally recognized Indian tribe; or a surety performing under a takeover agreement entered into with a Federal agency pursuant to a performance bond, the Contractor may choose to verify only employees assigned to the contract, whether existing employees or new hires. The Contractor shall follow the applicable verification requirements at (b)(1) or (b)(2) respectively, except that any requirement for verification of new employees applies only to new employees assigned to the contract.
- (4) *Option to verify employment eligibility of all employees*. The Contractor may elect to verify all existing employees hired after November 6, 1986, rather than just those employees assigned to the contract. The Contractor shall initiate verification for each existing employee working in the United States who was hired after November 6, 1986, within 180 calendar days of—
 - (i) Enrollment in the E-Verify program; or
 - (ii) Notification to E-Verify Operations of the Contractor's decision to exercise this option, using the contact information provided in the E-Verify program Memorandum of Understanding (MOU).
- (5) The Contractor shall comply, for the period of performance of this contract, with the requirements of the E-Verify program MOU.
 - (i) The Department of Homeland Security (DHS) or the Social Security Administration (SSA) may terminate the Contractor's MOU and deny access to the E-Verify system in accordance with the terms of the MOU. In such case, the Contractor will be referred to a suspension or debarment official.
 - (ii) During the period between termination of the MOU and a decision by the suspension or debarment official whether to suspend or debar, the Contractor is excused from its obligations under paragraph (b) of this clause. If the suspension or debarment official determines not to suspend or debar the Contractor, then the Contractor must reenroll in E-Verify.
- (c) *Web site*. Information on registration for and use of the E-Verify program can be obtained via the Internet at the Department of Homeland Security Web site: <http://www.dhs.gov/E-Verify>.

- (d) *Individuals previously verified*, The Contractor is not required by this clause to perform additional employment verification using E-Verify for any employee—
 - (1) Whose employment eligibility was previously verified by the Contractor through the E-Verify program;
 - (2) Who has been granted and holds an active U.S. Government security clearance for access to confidential, secret, or top secret information in accordance with the National Industrial Security Program Operating Manual; or
 - (3) Who has undergone a completed background investigation and been issued credentials pursuant to Homeland Security Presidential Directive (HSPD)-12, Policy for a Common Identification Standard for Federal Employees and Contractors.
- (e) *Subcontracts*. The Contractor shall include the requirements of this clause, including this paragraph (e) (appropriately modified for identification of the parties), in each subcontract that—
 - (1) Is for—
 - (i) Commercial or noncommercial services (except for commercial services that are part of the purchase of a COTS item (or an item that would be a COTS item, but for minor modifications), performed by the COTS provider, and are normally provided for that COTS item); or
 - (ii) Construction;
 - (2) Has a value of more than \$3,000; and
 - (3) Includes work performed in the United States.

I.8 52.227-2 NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (DEC 2007)

- (a) The Contractor shall report to the Contracting Officer, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this contract of which the Contractor has knowledge.
- (b) In the event of any claim or suit against the Government on account of any alleged patent or copyright infringement arising out of the performance of this contract or out of the use of any supplies furnished or work or services performed under this contract, the Contractor shall furnish to the Government, when requested by the Contracting Officer, all evidence and information in Contractor's possession pertaining to claim or suit. Such evidence and information shall be furnished at the expense of the Government except where the Contractor has agreed to indemnify the Government.

- (c) The Contractor shall include the substance of this clause, including this paragraph (c), in all subcontracts that are expected to exceed the simplified acquisition threshold at FAR 2.101.

I.9 52.243-6 CHANGE ORDER ACCOUNTING (APR 1984)

The Contracting Officer may require change order accounting whenever the estimated cost of a change or series of related changes exceeds \$100,000. The Contractor, for each change or series of related changes, shall maintain separate accounts, by job order or other suitable accounting procedure, of all incurred segregable, direct costs (less allocable credits) of work, both changed and not changed, allocable to the change. The Contractor shall maintain such accounts until the parties agree to an equitable adjustment for the changes ordered by the Contracting Officer or the matter is conclusively disposed of in accordance with the Disputes clause,

I.10 970.5223-4 WORKPLACE SUBSTANCE ABUSE PROGRAMS AT DOE SITES (DEC 2000)

- (a) Program Implementation. The Contractor shall, consistent with 10 CFR part 707, Workplace Substance Abuse Programs at DOE Sites, incorporated herein by reference with full force and effect, develop, implement, and maintain a workplace substance abuse program.
- (b) Remedies. In addition to any other remedies available to the Government, the Contractor's failure to comply with the requirements of 10 CFR part 707 or to perform in a manner consistent with its approved program may render the Contractor subject to: the suspension of contract payments, or, where applicable, a reduction in award fee; termination for default; and suspension or debarment.
- (c) Subcontracts. (1) The Contractor agrees to notify the Contracting Officer reasonably in advance of, but not later than 30 days prior to, the award of any subcontract the Contractor believes may be subject to the requirements of 10 CFR part 707.

(2) The DOE Prime Contractor shall require all subcontracts subject to the provisions of 10 CFR part 707 to agree to develop and Implement a workplace substance abuse program that complies with the requirements of 10 CFR part 707, Workplace Substance Abuse Programs at DOE Sites, as a condition for award of the subcontract. The DOE Prime Contractor shall review and approve each subcontractor's program, and shall periodically monitor each subcontractor's implementation of the program for effectiveness and compliance with 10 CFR part 707.

- (3) The Contractor agrees to include, and require the inclusion of, the requirements of this clause in all subcontracts, at any tier, that are subject to the provisions of 10 CFR part 707.

SECTION J

LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

J.1 LIST OF ATTACHMENTS

Attachment	Description
A	Reporting Requirements
B	List of Required Compliance Documents
C	Statement of Costs
D	U.S. Department of Labor Service Contract Act Wage Determination

J.2 CORRESPONDENCE PROCEDURES AND REPORT DISTRIBUTION ADDRESSEE LIST

All correspondence submitted by the Contractor (except for invoices and reports) shall be subject to the following procedures:

- (a) **Technical Correspondence.** Technical correspondence concerning performance of this task order shall be addressed to the DCOR, with an information copy of the correspondence to the Designated Contract Specialist (DCS) or DCO.
- (b) **Patents/Technical Data/ Intellectual Property Correspondence.** Correspondence concerning patent and technical data issues shall be addressed to the Assistant Chief Counsel for Intellectual Property, Office of Chief Counsel, USDOE, PO Box 2001, Oak Ridge, TN, 37831-8751, with an informational copy to the DCS or DCO and the DCOR.
- (c) **Non-technical Administrative Correspondence.** All correspondence, other than technical correspondence, shall be addressed to the DCO or DCS designated in ORO G25, with information copies of the correspondence to the DCOR.
- (c) **Subject Line(s).** All correspondence shall contain a subject line commencing with the task order number, as illustrated below:

"SUBJECT: Task Order No. (Insert the task order number), (Insert subject topic after task order number, e.g., "Request for subcontract placement consent")."

The mailing address for distribution of A,B,C,D and G is as stated in the chart below.

Distribution E and F are by electronic mail only.

U.S. Department of Energy
Oak Ridge Office
P.O. Box 2001
Oak Ridge, TN 37831

Office Identifier	Addressee
A	Office of Environmental Management, ORNL Projects Designated Contracting Officer Representative, EM-91 (appointed by separate memo)
B	Office of Environmental Management, ORNL Projects Alternate Designated Contracting Officer Representative, EM- 91 (appointed by separate memo)
C	Procurement and Contracts Division Karen Shears, Designated Contracting Officer, AD-423
D	Lisa Carter, Contractor Human Resource Group, AD-44
E	Jenise Mullins SE-32 Safety and Occupational Health Manager e-mail: mullinsjg@oro.doe.gov
F	Headquarters Energy Finance & Accounting Service Center e-mail: Wendy.miller@hq.doe.gov
G	Oak Ridge Financial Service Center email: southardtj@oro.doe.gov

J.3 CONTRACT ADMINISTRATION

The task order will be administered by:

U.S. Department of Energy Oak Ridge Office
Procurement and Contracts Division ATTN: Jim McDaniel
Designated Contract Specialist P.O. Box 2001 Oak Ridge, TN 37831

Written communication shall make reference to the task order number and shall be mailed to the DCS designated via separate correspondence to the above address.

SECTION J

ATTACHMENT A

REPORTING REQUIREMENTS/DELIVERABLES

The following items are project submittals necessary for the implementation and execution of the Statement of Work (SOW). An overall schedule for project submittals shall be proposed by the offerors.

REPORT	FREQUENCY	DISTRIBUTION
<i>Addressee List</i>		<i>(one copy each)</i>
I. Vouchers/Invoices (SF 1034) Supporting Statement of Cost and Fee	Monthly	Through VIPERS
II. Labor/Cost Management and Accrual Report	Monthly	A/B/C/F
III. Management Plan including Workplace Substance Program (See 970.5223-4), Quality Control Plan, Confidentiality Certification Agreement (See H.12), Equal Employment Opportunity Report (EEO-1) (See 52.222-26)	Monthly	A/B/C/D
IV. Corrective Action Items Status Report	Monthly	A/B/C
V. Other Reports		
Individual Accident/Illness Report (DOE F 5484.3)	Monthly	A/B/C/E
Headcount Data Report by EEO-1	Quarterly	A/B/C/D
Quarterly Employment Report	15 days after each Quarter	A/B/C/D
Payroll and Residence Report	Annual by Jan 15	A/B/C/D
Tabulation of Work-Hours	Quarterly	A/B/C/E
Diversity Plan Report	Annual	A/B/C/D
Project Management Plan	To Be Proposed by Contractor (During Pre-Mobilization)	A/B/C
Risk Management Plan	To Be Proposed by Contractor (During Pre-Mobilization)	A/B/C
Environmental, Safety and Health Plan	To Be Included in Offeror's Proposal	A/B/C

Quality Assurance Plan	To Be Proposed by Contractor (During Pre-Mobilization)	A/B/C
Work Control Plan	To Be Proposed by Contractor (During Pre-Mobilization)	A/B/C
Status Reports by WBS	Monthly	A/B/C
Waste Management Plan	To Be Proposed by Contractor (During Pre-Mobilization)	A/B/C
Transportation Plan	To Be Proposed by Contractor (During Pre-Mobilization)	A/B/C
Integrated Safety Management Plan (with System Description)	To Be Proposed by Contractor (During Pre-Mobilization)	A/B/C
Radiation Protection Plan	To Be Proposed by Contractor (During Pre-Mobilization)	A/B/C
Procurement Plan	To Be Proposed by Contractor (During Pre-Mobilization)	A/B/C
Closure Plan	To Be Proposed by Contractor (During Pre-Mobilization)	A/B/C
PIDS Report (FAR 45; CFR 109; 947.102-70)	Annual	G
Project Schedule	To Be Proposed by Contractor (During Pre-Mobilization)	A/B/C
Interface Agreements	30 Days After Award	A/B/C
Phased Construction Completion Report (PCCR)	To Be Proposed by Contractor (During Pre-Mobilization)	A/B/C

VII.American Recovery and Reinvestment Act of 2009		
Quarterly Staffing Report (summary of jobs "created" or "retained" by the contractor and first tier subcontractors)	Quarterly	A/B/C
Contract Performance Report (Refer to OMB No. 0704-0188 or DD FORM 2734/1, MAR 05) :Format 1 - Work Breakdown Structure, Format 3 - Baseline, and Format 5 - Explanations and Problem Analyses	Monthly	A/B/C
Milestone report from Primavera reflecting status of all milestones being reported with columns for the scope, original planned date, current planned date, and the actual date the milestone was completed	Monthly	A/B/C
Funds management report by Budgeting & Reporting (B&R) codes that identifies the amount of funds obligated to the contract and the amount of funds obligated to the contractor, and committed and expended by the contractor	Monthly	A/B/C

SECTION J

ATTACHMENT B

BASELINE LIST OF REQUIRED COMPLIANCE DOCUMENTS

List A

In accordance with Section I, clause 970.5204-2, the Contractor shall comply with the requirements of applicable Federal, State, and local laws and regulations (including DOE regulations), including 10 CFR 830, Nuclear Safety Management; 10 CFR 835, Occupational Radiation Protection; and 10 CFR 851, Worker Safety and Health Program, unless relief has been granted in writing by appropriate regulatory agency.

List B

Compliance with the following is required.

LIST B	
Requirement	Description
DOE O 151.1C	Comprehensive Emergency Management System
DOE N 203.1	Software Quality Assurance
DOE O 205.1A	Department of Energy Cyber Security Management Program
DOE N 206.1, Attachment 1	Department of Energy Privacy Program
DOE N 206.4	Personal Identity Verification
DOE N 206.5	Response and Notification Procedures for Data Breaches Involving Personally Identifiable Information
DOE O 210.2	DOE Corporate Operating Experience Program
DOE O 221.1 A	Reporting Fraud, Waste, and Abuse to the Office of Inspector General
DOE O 221.2A, Attachment 1	Cooperation with the Office of Inspector General
DOE N 221.15	Reporting Fraud, Waste, and Abuse
DOE O 225.1A, Attachment 1	Accident Investigations
DOE O 226.1A	Implementation of Department of Energy Oversight Policy
DOE P 226.1A	Department of Energy Oversight Policy
DOE N 234.1	Reporting of Radioactive Sealed Sources
DOE O 243.1	Records Management Program
DOE O 243.2	Vital Records
DOE N 251.73	Extension of DOE N 206.5, Response and Notification Procedures for Data Breaches Involving Personally Identifiable Information
DOE N 251.74	Extension of DOE N 206.4, Personal Identity Verification

DOE 0 252.1, Attachment 1	Technical Standards Program
DOE 0 350.1, Change 1, Att. 1, for Chapters I - IX	Contractor Human Resources Management Programs
DOE 0 413.1B	Internal Control Program
DOE 0 413.3A, Change 1	Program and Project Management for the Acquisition of Capital Assets
DOE 0 414.1C	Quality Assurance
DOE 0 420. 1B, Attachment 2	Facility Safety (Chapter II, Fire Protection, and Chapter III, Natural Phenomena applies to all facilities; Chapter II, Nuclear Criticality Safety, and Chapter V, System Engineer Program, apply to Nuclear Facilities only)
DOE 0 425.1C	Startup and Restart of Nuclear Facilities (Applies only to Nuclear Facilities)
DOE 0 433.1A, Attachment 1	Maintenance Management Program for DOE Nuclear Facilities (Applies only to Nuclear Facilities)
DOE 0 435.1, Change 1	Radioactive Waste Management
DOE 0 442.1A	Department of Energy Employee Concerns Program
DOE 0 450.1A, Attachment 1	Environmental Protection Program
DOE M 450.4-1	Integrated Safety Manual
DOE-STD-1120-2005	Integration of Environment, Safety, and Health Into Facility Disposition Activities
DOE O 460.1B	Packaging and Transportation Safety
DOE O 460.2A	Departmental Materials Transportation and Packaging Management
DOE O 471.1A	Identification and Protection of Unclassified Controlled Nuclear Information (when required)
DOE O 471.3	Identifying and Protecting Official Use Only Information
DOE O 475.2	Identifying Classified Information (when applicable)
DOE 0 534.1B	Accounting
DOE 0 551.1C	Official Foreign Travel
DOE 0 580.1, Change 1	DOE Personal Property Management Program
DOE 0 1450.4	Consensual Listening-in to or Recording Telephone/Radio Conversations
DOE 0 5400.5, Change 2	Radiation Protection of the Public and the Environment
DOE O 5480.19, Change 2	Conduct of Operations Requirements for DOE Facilities
DOE O 5480.20A, Change 1	Personnel Selection, Qualification, and Training Requirements for DOE Nuclear Facilities (Applies only to Nuclear Facilities)
EM-QA-001, Rev. 0	Office of Environmental Management (EM) Quality Assurance Program (QAP)
ANSI/ASHRAE 62	Ventilation

ANSI A10.31	Construction and Demolition - Digger Derricks Safety Requirements (As applicable)
ANSI A92.2	Vehicle-Mounted Elevating and Rotating Aerial Devices
ANSI C2	National Electrical Safety Code
ANSI N323-1978	Radiation Protection Instrumentation Test and Calibration
ANSI Z89.1	Industrial Protection Helmets
ANSI Z117.1	Safety Requirements for Confined Spaces
ANSI Z358.1	Emergency Eyewash and Shower Equipment
NFPA 70E (2009)	Electrical Safety Requirements for Employee Workplaces
NFPA 1	Fire Prevention Code
NFPA 10	Portable Fire Extinguishers
NFPA 13	Standard for the Installation of Sprinkler Systems
NFPA 30	Flammable and Combustible Liquids Code
NFPA 43D	Storage of Pesticides
NFPA 5 IB	Standard for Fire Protection in Use of Cutting and Welding Processes (IA-Fire Watchers)
NFPA 55	Compressed and Liquefied Gases in Portable Cylinders
NFPA 70E (2009)	Electrical Safety Requirements for Employee Workplaces
NFPA 72	National Fire Alarm Code
NFPA 101	Life Safety Code
NFPA 10 IB	Life Safety Code for Means of Egress for Buildings and Structures
NFPA 111	Stored Electrical Energy Emergency and Standby Power Systems
NFPA 241	Safeguarding Construction, Alteration, and Demolition Operations
NFPA 505	Powered Industrial Trucks including Type Designations, Areas of Use, Maintenance and Operation
NQA-1-2004	Quality Assurance Requirements for Nuclear Facility Applications, and addenda through 2007

SECTION J

ATTACHMENT C

STATEMENT OF COSTS

SUPPORTING REPORT OF COST AND FEE

See attached example format (Section L) for the preparation of the Supporting Report of Cost and Fee. This format may be modified to include further cost details as required by DOE. Final required format including further breakdown of costs will be established.

- (1) The Contractor, making due allowances for the Contractor's cost accounting and project management systems, shall complete the Supporting Report(s) of Cost and Fee.
- (2) The Contractor shall complete the Report(s) of Cost and Fee for each assignment supporting the total invoiced cost.
- (3) Costs claimed must be only those recorded costs authorized for billing by the provisions of the contract and supported by the Contractor's cost accounting system.
- (4) A separate line item should be identified for claimed overtime cost by each assignment.
- (5) The funds expended for the current billing period as well as for the cumulative contract period will be shown.
- (6) The certification statement, signed by a responsible official of the Contractor, will be placed at the bottom of the report(s) of cost and fee and appear as follows:

CERTIFICATION: I certify that this invoice is correct, was prepared in accordance with the terms of the contract and is supported by the Contractor's cost accounting system. The costs included herein have been incurred; represent payments made by the contractor except as otherwise authorized in the payments provisions of the contract; and properly reflect the level of effort required by DOE,

Signature/Title

Name of Preparer/Telephone Number

Company Name/Address

- (7) Additional supporting data for claimed costs shall be provided in such form and reasonable detail as an authorized representative of the Contracting Officer may require.

SECTION J

ATTACHMENT D

U.S. Department of Labor Service Contract Act Wage Determination

REGISTER OF WAGE
DETERMINATIONS UNDER
THE SERVICE CONTRACT ACT
By direction of the Secretary of Labor

U.S. DEPARTMENT OF LABOR
EMPLOYMENT STANDARDS
ADMINISTRATION
WAGE AND HOUR DIVISION
WASHINGTON D.C. 20210

Shirley F. Ebbesen, Director
Division of Wage Determinations

Wage Determination No.: 2005-2493
Revision No.: 10
Date of Revision: 05/26/2009

State: Tennessee

Area: Tennessee Counties of Anderson, Blount, Campbell, Claiborne, Cumberland, Fentress, Grainger, Hamblen, Jefferson, Knox, Loudon, Monroe, Morgan, Pickett, Roane, Scott, Sevier, Union

Fringe Benefits Required Follow the Occupational Listing

OCCUPATION CODE - TITLE	RATE
01000 - Administrative Support and Clerical Occupations	
01011 - Accounting Clerk I	12.00
01012 - Accounting Clerk II	13.35
01013 - Accounting Clerk III	14.93
01020 - Administrative Assistant	18.28
01040 - Court Reporter	14.96
01051 - Data Entry Operator I	10.83
01052 - Data Entry Operator II	13.19
01060 - Dispatcher, Motor Vehicle	16.25
01070 - Document Preparation Clerk	12.37
01090 - Duplicating Machine Operator	12.37

01111 - General Clerk I	9.96
01112 - General Clerk II	11.85
01113 - General Clerk	13.29
01120 - Housing Referral Assistant	16.57
01141 - Messenger Courier	10.49
01191 - Order Clerk I	10.73
01192 - Order Clerk II	13.65
01261 - Personnel Assistant (Employment) I	12.58
01262 - Personnel Assistant (Employment) II	14.92
01263 - Personnel Assistant (Employment) III	16.64
01270 - Production Control Clerk	16.30
01280 - Receptionist	11.72
01290 - Rental Clerk	13.05
01300 - Scheduler, Maintenance	13.48
01311 - Secretary I	13.48
01312 - Secretary II	14.96
01313 - Secretary III	16.57
01320 - Service Order Dispatcher	16.06
01410 - Supply Technician	18.28
01420 - Survey Worker	16.50
01531 - Travel Clerk I	11.78
01532 - Travel Clerk II	12.56
01533 - Travel Clerk III	13.50
01611 - Word Processor I	12.27
01612 - Word Processor II	13.62
01613 - Word Processor III	15.39
05000 - Automotive Service Occupations	

05005 - Automobile Body Repairer, Fiberglass	18.68
05010 - Automotive Electrician	16.03
05040 - Automotive Glass Installer	15.26
05070 - Automotive Worker	15.26
05110 - Mobile Equipment Servicer	13.68
05130 - Motor Equipment Metal Mechanic	16.78
05160 - Motor Equipment Metal Worker	15.26
05190 - Motor Vehicle Mechanic	16.55
05220 - Motor Vehicle Mechanic Helper	13.06
05250 - Motor Vehicle Upholstery Worker	14.47
05280 - Motor Vehicle Wrecker	15.26
05310 - Painter, Automotive	18.18
05340 - Radiator Repair Specialist	15.26
05370 - Tire Repairer	11.03
05400 - Transmission Repair Specialist	16.55
07000 - Food Preparation and Service Occupations	
07010 - Baker	10.96
07041 - Cook I	9.91
07042 - Cook II	11.05
07070 - Dishwasher	8.36
07130 - Food Service Worker	9.18
07210 - Meat Cutter	12.42
07260 - Waiter/Waitress	7.79
09000 - Furniture Maintenance and Repair Occupations	
09010 - Electrostatic Spray Painter	15.48
09040 - Furniture Handler	10.90
09080 - Furniture Refinisher	15.48

09090 - Furniture Refinisher Helper	12.42
09110 - Furniture Repairer, Minor	13.93
09130 - Upholsterer	15.48
11000 - General Services and Support Occupations	
11030 - Cleaner, Vehicles	8.43
11060 - Elevator Operator	9.54
11090 - Gardener	13.05
11122 - Housekeeping Aide	9.54
11150 - Janitor	10.48
11210 - Laborer, Grounds Maintenance	10.75
11240 - Maid or Houseman	8.32
11260 - Pruner	10.69
11270 - Tractor Operator	13.81
11330 - Trail Maintenance Worker	10.75
11360 - Window Cleaner	10.94
12000 - Health Occupations	
12010 - Ambulance Driver	14.54
12011 - Breath Alcohol Technician	14.98
12012 - Certified Occupational Therapist Assistant	20.28
12015 - Certified Physical Therapist Assistant	19.04
12020 - Dental Assistant	13.78
12025 - Dental Hygienist	27.65
12030 - EKG Technician	16.42
12035 - Electroneurodiagnostic Technologist	16.42
12040 - Emergency Medical Technician	14.54
12071 - Licensed Practical Nurse I	13.37
12072 - Licensed Practical Nurse II	14.98

12073 - Licensed Practical Nurse III	16.78
12100 - Medical Assistant	12.04
12130 - Medical Laboratory Technician	13.20
12160 - Medical Record Clerk	10.65
12190 - Medical Record Technician	13.54
12195 - Medical Transcriptionist	13.34
12210 - Nuclear Medicine Technologist	20.70
12221 - Nursing Assistant I	8.67
12222- Nursing Assistant II	9.63
12223- Nursing Assistant III	10.61
12224 - Nursing Assistant IV	11.92
12235 - Optical Dispenser	14.65
12236 - Optical Technician	13.21
12250 - Pharmacy Technician	16.23
12280 - Phlebotomist	11.92
12305 - Radiologic Technologist	20.22
12311 - Registered Nurse I	19.16
12312 - Registered Nurse II	23.46
12313 - Registered Nurse II, Specialist	23.46
12314- Registered Nurse III	26.04
12315- Registered Nurse III, Anesthetist	26.04
12316- Registered Nurse IV	30.91
12317 - Scheduler (Drug and Alcohol Testing)	18.51
13000 - Information and Arts Occupations	
13011 - Exhibits Specialist I	17.10
13012 - Exhibits Specialist II	21.18
13013 - Exhibits Specialist III	25.90

13041 - Illustrator I	16.64
13042 - Illustrator II	21.18
13043 - Illustrator III	25.90
13047 - Librarian	23.03
13050 - Library Aide/Clerk	11.41
13054 - Library Information Technology Systems Administrator	20.21
13058 - Library Technician	13.05
13061 - Media Specialist I	11.67
13062 - Media Specialist II	13.05
13063 - Media Specialist III	14.55
13071 - Photographer I	13.13
13072 - Photographer II	15.73
13073 - Photographer III	19.86
13074 - Photographer IV	25.55
13075 - Photographer V	30.07
13110 - Video Teleconference Technician	13.87
14000 - Information Technology Occupations	
14041 - Computer Operator I	14.94
14042 - Computer Operator II	16.70
14043 - Computer Operator III	18.79
14044 - Computer Operator IV	21.00
14045 - Computer Operator V	23.12
14071 - Computer Programmer I, (see 1)	20.49
14072 - Computer Programmer II, (see 1)	25.40
14073 - Computer Programmer III, (see 1)	27.62
14074 - Computer Programmer I, (see 1)	27.62

14101 - Computer Systems Analyst I, (see 1)	27.15
14102 - Computer Systems Analyst II, (see 1)	27.62
14103 - Computer Systems Analyst III, (see 1)	27.62
14150 - Peripheral Equipment Operator	14.86
14160 - Personal Computer Support Technician	21.00
15000 - Instructional Occupations	
15010 - Aircrew Training Devices Instructor (Non-Rated)	25.93
15020 - Aircrew Training Devices Instructor (Rated)	31.39
15030 - Air Crew Training Devices Instructor (Pilot)	34.52
15050 - Computer Based Training Specialist / Instructor	27.15
15060 - Educational Technologist	24.90
15070 - Flight Instructor (Pilot)	34.52
15080 - Graphic Artist	17.05
15090 - Technical Instructor	19.44
15095 - Technical Instructor/Course Developer	23.78
15110 - Test Proctor	15.69
15120 - Tutor	15.69
16000 - Laundry, Dry-Cleaning, Pressing And Related Occupations	
16010 - Assembler	8.48
16030 - Counter Attendant	8.48
16040 - Dry Cleaner	10.95
16070 - Finisher, Flatwork, Machine	8.48
16090 - Presser, Hand	8.48
16110 - Presser, Machine, Drycleaning	8.48
16130 - Presser, Machine, Shirts	8.48
16160 - Presser, Machine, Wearing Apparel, Laundry	8.48
16190 - Sewing Machine Operator	11.71

16220 - Tailor	12.47
16250 - Washer, Machine	9.38
19000 - Machine Tool Operation and Repair Occupations	
19010 - Machine-Tool Operator (Tool Room)	18.19
19040 - Tool and Die Maker	21.73
21000- Materials Handling And Packing Occupations	
21020-Forklift Operator	12.69
21030 - Material Coordinator	16.30
21040 - Material Expediter	16.30
21050 ~ Material Handling Laborer	11.47
21071 - Order Filler	10.28
21080 - Production Line Worker (Food Processing)	12.69
21110 - Shipping Packer	12.47
21130 - Shipping/Receiving Clerk	12.47
21140-Store Worker I	10.91
21150 - Stock Clerk	14.75
21210 - Tools and Parts Attendant	12.69
21410 - Warehouse Specialist	12.69
23000 - Mechanics and Maintenance and Repair Occupations	
23010 - Aerospace Structural Welder	21.76
23021 - Aircraft Mechanic I	20.73
23022 - Aircraft Mechanic II	21.76
23023 - Aircraft Mechanic III	22.84
23040 - Aircraft Mechanic Helper	15.54
23050 - Aircraft, Painter	19.79
23060 - Aircraft Servicer	17.43
23080 - Aircraft Worker	18.43

23110 - Appliance Mechanic	17.46
23120 - Bicycle Repairer	12.77
23125 - Cable Splicer	21.06
23130 - Carpenter, Maintenance	15.48
23140 - Carpet Layer	16.60
23160 - Electrician, Maintenance	20.79
23181 - Electronics Technician Maintenance I	19.33
23182 - Electronics Technician Maintenance II	20.32
23183 - Electronics Technician Maintenance III	21.27
23260 - Fabric Worker	15.62
23290 - Fire Alarm System Mechanic	17.63
23310 - Fire Extinguisher Repairer	14.75
23311 - Fuel Distribution System Mechanic	21.26
23312 - Fuel Distribution System Operator	17.14
23370 - General Maintenance Worker	15.31
23380 - Ground Support Equipment Mechanic	20.73
23381 - Ground Support Equipment Servicer	17.43
23382 - Ground Support Equipment Worker	18.43
23391 - Gunsmith I	14.75
23392- Gunsmith II	16.60
23393- Gunsmith III	18.29
23410 - Heating, Ventilation and Air-Conditioning Mechanic	16.22
23411 - Heating, Ventilation and Air Conditioning Mechanic (Research Facility)	16.97
23430 - Heavy Equipment Mechanic	16.35
23440 - Heavy Equipment Operator	14.97
23460 - Instrument Mechanic	22.57
23465 - Laboratory/Shelter Mechanic	17.46

23470 - Laborer	12.10
23510 - Locksmith	17.03
23530 - Machinery Maintenance Mechanic	19.19
23550 - Machinist, Maintenance	19.55
23580 - Maintenance Trades Helper	12.42
23591 - Metrology Technician I	22.57
23592 - Metrology Technician II	23.62
23593 - Metrology Technician III	24.64
23640 - Millwright	18.14
23710 - Office Appliance Repairer	17.03
23760 - Painter, Maintenance	17.03
23790 - Pipefitter, Maintenance	18.64
23810 - Plumber, Maintenance	17.78
23820 - Pneudraulic Systems Mechanic	18.29
23850 - Rigger	18.29
23870 - Scale Mechanic	16.60
23890 - Sheet-Metal Worker, Maintenance	17.52
23910 - Small Engine Mechanic	16.18
23931 - Telecommunications Mechanic I	21.41
23932 - Telecommunications Mechanic II	22.38
23950 - Telephone Lineman	18.19
23960 - Welder, Combination, Maintenance	17.74
23965 - Well Driller	16.22
23970 - Woodcraft Worker	18.29
23980 - Woodworker	14.31
24000 - Personal Needs Occupations	
24570 - Child Care Attendant	8.74

24580 - Child Care Center Clerk	10.88
24610 - Chore Aide	9.45
24620 - Family Readiness and Support Services Coordinator	11.27
24630 - Homemaker	13.52
25000 - Plant and System Operations Occupations	
25010 - Boiler Tender	23.32
25040 - Sewage Plant Operator	17.77
25070 - Stationary Engineer	23.32
25190 - Ventilation Equipment Tender	16.78
25210 - Water Treatment Plant Operator	19.10
27000 - Protective Service Occupations	
27004 - Alarm Monitor	12.36
27007 - Baggage Inspector	9.14
27008 - Corrections Officer	14.96
27010 - Court Security Officer	15.81
27030 - Detection Dog Handler	11.51
27040 - Detention Officer	14.96
27070 - Firefighter	14.62
27101 - Guard I	9.14
27102 - Guard II	11.51
27131 - Police Officer I	17.01
27132 - Police Officer II	18.55
28000 - Recreation Occupations	
28041 - Carnival Equipment Operator	10.86
28042 - Carnival Equipment Repairer	11.58
28043 - Carnival Equipment Worker	8.63
28210 - Gate Attendant/Gate Tender	12.73

28310 - Lifeguard	10.82
28350 - Park Attendant (Aide)	14.24
28510 - Recreation Aide/Health Facility Attendant	10.09
28515 - Recreation Specialist	13.70
28630 - Sports Official	11.34
28690 - Swimming Pool Operator	16.20
29000 - Stevedoring/Longshoremen Occupational Services	
29010 - Blocker and Bracer	15.01
29020 - Hatch Tender	15.01
29030 - Line Handler	15.01
29041 - Stevedore I	14.37
29042 - Stevedore II	15.93
30000 - Technical Occupations	
30010 - Air Traffic Control Specialist, Center (HFO), (see 2)	33.96
30011 - Air Traffic Control Specialist, Station (HFO), (see 2)	23.42
30012 - Air Traffic Control Specialist, Terminal (HFO), (see 2)	25.79
30021 - Archeological Technician I	15.60
30022 - Archeological Technician II	17.39
30023 - Archeological Technician III	21.62
30030 - Cartographic Technician	23.50
30040 - Civil Engineering Technician	20.21
30061 - Drafter/CAD Operator I	14.24
30062 - Drafter/CAD Operator II	15.98
30063 - Drafter/CAD Operator III	21.02
30064 - Drafter/CAD Operator IV	26.04
30081 - Engineering Technician I	15.84
30082 - Engineering Technician II	17.79

30083 - Engineering Technician III	20.11
30084 - Engineering Technician IV	24.92
30085 - Engineering Technician V	30.15
30086 - Engineering Technician VI	36.50
30090 - Environmental Technician	23.98
30210 - Laboratory Technician	17.40
30240 - Mathematical Technician	19.60
3 03 61 - Paralegal/Legal Assistant I	16.72
30362 - Paralegal/Legal Assistant II	18.60
30363 - Paralegal/Legal Assistant III	22.70
30364 - Paralegal/Legal Assistant IV	27.52
30390 - Photo-Optics Technician	20.74
30461 - Technical Writer I	17.98
30462 - Technical Writer II	21.99
30463 - Technical Writer III	26.61
30491 - Unexploded Ordnance (UXO) Technician I	21.58
30492 - Unexploded Ordnance (UXO) Technician II	26.11
30493 - Unexploded Ordnance (UXO) Technician III	31.30
30494 - Unexploded (UXO) Safety Escort	21.58
30495 - Unexploded (UXO) Sweep Personnel	21.58
30620 - Weather Observer, Combined Upper Air or, (see 2) Surface Programs	18.04
30621 - Weather Observer, Senior, (see 2)	20.04
31000 - Transportation/Mobile Equipment Operation Occupations	
31020 - Bus Aide	8.84
31030 - Bus Driver	12.73
31043 - Driver Courier	13.32
31260 - Parking and Lot Attendant	8.51

31290 - Shuttle Bus Driver	14.21
31310 - TaxiDriver	11.14
31361 - Truck driver, Light	14.21
31362 - Truck driver, Medium	15.01
31363 - Truck driver, Heavy	16.24
31364 - Truck driver, Tractor-Trailer	16.24
99000 - Miscellaneous Occupations	
99030 – Cashier	9.39
99050 - Desk Clerk	10.96
99095 - Embalmer	24.84
99251 - Laboratory Animal Caretaker I	11.14
99252 - Laboratory Animal Caretaker II	13.06
99310 - Mortician	25.37
99410 - Pest Controller	14.48
99510 - Photo finishing Worker	11.04
99710 - Recycling Laborer	14.64
99711 - Recycling Specialist	17.31
99730 - Refuse Collector	13.25
99810 -Sales Clerk	10.77
99820 - School Crossing Guard	10.79
99830 - Survey Party Chief	16.66
99831 - Surveying Aide	11.04
99832 - Surveying Technician	15.15
99840 - Vending Machine Attendant	12.29
99841 - Vending Machine Repairer	14.59
99842 - Vending Machine Repairer Helper	12.29

ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:

HEALTH & WELFARE: \$3.35 per hour or \$134.00 per week or \$580.66 per month

VACATION:

2 weeks paid vacation after 1 year of service with a contractor or successor; 3 weeks after 5 years, and 4 weeks after 15 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (Reg. 29 CFR 4.173)

HOLIDAYS:

A minimum of ten paid holidays per year, New Year's Day, Martin Luther King Jr's Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. (A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4174)

THE OCCUPATIONS WHICH HAVE NUMBERED FOOTNOTES IN PARENTHESES RECEIVE THE FOLLOWING:

(1) COMPUTER EMPLOYEES:

Under the SCA at section 8(b), this wage determination does not apply to any employee who individually qualifies as a bona fide executive, administrative, or professional employee as defined in 29 C.F.R. Part 541. Because most Computer System Analysts and Computer Programmers who are compensated at a rate not less than \$27.63 (or on a salary or fee basis at a rate not less than \$455 per week) an hour would likely qualify as exempt computer professionals, (29 C.F.R. 541.400) wage rates may not be listed on this wage determination for all occupations within those job families. In addition, because this wage determination may not list a wage rate for some or all occupations within those job families if the survey data indicates that the prevailing wage rate for the occupation equals or exceeds \$27.63 per hour conformances may be necessary for certain nonexempt employees. For example, if an individual employee is nonexempt but nevertheless performs duties within the scope of one of the Computer Systems Analyst or Computer Programmer occupations for which this wage determination does not specify an SCA wage rate, then the wage rate for that employee must be conformed in accordance with the conformance procedures described in the conformance note included on this wage determination. Additionally, because job titles vary widely and change quickly in the computer industry, job titles are not determinative of the application of the computer professional exemption. Therefore, the exemption applies only to computer employees who satisfy the compensation requirements and whose primary duty consists of:

- (1) The application of systems analysis techniques and procedures, including consulting with users, to determine hardware, software or system functional specifications;

- (2) The design, development, documentation, analysis, creation, testing or modification of computer systems or programs, including prototypes, based on and related to user or system design specifications;
- (3) The design, documentation, testing, creation or modification of computer programs related to machine operating systems; or
- (4) A combination of the aforementioned duties, the performance of which requires the same level of skills. (29 C.F.R. 541.400).

(2) AIR TRAFFIC CONTROLLERS AND WEATHER OBSERVERS - NIGHT PAY & SUNDAY PAY:

If you work at night as part of a regular tour of duty, you will earn a night differential and receive an additional 10% of basic pay for any hours worked between 6pm and 6am. If you are a full-time employee (40 hours a week) and Sunday is part of your regularly scheduled workweek, you are paid at your rate of basic pay plus a Sunday premium of 25% of your basic rate for each hour of Sunday work which is not overtime (i.e. occasional work on Sunday outside the normal tour of duty is considered overtime work).

HAZARDOUS PAY DIFFERENTIAL:

An 8 percent differential is applicable to employees employed in a position that represents a high degree of hazard when working with or in close proximity to ordnance, explosives, and incendiary materials. This includes work such as screening, blending, dying, mixing, and pressing of sensitive ordnance, explosives, and pyrotechnic compositions such as lead azide, black powder and photoflash powder. All dry-house activities involving propellants or explosives. Demilitarization, modification, renovation, demolition, and maintenance operations on sensitive ordnance, explosives and incendiary materials. All operations involving regrading and cleaning of artillery ranges. A 4 percent differential is applicable to employees employed in a position that represents a low degree of hazard when working with, or in close proximity to ordnance, (or employees possibly adjacent to) explosives and incendiary materials which involves potential injury such as laceration of hands, face, or arms of the employee engaged in the operation, irritation of the skin, minor burns and the like; minimal damage to immediate or adjacent work area or equipment being used. All operations involving, unloading, storage, and hauling of ordnance, explosive, and incendiary ordnance material other than small arms ammunition. These differentials are only applicable to work that has been specifically designated by the agency for ordnance, explosives, and incendiary material differential pay.

** UNIFORM ALLOWANCE **

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to this wage determination shall (in the absence of a bona fide collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of \$3.35 per week (or \$.67 cents per day). However, in those instances where the uniforms furnished are made of "wash and wear" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

The duties of employees under job titles listed are those described in the "Service Contract Act Directory of Occupations", Fifth Edition, April 2006, unless otherwise indicated. Copies of the Directory are available on the Internet. A links to the Directory may be found on the WHD home page at <http://www.dol.gov/esa/whd/> or through the Wage Determinations On- Line (WDOE) Web site at <http://wdol.gov/>.

REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE {Standard Form 1444 (SF 1444)}

Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed classes of employees shall be paid the monetary wages and furnished the fringe benefits as are determined. Such conforming process shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees. The conformed classification, wage rate, and/or fringe benefits shall be retroactive to the commencement date of the contract. {See Section 4.6 (C)(vi)} When multiple wage determinations are included in a contract, a separate SF 1444 should be prepared for each wage determination to which a class(es) is to be conformed. The process for preparing a conformance request is as follows:

- (1) When preparing the bid, the contractor identifies the need for a conformed occupation(s) and computes a proposed rate(s),
- (2) After contract award, the contractor prepares a written report listing in order proposed classification title(s), a Federal grade equivalency (FGE) for each proposed classification(s), job description(s), and rationale for proposed wage rate(s), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.

- (3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, for review. (See section 4.6(b)(2) of Regulations 29 CFR Part 4).
- (4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.
- (5) The contracting officer transmits the Wage and Hour decision to the contractor.
- (6) The contractor informs the affected employees.

Information required by the Regulations must be submitted on SF 1444 or bond paper.

When preparing a conformance request, the "Service Contract Act Directory of Occupations" (the Directory) should be used to compare job definitions to insure that duties requested are not performed by a classification already listed in the wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE		PAGE OF PAGES 1 2	
2. AMENDMENT/MODIFICATION NO. 001		3. EFFECTIVE DATE 07/13/2010		4. REQUISITION/PURCHASE REQ. NO. 10EM002761	
5. PROJECT NO. (If applicable)		6. ISSUED BY CODE 00518		7. ADMINISTERED BY (If other than Item 6) CODE 00518	
Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831		Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)		(X)		9A. AMENDMENT OF SOLICITATION NO.	
SAFETY AND ECOLOGY CORPORATION Attn: MARK DUFF 2800 SOLWAY ROAD KNOXVILLE TN 379313015				9B. DATED (SEE ITEM 11)	
CODE 825678758 FACILITY CODE		X		10A. MODIFICATION OF CONTRACT/ORDER NO. DE-AM09-05SR22413 DE-DT0001335	
				10B. DATED (SEE ITEM 13) 03/30/2010	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended. is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required) Net Increase : \$18,579,923.00
1111361

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A
X	P.L. 95-91, B.6 Obligations of Funds, FAR 52.232-22 Limitation of Funds
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return 0 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

Tax ID Number: 62-1495562

DUNS Number: 825678758

TAS: : 89 0335 : : TAS Recovery Act ORNL Hot Cells Project from Solicitation DE-SOL-0001283

OTLIN 2026.1 (2026 Complex, remove legacy material) \$8,046,031.00.

OTLIN 2026.2 (Prep Complex 2026 for D&D) &6,664,291.00.

OTLIN 2026.3 (D&D Complex 2026) \$3,869,601.00

Total Amount for this Modification: \$18,579,923.00

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)

16A. NAME AND TITLE OF CONTRACTING OFFICER (Type

or print)

Karen S. Shears

15B. CONTRACT/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA Signature on File	16C. DATE SIGNED
(Signature of person authorized to sign)		(Signature of Contracting Officer)	07/13/2010

NSN 7540-01-152-8070
Previous edition unusable

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED DE-AM09-05SR22413/DE-DT0001335/001	PAGE OF 2 2
---------------------------	---	------------------

NAME OF OFFEROR OR CONTRACTOR
SAFETY AND ECOLOGY CORPORATION

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Obligated Amount for this Modification: \$18,579,923.00 New Total Obligated Amount for this Award: \$35,204,733.35 Fund: 05949 Appr Year: 2009 Allottee: 30 Report Entity: 471999 Object Class: 25200 Program: 1111361 Project: 2002230 WFO: 0000000 Local Use: 0473208 TAS Agency: 89 TAS Account: 0335 FOB: Destination Period of Performance: 03/30/2010 to 08/26/2011 Add Item 00003 as follows:				
00003	TAS::89 0335::TAS Option to be exercised at a later date: 2026.1 Legacy material removal from building 2026 Add Item 00004 as follows:				8,046,031.00
00004	TAS::89 0355::TAS Option to be exercised at a later date: 2026.2 Demolition Preparation of Building 2026 - Add Item 00005 as follows:				6,664,291.00
00005	TAS::89 0335::TAS Option to be exercised at a later date: 2026.3 D&D of Building 2026-				3,869,601.00

NSN 7540-01-152-8067

OPTIONAL FORM 336
(4-86)
Sponsored by GSA
FAR (48 CFR) 53.110

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE		PAGE OF PAGES	
				1 3	
2. AMENDMENT/MODIFICATION NO. 002		3. EFFECTIVE DATE See Bolck 16c		4. REQUISITION/PURCHASE REQ. NO. See Schedule	
5. PROJECT NO. (If applicable)		6. ISSUED BY CODE 00518		7. ADMINISTERED BY (If other than Item 6) CODE 00518	
Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831		Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)		(X)		9A. AMENDMENT OF SOLICITATION NO.	
SAFETY AND ECOLOGY CORPORATION Attn: MARK DUFF 2800 SOLWAY ROAD KNOXVILLE TN 379313015				9B. DATED (SEE ITEM 11)	
CODE 825678758 FACILITY CODE		X		10A. MODIFICATION OF CONTRACT/ORDER NO. DE-AM09-05SR22413 DE-DT0001335	
				10B. DATED (SEE ITEM 13) 03/30/2010	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended. is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required) Net Increase : \$9,838,000.00
See Schedule

13. THIS ITEM ONLY APPLIES TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A
X	P.L. 95-91, B.6 Obligations of Funds, FAR 52.232-22 Limitation of Funds
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return 0 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

Tax ID Number: 62-1495562

DUNS Number: 825678758

TAS: : 89 0253 : : TAS Recovery Act ORNL Hot Cells Project from Solicitation DE-SOL-0001283

The purpose of the modification is to obligate funds for the following OTLINS:

3038.1 D&D of Building 3038: \$1,226,200.00

3517.1 Legacy Material Removal from Building 3517: \$8,611,800.00

LIST OF CHANGES:

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)

16A. NAME AND TITLE OF CONTRACTING OFFICER (Type

or print)

Karen S. Shears

15B. CONTRACT/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA Signature on File	16C. DATE SIGNED
(Signature of person authorized to sign)		(Signature of Contracting Officer)	07/29/2010

NSN 7540-01-152-8070
Previous edition unusable

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED DE-AM09-05SR22413/DE-DT0001335/002	PAGE OF 2 3
---------------------------	---	------------------

NAME OF OFFEROR OR CONTRACTOR
SAFETY AND ECOLOGY CORPORATION

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>Total Amount for this Modification: \$9,838,000.00 New Total Amount for this Version: \$9,838,000.00 New Total Amount for this Award: \$45,042,733.36 Obligated Amount for this Modification: \$9,838,000.00 New Total Obligated Amount for this Award: \$45,042,733.35 FOB: Destination Period of Performance: 03/30/2010 to 08/26/2011</p> <p>Add Item 00006 as follows:</p>				
00006	<p>Option to be exercised at a later date: 3038.1 D&D of the 3038 Building Includes Bid price plus DOE risk Requisition No: 10EM002776</p> <p>Accounting Info: 1111376 Fund: 06049 Appr Year: 2009 Allottee: 30 Report Entity: 471999 Object Class: 25200 Program: 1111376 Project: 2002101 WFO: 0000000 Local Use: 0473209 TAS Agency: 89 TAS Account: 0253 Funded: \$1,226,200.00</p> <p>Add Item 00007 as follows:</p> <p>Add additional funding for base scope and add funding for options to be exercised at a later date to task with Safety & Ecology Corporation. Specialist Jim McDaniel. This task is for ARRA funded project 3517.1 Legacy Material Removal from Bldg. 3517 and prep for demo.</p>				1,226,200.00
00007	<p>TAS::89 02 53::TAS Recovery Act</p> <p>Task Order DT0001335 Contract DE-AM0905SR22413</p> <p>Add additional funding for base scope and add funding for options to be exercised at a later date to task with Safety & Ecology Corporation. Specialist Jim McDaniel. This task is for ARRA funded project 3517.1 Legacy Material Removal from Bldg. 3517 and prep for demo. Requisition No: 10EM002851</p> <p>Accounting Info: Fund: 06049 Appr Year: 2009 Allottee: 30 Report Entity: 471999 Object Class: 25200 Program: Continued ...</p>				8,611,800.00

CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED DE-AM09-05SR22413/DE-DT0001335/002	PAGE OF 3 3
---------------------------	---	------------------

NAME OF OFFEROR OR CONTRACTOR
SAFETY AND ECOLOGY CORPORATION

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	1111376 Project: 2002101 WFO: 0000000 Local Use: 0473210 TAS Agency: 89 TAS Account: 0253 Funded: \$8,611,800.00				

NSN 7540-01-152-8067

OPTIONAL FORM 336
(4-86)
Sponsored by GSA
FAR (48 CFR) 53.110

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE	PAGE OF PAGES 1 1
2. AMENDMENT/MODIFICATION NO. 002	3. EFFECTIVE DATE 7/13/2010	4. REQUISITION/PURCHASE REQ. NO. 10EM002776	5. PROJECT NO. (If applicable)
6. ISSUED BY U.S. Department of Energy, Oak Ridge P.O. Box 2001 Oak Ridge TN 37831-8758	CODE	7. ADMINISTERED BY (If other than Item 6) U.S. Department of Energy, Oak Ridge Office P.O. Box 2001 Oak Ridge TN 37831-8758	CODE
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Safety And Ecology Corporation Attn: Mark Duff 2800 Solway Road Knoxville TN 37931		<input checked="" type="checkbox"/> 9A. AMENDMENT OF SOLICITATION NO.	
		<input type="checkbox"/> 9B. DATED (SEE ITEM 11)	
		<input checked="" type="checkbox"/> 10A. MODIFICATION OF CONTRACT/ORDER NO. DE-AM09-05SR22412 DE-DT0001335	
CODE 825678758 FACILITY CODE		<input type="checkbox"/> 10B. DATED (SEE ITEM 13) 03/30/2010	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended. is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

Fund	Year	Alottee	Reporting Entity	SGL	Object Class	Program Number	Project Number	WFO	Local Use	Amount Obligated
06049	2009	30	471999		25200	1111376	2002101	0000000	0473209	\$ 1,226,200.00
06049	2009	30	471999		25200	1111376	2002101		0473210	\$ 8,611,800.00

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE <input checked="" type="checkbox"/>	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) P.L. 95-91, B.6 Obligation of Funds, FAR 52.232-22 Limitation of Funds
<input type="checkbox"/>	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.)
<input type="checkbox"/>	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
<input type="checkbox"/>	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

Tax ID Number: 62-1495562

DUNS Number: 825678758

TAS: : 89 0253 : : TAS Recovery Act ORNL Hot Cells Project from Solicitation DE-SOL-0001283

The purpose of the modification is to obligate funding for the following OTLINS:

OTLIN 3038.1 (D&D Bldg 3038) \$1,226,200.00

OTLIN 3517.1 (Remove Legacy Material Bldg 3517) \$8,611,800.00

Total Amount for this modification is \$ 9,838,000.00. Total Obligated Amount for this Award \$ 45,042,733.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains

unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER <i>(Type or print)</i>		16A. NAME AND TITLE OF CONTRACTING OFFICER <i>(Type or print)</i> Karen S. Shears, Contracting Officer	
15B. CONTRACT/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
BY (Signature of person authorized to sign)		BY /s/ Karen S. Shears (Signature of Contracting Officer)	

NSN 7540-01-152-8070
Previous edition unusable

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA FAR (48 CFR) 53.243

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE		PAGE OF PAGES	
				1 1	
2. AMENDMENT/MODIFICATION NO. 003		3. EFFECTIVE DATE See Bolck 16c		4. REQUISITION/PURCHASE REQ. NO. 10EM03938	
5. PROJECT NO. (If applicable)					
6. ISSUED BY		CODE 00518		7. ADMINISTERED BY (If other than Item 6)	
Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831				Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)				9A. AMENDMENT OF SOLICITATION NO.	
SAFETY AND ECOLOGY CORPORATION Attn: MARK DUFF 2800 SOLWAY ROAD KNOXVILLE TN 379313015					
				9B. DATED (SEE ITEM 11)	
				10A. MODIFICATION OF CONTRACT/ORDER NO. DE-AM09-05SR22413	
				DE-DT0001335	
				10B. DATED (SEE ITEM 13)	
CODE 825678758		FACILITY CODE		03/30/2010	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended. is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

See Schedule

13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	D. OTHER (Specify type of modification and authority) FAR 52.217-7 Option for Increased Quantity--Separately Priced Line Item

E. IMPORTANT: Contractor is not, is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

TAS: : 89 0253 : : TAS Recovery Act ORNL Hot Cells Project from Solicitation DE-SOL-0001283

The purpose of the modification is to exercise Optional Task Order Line Items (OTLINS) 2026.1, 2026.3.

The contractor is authorized to expend funds up to a combined cost ceiling of \$5,573,976.90 for these OTLINS.

Total Amount for this Modification: \$0.00

FOB: Destination

Period of Performance : 03/30/210 to 08/26/2011

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER <i>(Type or print)</i>		16A. NAME AND TITLE OF CONTRACTING OFFICER <i>(Type or print)</i>	
Christopher P. Leichtweis, CEO		Karen S. Shears	
15B. CONTRACT/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
/s/ Christopher P. Leichtweis	09/28/2010	/s/ Karen S. Shears	
(Signature of person authorized to sign)		(Signature of Contracting Officer)	09/09/2010

NSN 7540-01-152-8070
Previous edition unusable

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE		PAGE OF PAGES	
				1 1	
2. AMENDMENT/MODIFICATION NO. 004		3. EFFECTIVE DATE		4. REQUISITION/PURCHASE REQ. NO. 10EM03934	
5. PROJECT NO. (If applicable)					
6. ISSUED BY		CODE 00518		7. ADMINISTERED BY (If other than Item 6) CODE 00518	
Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831				Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, country, State and ZIP Code)				9A. AMENDMENT OF SOLICITATION NO.	
SAFETY AND ECOLOGY CORPORATION Attn: MARK DUFF 2800 SOLWAY ROAD KNOXVILLE TN 379313015				(X)	
				9B. DATED (SEE ITEM 11)	
				X	
				10A. MODIFICATION OF CONTRACT/ORDER NO. DE-AM09-05SR22413 DE-DT0001335	
				10B. DATED (SEE ITEM 13)	
CODE 825678758		FACILITY CODE		03/30/2010	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended. is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

See Schedule

13. THIS ITEM ONLY APPLIES TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	D. OTHER (Specify type of modification and authority) FAR 52.217-7 Option for Increased Quantity--Separately Priced Line Item

E. IMPORTANT: Contractor is not, is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

TAS : : 89 0253 : : TAS Recovery Act ORNL Hot Cells Project from Solicitation DE-SOL-0001283

The purpose of the modification is to exercise Optional Task Order Line Items (OTLINS) 3038.1, and 3517.

The contractor is authorized to expend funds up to a cost ceiling of \$367,860.00 for 3038.1 and \$20,000.00 for 3517.

Total Amount for this Modification: \$0.00

FOB: Destination

Period of Performance : 03/30/210 to 08/26/2011

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)	16A. NAME AND TITLE OF CONTRACTING OFFICER
---	--

(Type or print)

Christopher P. Leichtweis, CEO

Karen S. Shears

15B. CONTRACT/OFFEROR

15C. DATE SIGNED

16B. UNITED STATES OF AMERICA

/s/ Christopher P. Leichtweis

09/28/2010

/s/ Karen S. Shears

16C. DATE SIGNED

(Signature of person authorized to sign)

(Signature of Contracting Officer)

09/29/2010

NSN 7540-01-152-8070

Previous edition unusable

STANDARD FORM 30 (REV. 10-83)

Prescribed by GSA

FAR (48 CFR) 53.243

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE		PAGE OF PAGES	
				1 1	
2. AMENDMENT/MODIFICATION NO. 005		3. EFFECTIVE DATE See Bolck 16c		4. REQUISITION/PURCHASE REQ. NO. 11EM000038	
5. PROJECT NO. (If applicable)		6. ISSUED BY CODE 00518		7. ADMINISTERED BY (If other than Item 6) CODE 00518	
Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831		Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) SEC FEDERAL SERVICES CORPORATION Attn: MARK DUFF 2800 SOLWAY ROAD KNOXVILLE TN 379313015			(X)	9A. AMENDMENT OF SOLICITATION NO.	
				9B. DATED (SEE ITEM 11)	
			X	10A. MODIFICATION OF CONTRACT/ORDER NO. DE-AM09-05SR22413 DE-DT0001335	
				10B. DATED (SEE ITEM 13)	
CODE 142762843		FACILITY CODE		03/30/2010	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended. is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. **FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER.** If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)
See Schedule

13. THIS ITEM ONLY APPLIES TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A
X	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

TAS: : 89 0253 : : TAS Recovery Act ORNL Hot Cells Project

The purpose of the modification is to correct an administrative error in the DUNS number of the vendor for Task Order No. DE-DT0001335 under Contract No. DE-AM09-05SR22413. The correct DUNS number for SEC Federal Services for this task order is 142762843.

FOB: Destination

Period of Performance : 03/30/2010 to 08/26/2011

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains

unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER <i>(Type or print)</i>		16A. NAME AND TITLE OF CONTRACTING OFFICER <i>(Type or print)</i> Karen S. Shears	
15B. CONTRACT/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA Signature on File	16C. DATE SIGNED
<i>(Signature of person authorized to sign)</i>		<i>(Signature of Contracting Officer)</i>	10/07/2010

NSN 7540-01-152-8070
Previous edition unusable

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE	PAGE OF PAGES 1 1	
2. AMENDMENT/MODIFICATION NO. 006	3. EFFECTIVE DATE See Bolck 16c	4. REQUISITION/PURCHASE REQ. NO. 11EM001059		5. PROJECT NO. (If applicable)	
6. ISSUED BY	CODE 00518	7. ADMINISTERED BY (If other than Item CODE 6)		00518	
Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831		Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, country, State and ZIP Code)			(X)	9A. AMENDMENT OF SOLICITATION NO.	
SEC FEDERAL SERVICES CORPORATION Attn: MARK DUFF 2800 SOLWAY ROAD KNOXVILLE TN 379313015				9B. DATED (SEE ITEM 11)	
			X	10A. MODIFICATION OF CONTRACT/ORDER NO. DE-AM09-05SR22413 DE-DT0001335	
CODE 825678758			FACILITY CODE	10B. DATED (SEE ITEM 13) 03/30/2010	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended. is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

See Schedule

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A
X	FAR 52.243-2 Changes, cost Reimbursement
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ 1 _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

TAS: : 89 0253 : : TAS Recovery Act ORNL Hot Cells Project

The purpose of the modification is to delete DOE Order 425.1C from Section J, Attachment Band replace it with DOE Order 425.1D . This change will not impact cost or schedule.

FOB: Destination

Period of Performance : 03/30/2010 to 08/26/2011

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)

16A. NAME AND TITLE OF CONTRACTING OFFICER

(Type or print)

Ann Ward, Director of Contracts

Karen S. Shears

15B. CONTRACT/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
/s/ Ann Ward (Signature of person authorized to sign)	02/22/2011	(Signature of Contracting Officer)	

NSN 7540-01-152-8070
Previous edition unusable

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

**VERIFICATION OF READINESS
TO START UP OR RESTART
NUCLEAR FACILITIES**



U.S. DEPARTMENT OF ENERGY
Office of Health, Safety and Security

**VERIFICATION OF READINESS
TO START UP OR RESTART NUCLEAR FACILITIES**

1. PURPOSE. Establish the requirements for the Department of Energy (DOE), including the National Nuclear Security Administration (NNSA), for verifying readiness for startup of new Hazard Category 1, 2, and 3 nuclear facilities, activities, and operations, and for the restart of existing Hazard Category 1, 2, and 3 nuclear facilities, activities, and operations that have been shut down. The readiness reviews [Operational Readiness Reviews (ORRs) or Readiness Assessments (RAs)] are not intended to be line management tools to achieve readiness. Rather, the readiness reviews provide an independent verification of readiness to start or restart operations.
2. CANCELLATION. DOE O 425.1C, *Startup and Restart of Nuclear Facilities*, dated 3-13-03. Cancellation of an Order does not, by itself, modify or otherwise affect any contractual or regulatory obligation to comply with the Order. Contractor Requirements Documents (CRDs) that have been incorporated into a contract remain in effect throughout the term of the contract unless and until the contract or regulatory commitment is modified to either eliminate requirements that are no longer applicable or substitute a new set of requirements.
3. APPLICABILITY
 - a. Departmental Applicability. This Order is applicable to DOE within the provisions and restrictions of the National Nuclear Security Administration Act (NNSA Act), found at Title XXXII of PL. 106-65, National Defense Authorization Act for Fiscal Year 2000. This Order applies to all nuclear facilities, activities, and operations as defined in Title 10 of the Code of Federal Regulations (CFR), Part 830, Nuclear Safety Management, that are classified as Hazard Category 1, 2, or 3 nuclear facilities. This Order does not apply to the following:
 - (1) Activities regulated through a license by the Nuclear Regulatory Commission (NRC) or a state under an agreement with NRC, including activities certified by NRC under section 1701 of the Atomic Energy Act.
 - (2) In accordance with the responsibilities and authorities assigned by Executive Order 12344, codified at 50 USC sections 2406 and 2511 and to ensure consistency throughout the joint Navy and DOE organization of the Naval Nuclear Propulsion Program, the Deputy Administrator for Naval Reactors (Director) will implement and oversee all requirements and practices pertaining to this DOE Order for activities under the Director's cognizance, as deemed appropriate.

- (3) Activities regulated by the Department of Transportation; and transportation of on-site transportation packages authorized by 49 CFR, Part 173, Subpart I. On-site transportation activities may be excluded with PSO approval and CTA concurrence.
- (4) Activities in the Transportation Safeguards System in NNSA.

The Administrator of the National Nuclear Security Administration will assure that NNSA employees comply with their respective responsibilities under this Order. Nothing in this Order will be construed to interfere with the NNSA Administrator's authority under section 3212(d) of Public Law (P.L.) 106-65 to establish Administration-specific policies, unless disapproved by the Secretary.

- b. Contractors. The Contractor Requirements Document (CRD) sets forth requirements of this Order that will apply to contracts for the operation and management of a DOE-owned or -leased facility, including NNSA facilities.
 - c. Government-Owned, Government-Operated Facilities. The CRD, Attachment 1, sets forth requirements to also be applied to DOE government-owned, government-operated facilities. Government-operators shall comply with the requirements in Attachment 1.
 - d. Equivalencies and Exemptions. Equivalencies and exemptions to this Order are processed in accordance with DOE O 251.1C, *Departmental Directives Program*. Central Technical Authority (or designee) concurrence is required for both exemptions and equivalencies to this Order for nuclear facilities.
4. REQUIREMENTS. For NNSA facilities, the term "NNSA line management" is applied wherever the term "DOE line management" or a similar phrase is invoked in conjunction with a requirement or action. Direction and control of requirements pertinent to NNSA facilities, activities, or operations must fall under cognizant NNSA management, organizations, and activities, consistent with the NNSA Act. DOE Standard (STD) 30062010, *Planning and Conducting Readiness Reviews*, provides guidance on approaches and methods approved as acceptable for implementing the requirements of this Order. Other approaches and methods may be used provided they are documented, and approved by DOE Line Management as being in accordance with the requirements of this Order. Definitions of terms used in this Order are found in the definition section of DOE STD 3006-2010.

The readiness review process must, in all cases, demonstrate there is a reasonable assurance for adequate protection of workers, the public and the environment from adverse consequences from the start (or restart) of a Hazard Category 1, 2, or 3 nuclear facility, activity, or operation.

Hazard Category 1, 2, and 3 nuclear facilities, activities, or operations may be started (or restarted) only after readiness reviews have been conducted and the approvals specified in this Order have been received.

DOE line management must develop procedures that define the processes that will be utilized to implement the responsibilities of this Order. On-site transportation activities are subject to this order unless an alternate process is identified with PSO approval and CTA concurrence.

- a. Determining the Level of Readiness Review. DOE line management must evaluate the need to perform a Readiness Review prior to the startup and restart of Hazard Category 1, 2, and 3 nuclear facilities, activities, or operations.
 - (1) DOE line management must ensure that a properly scoped Readiness Review is planned and conducted to verify readiness for the restart of Hazard Category 1, 2, and 3 nuclear facilities, activities, or operations unless both of the following conditions are met:
 - (a) The restart is a resumption of routine operations after a short interruption (such as maintenance activities governed by existing maintenance procedures and processes) as defined in local procedures. (Note: 'short' may be defined as up to 6 months for Hazard Category 1 facilities, activities, or operations unless with PSO approval and CTA concurrence, this may be adjusted up to a maximum of twelve months. 'Short' may be defined as up to 12 months for Hazard Category 2 facilities, activities, or operations); and
 - (b) The restart is conducted using contractor approved operating procedures that provide specific direction for operating systems and equipment during normal conditions.
 - (2) A DOE ORR must be conducted for any of the following:
 - (a) Initial startup of a newly constructed nuclear facility. For the purpose of this criterion, a newly constructed nuclear facility refers to a new facility (not operation or activity) with a new Documented Safety Analysis (DSA) and associated Technical Safety Requirements (TSRs);
 - (b) Initial startup after conversion of an existing facility to a new nuclear mission with a new DSA and associated TSRs;
 - (c) Restart of a nuclear facility, activity, or operation that has upgraded its hazard categorization to Hazard Category 1, 2, or 3;
 - (d) Restart after a DOE management official directs the shutdown of a nuclear facility, activity, or operation for safety reasons;

- (e) Restart of a nuclear facility, activity, or operation after violation of a Safety Limit, as defined in 10 CFR Section 830.3, *Definitions*; or,
 - (f) Any situation deemed appropriate by DOE line management.
- (3) A DOE RA must be conducted for any of the following:
- (a) Initial startup of a new Hazard Category 1 or 2 activity or operation with a new Documented Safety Analysis (DSA) and associated Technical Safety Requirements (TSRs);
 - (b) Restart after an extended shutdown for a Hazard Category 1 or 2 nuclear facility, activity, or operation. (Extended shutdown for a Hazard Category 1 nuclear facility, activity, and operation is six months, unless, with PSO approval and CTA concurrence, this is adjusted up to a maximum of twelve months. For a hazard category 2 nuclear facility, activity, and operation an extended shutdown is 12 months);
 - (c) Startup or restart of a Hazard Category 1 or 2 nuclear facility, activity, or operation after substantial process, system, or facility modification. Local site implementing procedures must provided a process for determining whether a modification is substantial, based on the impact of the changes in the safety basis, equipment, operating procedures, training, or staffing, and the extent and complexity of these changes, whether or not these changes resulted in a positive Unreviewed Safety Question (USQ) determination; or,
 - (d) Any situation deemed appropriate by DOE line management.
- b. Determining the Startup Authorization Authority (SAA). For nuclear facility, activity, or operation startup or restart actions, the SAA must be determined using the following criteria:
- (1) For initial startup of a newly constructed Hazard Category 1 or 2 nuclear facility (not activity or operation) with a new DSA and associated TSRs, the Secretary of Energy (or designee) must approve startup. For initial startup of a newly constructed Hazard Category 3 nuclear facility (not activity or operation) with a new DSA and associated TSRs, the Cognizant Secretarial Officer (CSO) (or designee) must approve startup. If other DOE Orders require a higher level of startup authorization than this Order, the official described in this Order will recommend startup to the higher-level official. For initial startup of a newly constructed Hazard Category 1, 2, or 3 nuclear activity or operation with a new DSA and associated TSRs, approval to start must be granted by an official of a level commensurate with the DSA Approval Authority.

- (2) For initial startup after conversion of an existing facility to a Hazard Category 1 or 2 nuclear facility with a new DSA and associated TSRs, the Secretary of Energy (or designee) must approve startup. For initial startup after conversion of an existing facility to a new Hazard Category 3 nuclear facility with a new DSA and associated TSRs, the CSO (or designee) must approve startup. If other DOE Orders require a higher level of startup authorization than this Order, the official described in this Order will recommend startup to the higher-level official.
- (3) For restart of a nuclear facility, activity, or operation that has upgraded its Hazard Categorization to Hazard Category 1 or 2, the Secretary of Energy (or designee) must approve startup. For the restart of a nuclear facility, activity, or operation that has upgraded its Hazard Categorization to Hazard Category 3, the CSO (or designee) must approve restart.
- (4) For a shutdown directed by a DOE management official for safety reasons, approval to restart must be granted by an official of a level commensurate with the official ordering the shutdown, unless a higher level is designated by the CSO.
- (5) For a shutdown following violation of a Safety Limit, approval to restart must be granted by an official of a level commensurate with the Approval Authority for the Safety Limit. If the Safety Limit was approved by a Headquarters official, the CSO (or designee) must approve restart. If the Safety Limit was approved by a field official, the field element manager (or designee) must approve restart.
- (6) For an extended shutdown of a Hazard Category 1 nuclear facility, activity, or operation, the CSO must approve restart. For an extended shutdown of a Hazard Category 2 nuclear facility, activity, or operation, the CSO (or designee) must approve restart.
- (7) For a shutdown because of substantial process, system, or facility modifications to a Hazard Category 1 nuclear facility, activity, or operation, the CSO (or designee) must approve restart. For a shutdown because of substantial process, system, or facility modifications to a Hazard Category 2 nuclear facility, activity, or operation, the CSO (or designee) must approve restart.
- (8) For startup or restart of a nuclear facility, activity, or operation for which Readiness Reviews were required because a DOE official deemed it appropriate, the official approving startup or restart must be at a level commensurate with the official directing the review be conducted.

- (9) In all other cases, as specified in the approved Startup Notification Report (SNR). The SAA may be a senior contractor official if so designated in the SNR.

c. Startup Notification Report. DOE line management procedures concerning the SNR prepared by the contractor in accordance with Attachment 1 must address the following:

- (1) DOE line management must ensure that SNRs are submitted quarterly or on a periodicity as defined by the PSO.
- (2) DOE line management must ensure that SNRs project ahead at least one year, update information from previously approved SNRs for startups and restarts that have not yet occurred, and add information for each startup or restart that has been identified since the last approved SNR.
- (3) DOE line management must ensure that every startup or restart determined to require a Readiness Review is included in the SNR.
- (4) Each SNR must be reviewed and approved by DOE field element management. When the SNR includes activities for which the startup authorization authority resides at headquarters the field element management must approve or reject the activities on the SNR for which the field element is the SAA and must comment and make a recommendation regarding approval for those activities requiring headquarters approval.
- (5) Each SNR, including field element approval and/or recommendations, must be forwarded to the PSO, the site Lead PSO or CSO, as appropriate, the appropriate Central Technical Authority (CTA), and the Office of Health, Safety, and Security (HSS) for information.
- (6) Contractor and DOE Readiness Reviews must not commence until DOE has approved the SNR.

d. Requirements Applicable to DOE Operational Readiness Reviews.

- (1) DOE line management must develop a plan of action (POA), which describes the scope of the ORR. The POA must provide a clear discussion of the physical or geographic scope of the ORR and a clear description of the structures, systems, and components (SSCs), individual processes, and programs that are within the scope of the ORR. The POA must also designate the proposed ORR team leader.
 - (a) All core requirements identified in section 4.f, below, must be addressed when developing the breadth of the ORR. The POA may also define the depth or tailoring for each core requirement to more fully describe the total required scope of the ORR.

- (b) In order to justify not performing evaluation of a core requirement, or portion thereof, the POA must reference a timely, independent review that addressed a core requirement in a technically satisfactory manner, provided the review being referenced determined the requirements were successfully implemented.
 - (c) The POA must include the prerequisites for starting the DOE ORR. The prerequisites must define measurable actions or deliverables for each DOE specific core requirement that is to be reviewed in the ORR. Prerequisites must also address DOE oversight of contractor preparations and DOE readiness to oversee contractor operations within the scope of the ORR.
 - (d) DOE line management must forward the DOE POA to the SAA. DOE line management must also forward the DOE POA to the PSO, the site Lead PSO or CSO, as appropriate, the appropriate CTA, and HSS for information.
 - (e) The DOE POA must be approved by the SAA prior to the start of the review. The SAA provides the POA to the designated team leader.
- (2) The ORR team leader must select the DOE ORR team members.
- (a) Team members must meet the following qualification and training requirements:
 - 1 Technical knowledge of the area assigned for evaluation, including experience working in the technical area;
 - 2 Knowledge of performance-based assessment processes and methods; and
 - 3 Knowledge of facility, activity, or operation-specific information.
 - (b) The ORR team must not include as senior members (i.e., team leader, subteam leader, senior advisor) individuals from offices that are assigned direct line management responsibility for the work being reviewed. Any exceptions require SAA approval.

Additionally, an ORR team member must not review work for which he or she is directly responsible.

- (c) The ORR team leader must determine and document the qualifications of the team members and their freedom from a conflict of interest in the areas they are assigned to review.
- (d) DOE line management must support the DOE ORR team leader in staffing the DOE ORR team.

Note: DOE-HDBK-3012, *Guide to Good Practices for Operational Readiness Reviews, Team Leader's Guide*, provides information useful to team leaders in preparing for and conducting Readiness Reviews.

- (3) The ORR team must develop an ORR Implementation Plan (IP). The ORR IP documents the evaluation criteria and the review approaches based on the scope defined in the ORR POA. The ORR team leader approves the ORR IP.
- (4) DOE line management must forward the DOE IP to the SAA, site Lead PSO or CSO, as appropriate, the appropriate CTA, and HSS for information.
- (5) Prior to starting the ORR:
 - (a) DOE line management has received a Readiness to Proceed Memorandum from the responsible contractor certifying that the facility, activity, or operation is ready for startup or restart and this has been verified by the contractor ORR.
 - (b) DOE line management must verify that the contractor's preparations for startup or restart have been completed with the exception of a manageable list of open pre start issues. The pre start issues must have a well-defined schedule for closure to allow the DOE ORR team to review the closure process.
 - (c) DOE line management must verify that the DOE ORR POA prerequisites have been met.
 - (d) In the verification process, DOE Field Element line management must document their actions to verify Field Element and contractor readiness, including:
 - 1 Review of closure of the contractor's ORR findings,
 - 2 Assessment of completion of defined prerequisites; and
 - 3 Other assessments performed to ascertain readiness.

- (6) Specific events significant to the startup and restart process that occur prior to the formal commencement of the DOE ORR; e.g., site emergency response drills, may be reviewed by the DOE ORR team at the time they are conducted.
- (7) Upon direction of the SAA, the ORR may commence. The ORR team must use the IP to conduct the ORR.
- (8) Upon completion of the DOE ORR, the DOE ORR team leader, with support from individual team members, must prepare, approve, and submit a final report to the SAA.
 - (a) The final report must document the results of the ORR and make a conclusion as to whether startup or restart of the nuclear facility, activity, or operation can proceed safely. The ORR final report must state whether the contractor has established the following:
 - 1 An agreed-upon set of requirements to govern safe operations of the facility, activity, or operation;
 - 2 That this set of requirements has been formalized with DOE through the contract or other enforceable mechanism;
 - 3 That these requirements have been appropriately implemented in the facility, activity or operation, or appropriate compensatory measures, formally approved by DOE, are in place during the period prior to full implementation; and that,
 - 4 In the opinion of the DOE ORR team, adequate protection of the public health and safety, worker safety, and the environment will be maintained.

The final report must be of adequate detail to support its conclusion, such that a knowledgeable reader would reasonably be expected to draw the same conclusions.

- (b) The final report should include a statement regarding the team leader's assessment of the adequacy of the implementation of the core functions and guiding principles of Integrated Safety Management (ISM) at the facility undergoing the review.
- (c) There must be a lessons learned section of the final report that may relate to design, construction, operation, and decommissioning of similar facilities, activities or operations and to help guide future Readiness Review efforts.

- (d) The team leader must approve the final report, and each team member must approve the section of the final report for which he or she was responsible. There will be a provision for dissenting professional opinions if agreement cannot be achieved.
- (9) The final report must be submitted to the SAA as a basis for approving the startup or restart of the nuclear facility, activity, or operation. A copy of the final report must be forwarded to the PSO, the site Lead PSO or CSO, as appropriate, the appropriate CTA, and HSS for information.
- (10) Closure of DOE ORR findings must include:
 - (a) Development of corrective action plans approved by DOE to correct the findings. Action plans must provide evaluation of, and address, any overall programmatic deficiencies and causes.
 - (b) Creation of a finding closure package which must include a brief description of actual corrective actions taken, evidence of completion, and reasons for concluding that closure has been achieved.
 - (c) DOE verification of closure of prestart findings. The organization verifying the closure must be designated by the SAA.
- (11) DOE line management must ensure that the contractor and DOE have satisfactorily resolved all prestart findings of the DOE and contractor ORRs prior to startup or restart of the facility, activity, or operation. The SAA may approve startup or restart after prestart findings are resolved.

e. Requirements Applicable to DOE Readiness Assessments.

The requirements for performing readiness assessments as described below maybe tailored with approval of the PSO and concurrence from the CTA.

- (1) The DOE RA must use a graded approach to the tenets of ORR requirements specified in this Order. An RA may be as short and simple as a checklist, or may approach the breadth and depth of an ORR, depending on the causes and duration of the shutdown and the modifications accomplished during the shutdown. In view of the flexibility to fit the rigor of the RA to the circumstances of the startup/restart situation, DOE must not develop readiness review processes similar to RAs but called something different.
- (2) DOE line management must develop a POA, which describes the scope of the RA. The POA must provide a clear discussion of the physical or geographic scope of the RA and a clear definition of the SSCs, individual processes, and programs that are within the scope of the RA. The POA must also designate the proposed RA team leader.

- (a) All core requirements identified in section 4.f, below, must be evaluated for applicability for inclusion in the scope of the RA. The POA for the RA must provide a basis for justifying the exclusion of any core requirement that will not be assessed during the RA. The level of detail provided in the justification should be commensurate with the complexity of the review and of the operation, such that a knowledgeable reader would reasonably be expected to draw the same conclusions. The POA may also discuss the depth or tailoring for each core requirement to more fully describe the total required scope of the RA. The development of the scope must be based, in part, on the status of and changes to the facility, operating procedures, safety basis documents, hazards, operational conditions, and personnel.
 - (b) The POA for the DOE RA must include the prerequisites for starting the DOE RA. Prerequisites define measurable actions or deliverables that, when completed, provide assurance that readiness has been achieved for each DOE specific core requirement that is to be reviewed in the RA. Prerequisites must also address DOE oversight of contractor preparations and DOE's readiness to oversee contractor operations within the scope of the RA.
 - (c) DOE line management must forward the DOE POA to the SAA, DOE line management must also forward the DOE POA to the PSO, the site Lead PSO or CSO, as appropriate, the appropriate CTA, and HSS for information.
 - (d) The DOE POA must be approved by the SAA prior to the start of the review. The SAA provides the POA to the designated team Leader.
- (3) The RA team leader must select the DOE RA team members.
- (a) Team members must meet the following qualification and training requirements:
 - 1 Technical knowledge of the area assigned for evaluation, including experience working in the technical area;
 - 2 Knowledge of performance-based assessment processes and methods; and

3 Knowledge of facility, activity, or operation-specific information.

- (b) An RA team member must not review work for which she or he is directly responsible.
- (c) The RA team leader must determine and document the qualification of RA team members and their freedom from a conflict of interest in the areas they are assigned to review.
- (d) DOE line management must support the DOE RA team leader in staffing the DOE RA team.

NOTE: DOE-HDBK-3012, *Guide to Good Practices for Operational Readiness Reviews, Team Leader's Guide*, provides information useful to team leaders in preparing for and conducting Readiness Reviews.

- (4) The DOE RA team must develop an RA IP. The DOE RA IP documents the evaluation criteria and the review approaches based on the scope given in the DOE RA POA. The DOE RA team leader approves the RA IP. A DOE RA IP that is developed by the DOE RA team and approved by the team leader may be as short and simple as a restart check procedure, or may approach the breadth and depth of an ORR IP. The IP must include the full RA scope defined in the DOE POA.
- (5) DOE line management must forward the DOE RA IP to the SAA, cognizant PSO, the site Lead PSO or CSO, as appropriate, the appropriate CTA, and HSS for information.
- (6) Prior to starting the DOE RA:
 - (a) DOE line management has received a Readiness to Proceed Memorandum from the responsible contractor certifying that the facility, activity, or operation is ready for startup or restart.
 - (b) DOE line management must verify that the contractor's preparations for startup or restart have been completed with the exception of a manageable list of open prestart issues. The prestart issues must have a well-defined schedule for closure to allow the DOE RA team to review the closure process.
 - (c) DOE line management must verify that the DOE RA Plan of Action prerequisites have been met.
 - (d) In the verification process, DOE field element line management must document their actions to verify field element and contractor readiness, including;

- 1 Review of the closure of the contractor's RA findings,
 - 2 Assessment of completion of defined prerequisites, and
 - 3 Other assessments performed to ascertain readiness.
 - (7) Specific events significant to the startup and restart process that occur prior to the formal commencement of the DOE RA; e.g., site emergency response drills, may be reviewed by the DOE RA team at the time they are conducted.
 - (8) Upon direction of the SAA, the RA may commence. The RA team must use the IP to conduct the RA.
 - (9) Upon completion of the DOE RA, the DOE RA team leader must prepare, approve, and submit a final report to the SAA. The final report is approved by the team leader and each team member approves the section of the final report for which he or she was responsible. There will be a provision for dissenting professional opinions if agreement cannot be achieved.
 - (a) The final report must document the results of the RA and make a conclusion as to whether startup or restart of the nuclear facility, activity, or operation can proceed safely. The final report must be adequately detailed to support its conclusion, such that a knowledgeable reader would reasonably be expected to draw the same conclusions.
 - (b) There must be a lessons learned section of the final report that may relate to design, construction, operation, and decommissioning of similar facilities, activities, or operations and future Readiness Review efforts.
 - (10) The final report must be submitted to the SAA to be used as a basis for approving the startup or restart of the nuclear facility, activity, or operation. A copy of the final RA report must be forwarded to the PSO, the site Lead PSO or CSO, as appropriate, the appropriate CTA, and HSS for information.
 - (11) Closure of DOE RA findings must include:
 - (a) Development of corrective action plans approved by DOE to correct the findings. Action plans must provide evaluation of, and address any overall programmatic deficiencies and causes.
 - (b) Creation of a finding closure package which must include a brief description of actual corrective actions taken, evidence of completion, and reasons for concluding that closure has been achieved.
-

- (c) DOE verification of closure of prestart findings. The organization verifying the closure must be designated by the SAA.
- (12) DOE line management must ensure that the contractor and DOE have satisfactorily resolved all prestart findings of the contractor and DOE RAs prior to startup or restart of the facility, activity, or operation. The SAA may approve startup or restart after prestart findings are resolved.
- f. Core Requirements. Core requirements verify the readiness of personnel, procedures, programs, and equipment within the scope of the Readiness Review to safely start nuclear operations. These core requirements are directly related to the seven guiding principles of ISM.
- (1) Line management has established Safety Management Programs (SMPs) to ensure safe accomplishment of work:
- (a) Contract requirements for the SMPs have been flowed down into facility-specific procedures;
 - (b) SMP implementing procedures have been effectively implemented in support of the facility;
 - (c) A sufficient number of qualified personnel is available to effectively implement the SMPs in support of the facility; and
 - (d) Adequate facilities and equipment are available to ensure that SMP support and services are adequate for safe facility operation.

The following SMPs are identified in 10 CFR Section 830.204,
Documented Safety Analysis:

- Quality Assurance Programs
- Procedures Management
- Maintenance Management
- Personnel Training Program
- Conduct of Operations
- Emergency Preparedness
- Fire Protection Program
- Waste Management Program
- Radiation Protection
- Criticality Safety Program

The SAA should designate and approve via the POA those specific SMPs to be included in the breadth of the readiness review and should specify the scope of the desired review of each designated SMP. Additional support programs may be specified in the POA if required to ensure safety of nuclear operations.

- (2) Functions, assignments, responsibilities, and reporting relationships, including those between the line operating organization and environment, safety and health support organizations, are clearly defined, understood, and effectively implemented, with line management responsibility for control of safety.
- (3) The selection, training, and qualification programs for operations and operations support personnel have been established, documented, and effectively implemented.

Training and qualification requirements for each position encompass the range of assigned duties and activities.

The selection process and applicable position-specific training for managers ensures competence commensurate with their responsibilities.

Modifications to the facility have been reviewed for potential impacts on training and qualification. Training has been performed to incorporate all aspects of these changes.

- (4) Level of knowledge of managers, operations, and operations support personnel is adequate based on reviews of examinations and examination results, selected interviews of managers, operations, and operations support personnel, and observations of operational demonstrations.
- (5) Personnel exhibit an awareness of public and worker safety and health and environmental protection requirements and, through their actions, demonstrate a high-priority commitment to comply with these requirements. Worker safety and health requirements of 10 CFR Part 851, *Worker Safety and Health Program*, have been implemented within the facility.
- (6) Facility safety documentation (normally DSA and TSRs) is in place that describes the "safety envelope" of the facility.

- (a) The safety documentation characterizes the hazards/risks associated with the facility and identifies preventive and mitigating measures (systems, procedures, administrative controls, etc.) that protect workers and the public from those hazards/risks.
 - (b) Facility safety documentation is approved and has been implemented.
 - (c) Implementation of facility safety documentation has been verified and is current.
 - (d) SSCs are defined.
 - (e) A system to maintain control over facility design with emphasis on Vital Safety Systems (VSS) is established.
 - (f) Procedures for maintaining the safety documentation have been adequately defined and implemented and provide for required updates.
 - (g) A DOE-approved USQ procedure has been effectively implemented.
- (7) A program is in place to confirm and periodically reconfirm the condition and operability of VSS. This includes examinations of records of tests and calibration of these systems.
- The material condition of all safety, process, and utility systems is adequate to support the safe conduct of work.
- (8) The facility systems and procedures, as affected by facility modifications, are consistent with the description of the facility, procedures, and accident analysis and assumptions included in the safety documentation.
- A formal program is defined and implemented to control facility modifications. Authorized modifications within the scope of the Readiness Review have been completed and fully closed, or evaluated and determined not to affect the ability to safely start nuclear operations.
- (9) Adequate and accurate procedures and safety limits are approved and in place for operating the process systems and utility systems. The procedures include necessary revisions for all modifications that have been made to the facility. Facility processes ensure that only the most current revision to each procedure is in use.
- (10) A routine operations drill program and an emergency management drill and exercise program have been established and implemented. Records for each program are adequate to demonstrate the effectiveness of completed drills and exercises as well as planning for future drills and exercises.

- (11) An adequate startup or restart program has been developed that includes plans for graded operations and testing after startup or resumption to simultaneously confirm operability of equipment, the viability of procedures, and the performance and knowledge of the operators.

The plans should indicate validation processes for equipment, procedures, and operators after startup or resumption of operations, including any required restrictions and additional oversight.

Any compensatory measures required during the approach to full operations are described.

- (12) The formality and discipline of operations are adequate to conduct work safely, and programs are in place to maintain this formality and discipline (e.g., DOE O 5480.19, *Conduct of Operations Requirements for DOE Facilities*).

Sufficient numbers of qualified personnel are available to conduct operations.

- (13) Formal agreements between the operating contractor and DOE have been established via the contract or other enforceable mechanism to govern safe facility operations.

A systematic review of the facility's conformance to these requirements has been performed.

These requirements have been implemented in the facility, or compensatory measures are in place during the period of implementation. The compensatory measures and the implementation period are approved by DOE.

- (14) An effective feedback and improvement process (i.e., Contractor Assurance System) has been established to identify, evaluate, and resolve deficiencies and recommendations made by contractor line management and independent contractor audit and assessment groups. The process also provides for resolution of issues and recommendations by external official review teams and audit organizations. (e.g., DOE O 226.1A, *Implementation of Department of Energy Oversight Policy*, dated 7-31-07)

- (15) The breadth, depth, and results of the responsible contractor Readiness Review, including corrective actions, is adequate to verify the readiness of hardware, personnel, and management programs to support nuclear operations. The Readiness Review scope met the requirements of the approved POA.

- (16) The technical and managerial qualifications and competence of those personnel at the DOE field element and at DOE Headquarters assigned responsibilities for providing direction and guidance to the contractor, and those assigned oversight responsibilities within the scope of the Readiness Review, including the facility representatives, are commensurate with the assigned responsibilities.
- (17) DOE field element management systems for DOE oversight of facility operations, such as oversight and assessment programs, occurrence reporting, facility representatives, corrective actions, and quality assurance programs, are adequate.

g. DOE Field Element Line Management Oversight of the Process for Verifying Readiness to Start Up or Restart Nuclear Facilities.

- (1) DOE field element line management must review and concur with contractor procedures for implementing the requirements of the CRD. Forward contractor's procedures, for implementing the requirements of the CRD with comment to the appropriate PSO and CTA as well as HSS.
- (2) DOE field element line management must ensure that the contractor properly implements the requirements of the CRD of this Order. Key elements of an oversight program include:
 - (a) Ensuring that the contractor prepares and submits quarterly SNRs that accurately reflect all Readiness Reviews required for startup or restart of nuclear facilities, activities, or operations.
 - (b) Ensuring that the contractor develops a POA that adequately defines the scope of the Readiness Review appropriate for the circumstances associated with the startup or restart.
 - (c) Ensuring that the contractor POA appropriately specifies the prerequisites for starting the contractor's Readiness Review.
 - (d) Evaluating the adequacy of the qualifications of contractor Readiness Review team members.
 - (e) When SAA resides with DOE, review and approve the contractor's POA. If SAA does not reside with field element line management, forward the contractor's POA onto the SAA with recommendation for disposition.

- (f) Evaluating the adequacy of the contractor Readiness Review.
- (g) Evaluating that the contractor Readiness Review final report adequately describes the review and contains sufficient detail to support its conclusion.
- (h) Ensuring the contractor and DOE have satisfactorily resolved all prestart findings of the contractor and DOE Readiness Reviews (if applicable) prior to startup or restart of the facility, activity, or operation.
- (i) When applicable, forward, with comment, the contractor's Readiness to Proceed Memorandum to the SAA.
- (j) Ensuring that the contractor and DOE have developed and implemented approved corrective action plans for post-start findings.

h. DOE Headquarters Line Management Oversight of the DOE Field Process for Verifying Readiness to Startup and Restart Nuclear Facilities.

DOE Headquarters line management must oversee DOE field processes for verifying readiness to startup and restart nuclear facilities in accordance with DOE O 226.1A, *Implementation of Department of Energy Oversight Policy*, and DOE-STD-3006, *Planning and Conducting Readiness Reviews*.

i. Records Management Program. Requirements for maintenance and disposition of Federal records, such as those pertaining to ORRs or RAs, are provided under the general guidance of DOE O 243.1, *Records Management Program*. The disposition, including destruction, of Federal records must be in accordance with:

- (1) the General Records Schedules, as published by the National Archives and Records Administration (NARA) or
- (2) DOE records disposition authority (Standard Form 115, *Request for Records Disposition Authority*), as approved by NARA.

Consult the cognizant field element records officer for guidance.

j. Implementation. Implementation of this Order for DOE Line management must be completed in 180 days from the issuance of the Order, unless a different schedule is approved by the PSO with concurrence of the CTA. Those previously identified and defined readiness activities scheduled to be completed within one year of the issuance of the Order must be subject to the former version of the Order unless approved otherwise by the PSO with concurrence of the CTA.

5. RESPONSIBILITIES.

a. DOE and NNSA Line Management.

- (1) Establish procedures as necessary to manage the verification of readiness to start up or restart nuclear facilities, activities, or operations in accordance with the requirements of this Order. Forward procedures to the appropriate PSO and CTA as well as HSS for information.
- (2) Exercise delegation of authority and document all delegations of authority made under the provisions granted by this Order.

b. Office of Health, Safety and Security.

- (1) In coordination with the PSO, perform independent reviews of startup and restart activities as appropriate and provide results of these reviews to CSOs for information.
- (2) Review and comment, as appropriate, on the procedures developed by PSOs, field element offices, and contractors for verifying readiness to start up or restart nuclear facilities, activities, or operations, and provide the results of these reviews to CSOs for information.
- (3) Review and comment as appropriate on SNRs, contractor and DOE POAs, IPs, and ORR or RA final reports for verifying readiness to start up or restart nuclear facilities, activities, or operations, and provide the results of these reviews to CSOs for information.

6. REFERENCES.

- a. Title 10, Code of Federal Regulations (CFR), Part 830, Nuclear Safety Management.
- b. 10 CFR Part 851, Worker Safety and Health Program.
- c. 49CFR, Part 173, Subpart I, Class 7 (Radioactive Materials)
- d. *DOE O 226.1A*, Implementation of Department of Energy Oversight Policy, *dated 7-31-07*.
- e. DOE O 243.1, *Records Management Program*, dated 2-3-06.
- f. *DOE O 251.1C*, Departmental Directives Program, *dated 1-15-09*.
- g. *DOE O 5480.19*, Conduct of Operations Requirements for DOE Facilities, *dated 10-23-01*.

DOE O 425.1D
4-16-2010

- h. DOE Standard (STD) 3006-2010, Planning and Conducting Readiness Reviews.*
 - i. DOE-Handbook (HDBK) 3012, Guide to Good Practices for Operational Readiness Reviews, Team Leader's Guide.*
7. CONTACT. Questions concerning this Order should be referred to the Director, Office of Nuclear Safety Policy and Assistance, at 301-903-3331.

BY ORDER OF THE SECRETARY OF ENERGY



DANIEL B. PONEMAN
Deputy Secretary

CONTRACTOR REQUIREMENTS DOCUMENT

DOE O 425.1D, VERIFICATION OF READINESS TO START UP OR RESTART NUCLEAR FACILITIES

1. DEPARTMENT OF ENERGY (DOE) INCLUDING THE NATIONAL NUCLEAR SECURITY ADMINISTRATION (NNSA) CONTRACTOR RESPONSIBILITIES. This Contractor Requirements Document (CRD) applies to all nuclear facilities, activities, and operations classified as Hazard Categories 1, 2, or 3, including NNSA facilities, as defined in 10 CFR Part 830. Contractors must establish procedures to manage startup and restart actions in accordance with this CRD. Definitions of terms used in this CRD are found in the definition section of DOE STD 3006-2010.

Regardless of the performer of the work, the contractor is responsible for complying with the requirements of this Contractor Requirements Document (CRD) and flowing down CRD requirements to subcontractors at any tier to the extent necessary to ensure contractor compliance.

2. CONTRACTOR REQUIREMENTS. DOE Standard (STD) 3006-2010, *Planning and Conduct of Readiness Reviews*, provides guidance on approaches and methods approved as acceptable for implementing the requirements of this CRD. Other approaches and methods may be used provided they are documented, and approved by DOE Line Management as being in accordance with the requirements of this CRD.

Contractor line management must develop procedures to define the processes that will be used to implement the responsibilities of this CRD. These procedures must be submitted to DOE line management for concurrence. On-site transportation activities are subject to this order unless an alternate process is identified with PSO approval and CTA concurrence.

- a. Determining the Level of Readiness Review. Contractor line management must evaluate the need to perform a Readiness Review [Operational Readiness Review (ORR) or Readiness Assessment (RA)] prior to the startup and restart of Hazard Category 1, 2, and 3 nuclear facilities, activities, or operations.
 - (1) Contractor line management must ensure that a properly scoped Readiness Review is planned and conducted to verify readiness for the startup and restart of Hazard Category 1, 2, and 3 nuclear facilities, activities, or operations, unless both of the following conditions are met:
 - (a) The restart is a resumption of routine operations after a shortinterruption (such as maintenance activities governed by existing maintenance procedures and processes) as defined in local procedures. (Note: 'short' may be defined as up to 6 months for Hazard Category 1 facilities, activities, or operations unless with PSO approval and CTA concurrence, this may be adjusted up to a maximum of twelve months. 'Short' may be defined as up to 12 months for Hazard Category 2 facilities, activities, or operations); and

- (b) The restart is conducted using contractor-approved operating procedures that provide specific direction for operating systems and equipment during normal conditions.
- (2) An ORR must be conducted for any of the following:
- (a) The initial startup of a newly constructed nuclear facility. For the purpose of this criterion, a newly constructed nuclear facility refers to a new facility (not operation or activity) with a new Documented Safety Analysis (DSA) and associated Technical Safety Requirements (TSRs);
 - (b) Initial startup after conversion of an existing facility to a new nuclear mission with a new DSA and associated TSRs;
 - (c) The restart of a nuclear facility, activity, or operation that has upgraded its hazard categorization to Hazard Category 1, 2, or 3;
 - (d) Restart after a DOE management official directs the shutdown of a nuclear facility, activity, or operation for safety reasons;
 - (e) Restart of a nuclear facility, activity, or operation after violation of a Safety Limit, as defined in 10 CFR Section 830.3, *Definitions*; or
 - (f) Any situation deemed appropriate by DOE or contractor line management officials.
- (3) An RA must be conducted for startup or restart of a Hazard Category 1, 2, or 3 nuclear facility, activity, or operation except as discussed in paragraphs (1) and (2) above, or when deemed appropriate by DOE or contractor line management officials.
- b. Determining the SAA. For nuclear facility, activity, or operation startup or restart actions, the SAA must be determined using the following criteria:
- (1) For initial startup of a newly constructed Hazard Category 1 or 2 nuclear facility [not activity or operation] with a new DSA and associated TSRs, the Secretary of Energy (or designee) must approve startup. For initial startup of a newly constructed Hazard Category 3 nuclear facility [not activity or operation] with a new DSA and associated TSRs, the Cognizant Secretarial Officer (CSO) (or designee) must approve startup. If CRDs to other DOE directives require a higher level of startup authorization than this CRD, the official described in this CRD will recommend startup to the higher-level official. For initial startup of a newly constructed Hazard Category 1, 2, or 3 nuclear activity or operation with a new DSA and associated TSRs, approval to start must be granted by an official of a level commensurate with the DSA Approval Authority.

- (2) For initial startup after conversion of an existing nuclear facility to a new Hazard Category 1 or 2 nuclear facility with a new DSA and associated TSRs, the Secretary of Energy (or designee) must approve startup. For initial startup after conversion of an existing facility to a new Hazard Category 3 nuclear facility with a new DSA and associated TSRs, the CSO (or designee) must approve startup. If CRDs to other DOE directives require a higher level of startup authorization than this CRD, the official described in this CRD will recommend startup to the higher-level official.
- (3) For restart of a nuclear facility, activity, or operation that has upgraded its hazard categorization to Hazard Category 1 or 2, the Secretary of Energy (or designee) must approve startup. For the restart of a nuclear facility, activity, and operation that has upgraded its hazard categorization to Hazard Category 3, the CSO (or designee) must approve restart.
- (4) For a shutdown directed by a DOE management official for safety reasons, approval to restart must be granted by an official of a level commensurate with the official ordering the shutdown, unless a higher level is designated by the CSO.
- (5) For a shutdown following a violation of a Safety Limit, approval to restart must be granted by an official of a level commensurate with the Approval Authority for the Safety Limit. If the Safety Limit was approved by a Headquarters official, the CSO (or designee) must approve restart. If the Safety Limit was approved by a field official, the field element manager (or designee) must approve restart.
- (6) For an extended shutdown of a Hazard Category 1 nuclear facility, activity, or operation, the CSO (or designee) must approve restart. For an extended shutdown of a Hazard Category 2 nuclear facility, activity, or operation, the CSO (or designee) must approve restart.
- (7) For a shutdown because of substantial process, system, or facility modifications to a Hazard Category 1 nuclear facility, activity, or operation, the CSO must approve restart. For a shutdown because of substantial process, system, or facility modifications to Hazard Category 2 nuclear facility, activity, or operation, the CSO (or designee) must approve restart.
- (8) For startup or restart of a nuclear facility, activity, or operation for which Readiness Reviews were required because a DOE official deemed it appropriate, the official approving startup or restart must be of a level commensurate with the official directing the review be conducted.

- (9) In all other cases as specified in the approved Startup Notification Report (SNR). The SAA may be a senior contractor official if so designated in the SNR.

c. Startup Notification Report. Contractor procedures must provide for SNRs.

- (1) SNRs must be submitted to DOE quarterly or on a periodicity as defined by the PSO.
- (2) SNRs must project ahead at least one year, updating information from previously approved SNRs for startups and restarts that have not yet occurred, and adding information for each startup or restart that has been identified since the last approved SNR.
- (3) The SNR is to be forwarded to DOE line management for approval.
- (4) Information to be included in the SNR for each startup or restart must be accurate and adequate to fully support the recommended actions and permit an informed decision by DOE. The SNR must include, at a minimum:
 - (a) A brief description of the facility or program work including Hazard Categorization, to be started or restarted;
 - (b) The reason for non-operation (e.g., maintenance or modification outage, no program work, new facility, shutdown for safety concerns, etc);
 - (c) The approximate date that operations were last conducted (for restarts) and the projected date for the startup;
 - (d) The proposed type of readiness review, including whether a DOE Readiness Review is required;
 - (e) The basis or justification for the proposed type of Readiness Review;
 - (f) The proposed SAA; and
 - (g) The projected date for the submittal of the associated Plan of Action (POA).
- (5) Contractor Readiness Reviews must not commence until the SNR and POA have been approved.

- (6) Every startup or restart determined to require a Readiness Review must be included in the SNR. Readiness for these startups and restarts must be verified using an ORR or properly scoped RA as appropriate. Contractor routine procedures must not be developed for the purpose of avoiding a properly scoped RA.

d. Requirements Applicable to Operational Readiness Reviews.

- (1) Contractor line management must develop a POA, which describes the scope of the ORR. The POA must provide a clear discussion of the physical or geographic scope of the ORR and a clear description of the structures, systems, and components (SSCs), individual processes, and programs that are within the scope of the ORR. The POA must also designate the proposed ORR team leader.
 - (a) All core requirements identified in section 2.f, below, must be addressed when developing the breadth of the ORR. The POA may also define the depth or tailoring for each core requirement to more fully describe the total required scope of the ORR.
 - (b) In order to justify not performing evaluation of a core requirement, or portion thereof, the POA must reference a timely, independent review that addressed a core requirement in a technically satisfactory manner provided the review being referenced determined the requirements were successfully implemented.
 - (c) The POA must include the prerequisites for starting the ORR. The prerequisites must define measurable actions or deliverables that, when completed, provide assurance that readiness has been achieved for each core requirement of paragraph 2.f determined to be applicable when developing the scope of the ORR.
 - (d) Contractor line management must forward the POA to local DOE line management.
 - (e) The POA must be approved by the SAA.
- (2) The ORR team leader must select the ORR team members.
 - (a) Team members must meet the following qualification and training requirements:
 - 1 Technical knowledge of the area assigned for evaluation, including experience working in the technical area;
 - 2 Knowledge of performance-based assessment processes and methods; and

3 Knowledge of facility, activity, or operation-specific information.

- (b) The ORR team must not include as senior members (i.e., team leader, sub-team leader, senior advisor) individuals from organizations that are assigned direct line management responsibility for the work being reviewed. Any exceptions require SAA approval. Additionally, an ORR team member must not review work for which he or she is directly responsible.
- (c) The ORR team leader must determine and document the qualifications of ORR team members and their freedom from a conflict of interest in the areas they are assigned to review.
- (d) Contractor line management must support the ORR team leader in staffing the ORR team.

Note: DOE-HDBK-3012, *Guide to Good Practices for Operational Readiness Reviews, Team Leader's Guide*, provides information useful to team leaders in preparing for and conducting Readiness Reviews.

- (3) The ORR team must develop an ORR Implementation Plan (IP). The ORR IP documents the evaluation criteria and the review approaches based on the scope defined in the ORR POA. The ORR team leader approves the ORR IP.
- (4) Contractor line management must forward the ORR IP to local DOE line management for information.
- (5) Prior to starting the ORR:
 - (a) Contractor line management has received a formal written Readiness to Proceed Memorandum certifying that the facility, activity or operation is ready for startup or restart.
 - (b) Contractor line management has verified that the preparations for startup or restart have been completed with the exception of a manageable list of open prestart issues. The prestart issues must have a well-defined schedule for closure to allow the ORR team to review the closure process.
 - (c) Contractor line management has verified that the ORR POA prerequisites are met.
- (6) Specific events significant to the startup and restart process that occur prior to the formal commencement of the ORR; e.g., site emergency response drills, may be reviewed by the ORR team at the time they are conducted.

- (7) Upon direction of contractor line management, the ORR may commence. The ORR team must use the IP to conduct the ORR.
- (8) Upon completion of the ORR, the ORR team leader, with support from the team members, must prepare, approve, and submit a final report.
 - (a) The final report must document the results of the ORR and make a conclusion as to whether startup or restart of the nuclear facility, activity, or operation can proceed safely. The ORR final report must state whether facility management has established the following:
 - 1 An agreed-upon set of requirements to govern safe operations of the facility, activity, or operation;
 - 2 That this set of requirements has been formalized with DOE through the contract or other enforceable mechanism;
 - 3 That these requirements have been appropriately implemented in the facility, activity or operation, or appropriate compensatory measures, formally approved by DOE, are in place during the period prior to full implementation; and that,
 - 4 In the opinion of the ORR team, adequate protection of the public health and safety, worker safety, and the environment has been maintained.

The final report must be of adequate detail to support its conclusion, such that a knowledgeable reader would reasonably be expected to draw the same conclusions.

- (b) The final report should include a statement regarding the team leader's assessment of the adequacy of the implementation of the core functions and guiding principles of Integrated Safety Management (ISM) at the facility undergoing the review.
- (c) There must be a lessons learned section of the final report that may relate to design, construction, operation, and decommissioning of similar facilities, activities or operations and to help guide future Readiness Review efforts.
- (d) The team leader must approve the final report, and each team member must approve the section of the final report for which he or she was responsible. There will be a provision for dissenting professional opinions if agreement cannot be achieved.

- (9) A copy of the final ORR report must be forwarded to cognizant contractor and DOE line management.
- (10) The closure of ORR findings must include:
 - (a) Development of corrective action plans to correct the findings. Action plans must provide evaluation of, and address any overall programmatic deficiencies and causes.
 - (b) Creation of a finding closure package which must include a brief description of actual corrective actions taken, evidence of completion, and reasons for concluding that closure has been achieved.
- (11) Following completion of the contractor ORR, the contractor will prepare and forward to DOE Line Management a Readiness to Proceed Memorandum indicating that readiness to start up or restart nuclear operations has been achieved. A manageable list of open prestart issues may exist provided that the issues have a well-defined schedule for closure.
- (12) Contractor line management must satisfactorily resolve all prestart findings from the DOE and contractor ORRs prior to startup or restart of the facility, activity, or operation. The SAA may approve startup or restart after prestart findings are resolved.

e. Requirements Applicable to Readiness Assessments.

The requirements for performing readiness assessments as described below may be tailored with approval of the PSO and concurrence from the CTA.

- (1) The contractor RA must use a graded approach to the tenets of ORR requirements specified in this CRD. An RA may be as short and simple as a check list, or may approach the breadth and depth of an ORR, depending on the causes and duration of the shutdown and the modifications accomplished during the shutdown. In view of the flexibility to fit the rigor of the RA to the circumstances of the startup/restart situation, contractors must not develop readiness review processes similar to RAs but called something different.
- (2) Contractor line management must develop a POA, which describes the scope of the RA. The POA must provide a clear discussion of the physical or geographic scope of the RA and a clear description of the SSCs, individual processes, and programs that are within the scope of the RA. The POA must also designate the proposed RA team leader.

- (a) All core requirements identified in section 2.f, below, must be evaluated for applicability for inclusion in the scope of the RA. The POA for the RA must provide a basis for justifying the exclusion of any core requirement that will not be assessed during the RA. The level of detail provided in the justification should be commensurate with the complexity of the review and of the operation, such that a knowledgeable reader would reasonably be expected to draw the same conclusions. The POA may also discuss the depth or tailoring for each core requirement to more fully describe the total required scope of the RA. The development of the scope must be based, in part, on the status of and changes to the facility, operating procedures, safety basis documents, hazards, operational conditions, and personnel.
 - (b) The POA for the RA must include the prerequisites for starting the RA. Prerequisites define measurable actions or deliverables that, when completed, provide assurance that readiness has been achieved for each specific core requirement that is to be reviewed in the RA.
 - (c) Contractor line management must forward the RA POA to local DOE line management.
 - (d) The POA must be approved by the SAA.
- (3) The RA team leader must select the RA team members, if needed.
- (a) Team members must meet the following qualification and training requirements:
 - 1 Technical knowledge of the area assigned for evaluation, including experience working in the technical area;
 - 2 Knowledge of performance-based assessment processes and methods; and
 - 3 Knowledge of facility, activity, or operation-specific information.
 - (b) An RA team member must not review work for which she or he is directly responsible.

(c) The RA team leader must determine and document the qualification of RA team members and their freedom from a conflict of interest in the areas they are assigned to review.

(d) Contractor line management must support the RA team leader in staffing the RA team.

Note: DOE-HDBK-3012, *Guide to Good Practices for Operational Readiness Reviews, Team Leader's Guide*, provides information useful to team leaders in preparing for and conducting Readiness Reviews.

- (4) The RA team must develop an RA IP. The RA IP documents the evaluation criteria and the review approaches based on the scope given in the RA POA. The RA team leader approves the RA IP. An RA IP that is developed by the RA team and approved by the team leader may be as short and simple as a check list, or may approach the breadth and depth of an ORR IP. The IP must include the full RA scope defined in the POA.
- (5) Contractor line management must forward the RA IP to local DOE line management for information.
- (6) Prior to starting the contractor RA:
- (a) Contractor line management has issued a formal written Readiness to Proceed Memorandum certifying that the facility is ready for startup or restart.
- (b) Contractor line management must verify that the preparations for startup or restart have been completed with the exception of a manageable list of open prestart issues. The prestart issues must have a well-defined schedule for closure to allow the RA team to review the closure process.
- (c) Contractor line management must verify that the contractor RA POA prerequisites have been met.
- (7) Specific events significant to the startup and restart process that occur prior to the formal commencement of the RA; e.g., site emergency response drills, may be reviewed by the RA team at the time they are conducted.
- (8) Upon direction from contractor line management, the RA may commence. The RA team must use the IP to conduct the RA.
- (9) Upon completion of the RA, the RA team leader must prepare, and approve a final report. The final report is approved by the team leader and each team member approves the section of the final report for which he or she was responsible. There will be a provision for dissenting professional opinions if agreement cannot be achieved.

- (a) The final report must document the results of the RA and make a conclusion as to whether startup or restart of the nuclear facility, activity, or operation can proceed safely. The final report must be adequately detailed to support its conclusion, such that a knowledgeable and independent reader would reasonably be expected to draw the same conclusions.
 - (b) There must be a lessons learned section of the final report that may relate to design, construction, operation, and decommissioning of similar facilities, activities or operations and to help guide future Readiness Review efforts.
- (10) For cases where startup or restart authority rests with the contractor, the RA team leader must submit the final RA report to the SAA. Where startup or restart authority rests with DOE, the RA team leader must submit the final RA report to contractor line management.
- (11) A copy of the final RA report must be forwarded to local DOE line management.
- (12) Closure of RA findings must include:
- (a) Development of corrective action plans to correct the findings. Action plans must provide evaluation of, and address any overall programmatic deficiencies and causes.
 - (b) Creation of a finding closure package which must include a brief description of actual corrective actions taken, evidence of completion, and reasons for concluding that closure has been achieved.
- (13) Following completion of the contractor RA, if the DOE is the SAA, the contractor will prepare and forward to DOE a Readiness to Proceed Memorandum indicating that readiness to start nuclear operations has been achieved. A manageable list of open prestart issues may exist provided they have a well-defined schedule for closure.
- (14) Contractor line management must satisfactorily resolve all contractor prestart findings prior to startup or restart of the facility, activity, or operation. The SAA may approve startup or restart after prestart findings are resolved.
- f. Core Requirements. Core requirements verify the readiness of personnel, procedures, programs, and equipment within the scope of the Readiness Review to safely start nuclear operations. These core requirements are directly related to the seven guiding principles of ISM.

- (1) Line management has established Safety Management Programs (SMPs) to ensure safe accomplishment of work:
 - (a) Contract requirements for the SMPs have been flowed down into facility-specific procedures,
 - (b) SMP implementing procedures have been effectively implemented in support of the facility,
 - (c) A sufficient number of qualified personnel is available to effectively implement the SMPs in support of the facility, and
 - (d) Adequate facilities and equipment are available to ensure that SMP support and services are adequate for safe facility operations.

The following SMPs are identified in 10 CFR Section 830.204, *Documented Safety Analysis*:

- Quality Assurance Programs
- Procedures Management
- Maintenance Management
- Personnel Training Program
- Conduct of Operations
- Emergency Preparedness
- Fire Protection Program
- Waste Management Program
- Radiation Protection
- Criticality Safety Program

The SAA should designate and approve via the POA those specific SMPs to be included in the breadth of the readiness review and should specify the scope of the desired review of each designated SMP. Additional support programs may be specified in the POA if required to ensure safety of nuclear operations.

- (2) Functions, assignments, responsibilities, and reporting relationships, including those between the line operating organization and environment, safety and health support organizations, are clearly defined, understood, and effectively implemented, with line management responsibility for control of safety.
- (3) The selection, training, and qualification programs for operations and operations support personnel have been established, documented, and effectively implemented.

Training and qualification requirements for each position encompass the range of assigned duties and activities.

The selection process and applicable position-specific training for managers ensures competence commensurate with their responsibilities.

Modifications to the facility have been reviewed for potential impacts on training and qualification. Training has been performed to incorporate all aspects of these changes.

- (4) Level of knowledge of managers, operations, and operations support personnel is adequate based on reviews of examinations and examination results, selected interviews of managers, operating, and operations support personnel, and observations of operational demonstrations.
- (5) Personnel exhibit an awareness of public and worker safety and health and environmental protection requirements and, through their actions, demonstrate a high-priority commitment to comply with these requirements. Worker safety and health requirements of 10 CFR Part 851, *Worker Safety and Health Program*, have been implemented within the facility.
- (6) Facility safety documentation (normally DSA and TSRs) is in place that describes the safety envelope of the facility.
 - (a) The safety documentation characterizes the hazards/risks associated with the facility and identifies preventive and mitigating measures (systems, procedures, administrative controls, etc.) that protect workers and the public from those hazards/risks.
 - (b) Facility safety documentation is approved and has been implemented.
 - (c) Implementation of facility safety documentation has been verified and is current.
 - (d) SSCs are defined.

- (e) A system to maintain control over facility design with emphasis on Vital Safety Systems (VSS) is established.
 - (f) Procedures for maintaining the safety documentation have been adequately defined and implemented and provide for required updates.
 - (g) A DOE-approved Unreviewed Safety Question procedure has been effectively implemented.
- (7) A program is in place to confirm and periodically reconfirm the condition and operability of VSS. This includes examinations of records of tests and calibration of these systems.
- The material condition of all safety, process, and utility systems is adequate to support the safe conduct of work.
- (8) The facility systems and procedures, as affected by facility modifications, are consistent with the description of the facility, procedures, accident analyses, and assumptions included in the safety documentation.
- A formal program is defined and implemented to control facility modifications. Authorized modifications within the scope of the Readiness Review have been completed and fully closed, or evaluated and determined not to affect the ability to safely start nuclear operations.
- (9) Adequate and accurate procedures and safety limits are approved and in place for operating the process systems and utility systems. The procedures include necessary revisions for all modifications that have been made to the facility. Facility processes ensure that only the most current revision to each procedure is in use.
- (10) A routine operations drill program and an emergency management drill and exercise program have been established and implemented. Records for each program are adequate to demonstrate the effectiveness of completed drills and exercises as well as planning for future drills and exercises.
- (11) An adequate startup or restart program has been developed that includes plans for graded operations and testing after startup or resumption to simultaneously confirm operability of equipment, the viability of procedures, and the performance and knowledge of the operators.

The plans should indicate validation processes for equipment, procedures, and operators after startup or resumption of operations, including any required restrictions and additional oversight.

Any compensatory measures required during the approach to full operations are described.

- (12) The formality and discipline of operations are adequate to conduct work safely, and programs are in place to maintain this formality and discipline (e.g., DOE O 5480.19, Chg 2, *Conduct of Operations Requirements for DOE Facilities*).

Sufficient numbers of qualified personnel are available to conduct operations.

- (13) Formal agreements between the operating contractor and DOE have been established via the contract or other enforceable mechanism to govern safe facility operations.

A systematic review of the facility's conformance to these requirements has been performed.

These requirements have been implemented in the facility, or compensatory measures are in place during the period of implementation. The compensatory measures and the implementation period are approved by DOE.

- (14) An effective feedback and improvement process (i.e., Contractor Assurance System) has been established to identify, evaluate, and resolve deficiencies and recommendations made by contractor line management and independent contractor audit and assessment groups. The process also provides for resolution of issues and recommendations by external official review teams and audit organizations (e.g., DOE O 226.1A, *Implementation of Department of Energy Oversight Policy*, dated, 7-31-07).

- g. Exemptions and Equivalencies. Exemptions and equivalencies may be obtained in accordance with DOE O 251.1C, *Departmental Directives Program*, and DOE O 410.1, Central Technical Authority Responsibilities Regarding Nuclear Safety Requirements.

Central Technical Authority (or designee) concurrence is required for both exemptions and equivalencies to this Order for nuclear facilities.

- h. Records Management Program. Requirements for maintenance and disposition of Federal records, such as those pertaining to ORRs or RAs, are provided under the general guidance of DOE O 243.1, *Records Management Program*. The disposition, including destruction, of Federal records must be in accordance with:

- (1) The General Records Schedules, as published by the National Archives and Records Administration (NARA) or

- (2) DOE records disposition authority (Standard Form 115, *Request for Records Disposition Authority*), as approved by NARA.

Consult the cognizant field element office records officer for guidance.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE		PAGE OF PAGES 1 2	
2. AMENDMENT/MODIFICATION NO. 007		3. EFFECTIVE DATE See Block 16C		4. REQUISITION/PURCHASE REQ. NO. 11EM003016	
6. ISSUED BY Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831		CODE 00518		7. ADMINISTERED BY (if other than item 6) Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, country, state and ZIP Zode). SEC FEDERAL SERVICES CORPORATION Attn: MARK DUFF 2800 SOLWAY ROAD KNOXVILLE TN 379313015		CODE 825678758		FACILITY CODE	
		(x)		9A. AMENDMENT OF SOLICITATION NO.	
				9B. DATED (SEE ITEM 11)	
		X		10A. MODIFICATION OF CONTRACT/ORDER NO. DE -AM09- 05SR22413 DE-DT0001335	
				10B. DATED (SEE ITEM 13) 03/30/2010	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is not extended. is extended. is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required) Net Decrease : -\$8,601,412.58

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: P.L 95-91 and mutual agreement of the parties
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

TAS: : 89 0253 : : TAS Recovery Act ORNL Hot Cells Project

LIST OF CHANGES :

Obligated Amount for this Modification : -\$8,601,412.58

New Total Obligated Amount for this Award : \$36,441,320.77

NEW ACCOUNTING CODE ADDED :

Account Code :

Fund 06049

Appr Year 2009

Allocatee 30

Reporting Entity 471999

Continued ...

Expect as provided herein, all of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (<i>Type or print</i>)		16A. NAME AND TITLE OF CONTRACTING OFFICER (<i>Type or print</i>)	
Christopher P. Leichtweis, CEO		Karen S. Shears	
15B. CONTRACT/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
/s/ Christopher P. Leichtweis		/s/ Karen S. Shears	
(Signature of person authorized to sign)		(Signature of Contracting Officer)	06/28/2011

NSN 7540-01-152-8070
Previous edition unusable

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

CONTINUATION SHEET	REFERENCE OF DOCUMENT BEING CONTINUED	PAGE OF PAGES	
	DE-AM09-05SR22413/DE-DT0001335/007	2	2

NAME OF OFFEROR OR CONTRACTOR
SEC FEDERAL SERVICES CORPORATION

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Object calss 25200 Program 1111376 Project 2002101 WFO 0000000 Local use 0473210 Amount : -\$8,601,412.58 Fund : 06049 Appr Year : 2009 Allottee : 30 Report Entity : 471999 Object Class : 25200 Program : 1111376 Project : 2002101 WFO : 0000000 Local Use : 0473210 FOB : Destination Period of Performance : 03/03/2010 to 08/26/2011				

NSN 7540-01-152-8067

OPTIONAL FORM 336 (4-88)
Sponsored GSA
FAR (48 CFR) 63.110

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE		PAGE OF PAGES 1 1	
2. AMENDMENT/MODIFICATION NO. 008		3. EFFECTIVE DATE See Block 16C		4. REQUISITION/PURCHASE REQ. NO. 11EM003019	
6. ISSUED BY Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831		CODE 00518		5. PROJECT NO. (if applicable)	
				7. ADMINISTERED BY (if other than item 6) Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, country, state and ZIP Zode). SEC FEDERAL SERVICES CORPORATION Attn: MARK DUFF 2800 SOLWAY ROAD KNOXVILLE TN 379313015		(x)		9A. AMENDMENT OF SOLICITATION NO.	
				9B. DATED (SEE ITEM 11)	
		X		10A. MODIFICATION OF CONTRACT/ORDER NO. DE -AM09- 05SR22413 DE-DT0001335	
				10B. DATED (SEE ITEM 13) 03/30/2010	
CODE 825678758		FACILITY CODE			
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS					

o The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers o is extended. o is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required) Net Increase : \$8,601,412.58

See Schedule

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: P.L 95-91
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor X is not, O is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

TAS : 89 0253 : : TAS Recovery Act ORNL Hot Cells Project

LIST OF CHANGES :

Total Amount for this Modification : \$8,601,412.57

New Total Amount for this : \$45,042,733.55

The contractor is authorized to expand funds up to \$10,227,000.00 for task Order Line Item 3026.

FOB: Destination

Period of Performance : 03/30/2010 to 08/26/2011

Expect as provided herein, all of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER <i>(Type or print)</i>		16A. NAME AND TITLE OF CONTRACTING OFFICER <i>(Type or print)</i>	
		Karen S. Shears	
15B. CONTRACT/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA Signature on File	16C. DATE SIGNED
(Signature of person authorized to sign)		(Signature of Contracting Officer)	06/28/2011

NSN 7540-01-152-8070
Previous edition unusable

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE		PAGE OF PAGES	
				1	2
2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (if applicable)		
009	See Block 16C	11EM003004			
6. ISSUED BY	CODE	7. ADMINISTERED BY (if other than item 6)	CODE	00518	
Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831		Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, country, state and ZIP Zode).		9A. AMENDMENT OF SOLICITATION NO.			
SEC FEDERAL SERVICES CORPORATION Attn: MARK DUFF 2800 SOLWAY ROAD KNOXVILLE TN 379313015		(x)			
		9B. DATED (SEE ITEM 11)			
		X 10A. MODIFICATION OF CONTRACT/ORDER NO. DE -AM09- 05SR22413 DE-DT0001335			
		10B. DATED (SEE ITEM 13) 03/30/2010			
CODE 825678758		FACILITY CODE			

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended. is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

See Schedule

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A
X	FAR 52.243-2, Changes - Cost Reimbursement
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return 0 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

TAS: : 89 0253 : : TAS Recovery Act ORNL Hot Cells Project

LIST OF CHANGES :

The purpose of this modification is to (1) authorize the contractor to proceed with the attached Statement of Work (SOW) and (2) designate \$200,000.00 of the funds obligated under the Task Order by this modification for this authorized effort.

A. The Contractor is authorized to proceed in accordance with the attached SOW with a not-to-exceed ceiling of \$200,000.00 from funds previously obligated under the Task Order.

B. Prior to defination of this work, cost reimbursement is authorized; however, no fee payment is authorized.

Continued ...

Expect as provided herein, all of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER <i>(Type or print)</i>		16A. NAME AND TITLE OF CONTRACTING OFFICER <i>(Type or print)</i> Karen S. Shears	
15B. CONTRACT/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA Signature on File	16C. DATE SIGNED
(Signature of person authorized to sign)		(Signature of Contracting Officer)	06/28/2011

NSN 7540-01-152-8070
Previous edition unusable

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

CONTINUATION SHEET	REFERENCE OF DOCUMENT BEING CONTINUED	PAGE OF PAGES	
	DE-AM09-05SR22413/DE-DT0001335/009	2	2

NAME OF OFFEROR OR CONTRACTOR
SEC FEDERAL SERVICES CORPORATION

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (E)
	<p>C. In accordance with FAR 52.243-2 Changes, Cost Reimbursement, if the above change causes an increase or decrease in the estimated cost of, or the time required for, performance of any part of the work under this contract, whether or not changed by the order, or otherwise affects any other terms and conditions of this contract, the Contracting Officer shall make an equitable adjustment in the estimated cost and schedule, or both; amount of any fixed fee; and other affected terms. The Contractor must assert its right to an adjustment under this clause no later than July 28,2011. The Contractor's proposal for this task order change shall include credits resulting from any effort deleted or otherwise not required as a result of this change. It is anticipated that estimated cost available base and/or award fee for this authorized work will be negotiated no later than September 2011. Due to the nature of this action, DOE requires seperate accounting for the incurred costs for this effort.</p> <p>FOB: Destination Period of Performance : 03/30/2010 to 08/26/2011</p>				

NSN 7540-01-152-8067

OPTIONAL FORM 336 (4-88)
Sponsored GSA
FAR (48 CFR) 53.110

Prepare Safety Basis Documents for 3026 C/D

Statement of Work:

The Contractor shall update the currently approved Safety Basis documents with the assumption that the 3026 C/D Hot Cells Facility is a (nuclear) Hazard Category 3 facility.

Deliverables:

The following deliverables and supporting applicable documents are required consistent with the requirements of 10 CFR 8030, and DOE Standard 1120:

- Documented Safety Analysis (DSA)
- Technical Safety Requirements (TSR)
- Hazards Survey revisions
- Emergency Planning Hazard Assessment
- Emergency Action Level documentation
- Fire Hazards Analysis

Develop a Technical Alternatives Analysis for 3026C/D

Statement of Work:

The Contractor shall identify viable technical alternatives and major assumptions to execute the remaining work scope of the full demolition of Building 3026C/D, in accordance with the subject task order.

Deliverables:

The following deliverables and supporting applicable documents are required:

- A list of viable alternatives, including cost and schedule estimates, and impacts
- Justification for the selected approach and method of accomplishment
 - Identify sampling and analysis approach and data gathering
 - Identification of how radiological dose rates and increased controls associated with a Hazard Category 3 facility are addressed
 - Identification of how decontamination activities will lead to the facility being downgraded to a less than Hazard Category 3 levels prior to demolition
 - Identification of a waste management approach to, remove, stabilize, store, and package radioactive and hazardous materials and waste to meet transportation and disposal requirements
- Identification of risk management approach
- Implementation of lessons learned from SPRU project
- Identification of any GFS&I or long-lead procurement items, if any

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE	PAGE OF PAGES 1 1	
2. AMENDMENT/MODIFICATION NO. 010	3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO. 11EM003146	5. PROJECT NO. (if applicable)	
6. ISSUED BY Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831	CODE 00518	7. ADMINISTERED BY (if other than item 6) Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831		CODE 00518
8. NAME AND ADDRESS OF CONTRACTOR (No., street, country, state and ZIP Zode). SEC FEDERAL SERVICES CORPORATION Attn: MARK DUFF 2800 SOLWAY ROAD KNOXVILLE TN 379313015		(x)	9A. AMENDMENT OF SOLICITATION NO.	
			9B. DATED (SEE ITEM 11)	
		X	10A. MODIFICATION OF CONTRACT/ORDER NO. DE -AM09- 05SR22413 DE-DT0001335	
CODE 825678758			10B. DATED (SEE ITEM 13) 03/30/2010	
FACILITY CODE				

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended. is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

See Schedule

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A
X	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ 0 _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

TAS: : 89 0253 : : TAS Recovery Act ORNL Hot Cells Project

The purpose of this modification is to formally rescind William Bailey as ACOR and appoint Davis A Hutchins to that position.

FOB: Destination

Period of Performance: 03/30/2010

Expect as provided herein, all of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER <i>(Type or print)</i>		16A. NAME AND TITLE OF CONTRACTING OFFICER <i>(Type or print)</i>	
		Karen S. Shears	
15B. CONTRACT/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA Signature on File	16C. DATE SIGNED
(Signature of person authorized to sign)		(Signature of Contracting Officer)	07/13/2011

NSN 7540-01-152-8070
Previous edition unusable

STANDARD FORM 30 (REV.
10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE		PAGE OF PAGES 1 1	
2. AMENDMENT/MODIFICATION NO. 011		3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO. 11EM003206		5. PROJECT NO. (if applicable)
6. ISSUED BY Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831		CODE 00518	7. ADMINISTERED BY (if other than item 6) Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831		CODE 00518
8. NAME AND ADDRESS OF CONTRACTOR (No., street, country, state and ZIP Code). SEC FEDERAL SERVICES CORPORATION Attn: MARK DUFF 2800 SOLWAY ROAD KNOXVILLE TN 379313015			9A. AMENDMENT OF SOLICITATION NO. (x)		
			9B. DATED (SEE ITEM 11)		
			X 10A. MODIFICATION OF CONTRACT/ORDER NO. DE -AM09- 05SR22413 DE-DT0001335		
			10B. DATED (SEE ITEM 13) 03/30/2010		
CODE 825678758		FACILITY CODE			

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended. is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. **FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER.** If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

See Schedule

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: Mutual Consent of the Parties
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

TAS: : 89 0253 : : TAS Recovery Act ORNL Hot Cells Project

Please see attached pages.

FOB: Destination

Period of Performance: 03/30/2010 to 12/08/2011

Expect as provided herein, all of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (<i>Type or print</i>)		16A. NAME AND TITLE OF CONTRACTING OFFICER (<i>Type or print</i>)	
Christopher P. Leichtweis		Karen S. Shears	
15B. CONTRACT/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
/s/ Christopher P. Leichtweis	8/5/2011	/s/ Karen S. Shears	8/5/11
<u>(Signature of person authorized to sign)</u>		<u>(Signature of Contracting Officer)</u>	

NSN 7540-01-152-8070
Previous edition unusable

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

The purpose of this modification is to:

1. Extend the period of performance of the Task Order to December 8, 2011 to account for the delay in performance due to the award protest.
2. Add FAR 52.243-7 to the task order.
3. Adopt FAR 52.222-2 from the Basic Contract with the appropriate fill-in information.
4. The ceiling price for the execution of the change order scope in mod 009 is raised to \$400,000.00 based on the contractor's letter of July 20, 2001 indicating that 75% of the ceiling price would be expended by July 29, 2001,

Section F.1 is modified to read as follows (changes denoted by underlining):

F.1 PERIOD OF PERFORMANCE

The period of performance for the Recovery Act work specified in Section C, SOW, shall be for the period of performance beginning as of the effective date of this task order and not to exceed December 8, 2011 (notwithstanding Clause H.999 as related to "Covered Funds definition). Actual period of performance will be based on the contractor's schedule of work to be performed.

The following clauses are added to Section I of the task order:

1.11 52.243-7 Notification of Changes (Apr 1984)

(a) *Definitions.* "Contracting Officer," as used in this clause, does not include any representative of the Contracting Officer.

"Specifically Authorized Representative (SAR)." as used in this clause, means any person the Contracting Officer has so designated by written notice (a copy of which shall be provided to the Contractor) which shall refer to this subparagraph and shall be issued to the designated representative before the SAR exercises such authority.

(b) *Notice.* The primary purpose of this clause is to obtain prompt reporting of Government conduct that the Contractor considers to constitute a change to this contract. Except for changes identified as such in writing and signed by the Contracting Officer, the Contractor shall notify the Administrative Contracting Officer in writing promptly, within 10 calendar days from the date that the Contractor identifies any Government conduct (including actions, inactions, and written or oral communications) that the Contractor regards as a change to the contract terms and conditions. On the basis of the most accurate information available to the Contractor, the notice shall state —

- (1) The date, nature, and circumstances of the conduct regarded as a change;
- (2) The name, function, and activity of each Government Individual and Contractor official or employee involved in or knowledgeable about such conduct;
- (3) The identification of any documents and the substance of any oral communication involved in such conduct;
- (4) In the instance of alleged acceleration of scheduled performance or delivery, the basis upon which it arose;
- (5) The particular elements of contract performance for which the Contractor may seek an equitable adjustment under this clause, including --
 - (i) What contract line items have been or may be affected by the alleged change;
 - (ii) What labor or materials or both have been or may be added, deleted, or wasted by the alleged change;
 - (iii) To the extent practicable, what delay and disruption in the manner and sequence of performance and effect on continued performance have been or may be caused by the alleged change;
 - (iv) What adjustments to contract price, delivery schedule, and other provisions affected by the alleged change are estimated; and
- (6) The Contractor's estimate of the time by which the Government must respond to the Contractor's notice to minimize cost, delay or disruption of performance.

(c) *Continued performance.* Following submission of the notice required by paragraph (b) of this clause, the Contractor shall diligently continue performance of this contract to the maximum extent possible in accordance with its terms and conditions as construed by the Contractor, unless the notice reports a direction of the Contracting Officer or a communication from a SAR of the Contracting Officer, in either of which events the Contractor shall continue performance; provided, however, that if the Contractor regards the direction or communication as a change as described in paragraph (b) of this clause, notice shall be given in the manner provided. All directions, communications, interpretations, orders and similar actions of the SAR shall be reduced to writing promptly and copies furnished to the Contractor and to the Contracting Officer. The Contracting Officer shall promptly countermand any action which exceeds the authority of the SAR.

(d) *Government response*, The Contracting Officer shall promptly, within 10 calendar days after receipt of notice, respond to the notice in writing. In responding, the Contracting Officer shall either --

- (1) Confirm that the conduct of which the Contractor gave notice constitutes a change and when necessary direct the mode of further performance;
- (2) Countermand any communication regarded as a change;
- (3) Deny that the conduct of which the Contractor gave notice constitutes a change and when necessary direct the mode of further performance; or
- (4) In the event the Contractor's notice information is inadequate to make a decision under subparagraphs (d)(1), (2), or (3) of this clause, advise the Contractor what additional information is required, and establish the date by which it should be furnished and the date thereafter by which the Government will respond.

(e) Equitable adjustments.

(1) If the Contracting Officer confirms that Government conduct effected a change as alleged by the Contractor, and the conduct causes an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the work under this contract, whether changed or not changed by such conduct, an equitable adjustment shall be made --

- (i) In the contract price or delivery schedule or both; and
- (ii) In such other provisions of the contract as may be affected.

(2) The contract shall be modified in writing accordingly. In the case of drawings, designs or specifications which are defective and for which the Government is responsible, the equitable adjustment shall include the cost and time extension for delay reasonably incurred by the Contractor in attempting to comply with the defective drawings, designs or specifications before the Contractor identified, or reasonably should have identified, such defect. When the cost of property made obsolete or excess as a result of a change confirmed by the Contracting Officer under this clause is included in the equitable adjustment the Contracting Officer shall have the right to prescribe the manner of disposition of the property. The equitable adjustment shall not include increased costs or time extensions for delay resulting from the Contractor's failure to provide notice or to continue performance as provided, respectively, in paragraphs (b) and (c) of this clause.

NOTE: The phrases "contract price" and "cost" wherever they appear in the clause, may be appropriately modified to apply to cost-reimbursement or incentive contracts, or to combinations thereof.

1.12 52.222-2 Payment for Overtime Premiums (Jul 1990)

(a) The use of overtime is authorized under this contract if the overtime premium does not exceed \$20,000.00/month or the overtime premium is paid for work --

- (1) Necessary to cope with emergencies such as those resulting from accidents, natural disasters, breakdowns of production equipment, or occasional production bottlenecks of a sporadic nature;
- (2) By indirect-labor employees such as those performing duties in connection with administration, protection, transportation, maintenance, standby plant protection, operation of utilities, or accounting;
- (3) To perform tests, industrial processes, laboratory procedures, loading or unloading of transportation conveyances, and operations in flight or afloat that are continuous in nature and cannot reasonably be interrupted or completed otherwise; or
- (4) That will result in lower overall costs to the Government.

(b) Any request for estimated overtime premiums that exceeds the amount specified above shall include all estimated overtime for contract completion and shall --

- (1) Identify the work unit; e.g., department or section in which the requested overtime will be used, together with present workload, staffing, and other data of the affected unit sufficient to permit the Contracting Officer to evaluate the necessity for the overtime;
- (2) Demonstrate the effect that denial of the request will have on the contract delivery or performance schedule;
- (3) Identify the extent to which approval of overtime would affect the performance or payments in connection with other Government contracts, together with identification of each affected contract; and
- (4) Provide reasons why the required work cannot be performed by using multishift operations or by employing additional personnel.

* Insert either "zero" or the dollar amount agreed to during negotiations. The inserted figure does not apply to the exceptions in subparagraph (a)(1) through (a)(4) of the clause.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE		PAGE OF PAGES 1 3	
2. AMENDMENT/MODIFICATION NO. 012		3. EFFECTIVE DATE See Bolck 16c	4. REQUISITION/PURCHASE REQ. NO. 11SC007271		5. PROJECT NO. (If applicable)
6. ISSUED BY Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831		CODE 00518	7. ADMINISTERED BY (If other than Item 6) Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831		CODE 00518
8. NAME AND ADDRESS OF CONTRACTOR (No., street, country, State and ZIP Code) SEC FEDERAL SERVICES CORPORATION Attn: MARK DUFF 2800 SOLWAY ROAD KNOXVILLE TN 379313015 CODE 825678758			(X)		
			9A. AMENDMENT OF SOLICITATION NO.		
			9B. DATED (SEE ITEM 11)		
			X		
			10A. MODIFICATION OF CONTRACT/ORDER NO. DE-AM09-05SR22413 DE-DT0001335		
			10B. DATED (SEE ITEM 13) 03/30/2010		
FACILITY CODE					

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended. is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)
See Schedule

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	D. OTHER (Specify type of modification and authority) P.L. 91-95 and Mutual Agreement

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ 1 _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

TAS: : 89 0253 : TAS Recovery Act ORNL Hot Cells Project

The purpose of the modification is to recognize three positions as key Personnel in accordance with Dear 952.235-70 Key Personnel (Apr 1994). The key Personnel are identified in Section J, Attachment E, Key Personnel.

FOB: Destination

Period of Performance : 03/30/2010 to 12/08/2011

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER <i>(Type or print)</i>		16A. NAME AND TITLE OF CONTRACTING OFFICER <i>(Type or print)</i>	
Christopher P. Leichtweis, CEO		Karen S. Shears	
15B. CONTRACT/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
/s/ Christopher P. Leichtweis			
<i>(Signature of person authorized to sign)</i>	09/15/2011	<i>(Signature of Contracting Officer)</i>	

NSN 7540-01-152-8070
Previous edition unusable

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

The purpose of this modification to to recognize three positions as Key Personnel in accordance with DEAR 952.235-70 Key Personnel (Apr 1994). The Key Personnel are identified in Section J Attachment E; Key Personnel.

SECTION J
ATTACHMENT E
KEY PERSONNEL

(a) Introduction

Key Personnel are considered essential to the success of all work being performed under this Task Order. This Clause provides specific requirements, in addition to the requirements of the clause in Section I of the Master Contract entitled, *Key Personnel*.

(b) Key Personnel for this Task Order

The list of Key Personnel for this Task Order will be amended during the course of the Task Order to add or delete Key Personnel as approved by the Contracting Officer. The following is the current list of Key Personnel for this Task Order:

<u>Name</u>	<u>Position</u>
Chris Leichtweis	ORNL Hot Cells Project Manager
Stace Johnson	Building 3038 Operations Manager
Scott Marhefka	Building 3026 Operations Manager
Jim Stafford	ES&H Manager

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE		PAGE OF PAGES 1 4	
2. AMENDMENT/MODIFICATION NO. 013		3. EFFECTIVE DATE See Bolck 16C		4. REQUISITION/PURCHASE REQ. NO. 11EM004091	
6. ISSUED BY Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831		CODE 00518		5. PROJECT NO. (If applicable) 00518	
		7. ADMINISTERED BY (If other than Item 6) Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, country, State and ZIP Code) SEC FEDERAL SERVICES CORPORATION Attn: MARK DUFF 2800 SOLWAY ROAD KNOXVILLE TN 379313015		<input checked="" type="checkbox"/> (X)		9A. AMENDMENT OF SOLICITATION NO.	
				9B. DATED (SEE ITEM 11)	
		<input checked="" type="checkbox"/> (X)		10A. MODIFICATION OF CONTRACT/ORDER NO. DE-AM09-05SR22413 DE-DT0001335	
				10B. DATED (SEE ITEM 13) 03/30/2010	
CODE 825678758		FACILITY CODE			

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended. is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)
See Schedule

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE <input checked="" type="checkbox"/>	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A FAR 52.243-2 Changes - Cost Reimbursement
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ 0 _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

TAS: : 89 0253 : : TAS Recovery Act ORNL Hot Cells Project

The purpose of this modification is to (1) authorize the Contractor to proceed with the attached Statement of Work (SOW) and (2) designate \$1,000,000.00 of the funds obligated under the Task Order by this modification for this authorized effort.

A. The Contractor is authorized to proceed in accordance with the attached SOW with a not-to-exceed ceiling of \$1,000,000.00 from funds previously obligated under the Task Order.

B. Prior to definitization of this work, cost reimbursement is authorized; however, no fee payment is authorized.

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed,

remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER <i>(Type or print)</i>		16A. NAME AND TITLE OF CONTRACTING OFFICER <i>(Type or print)</i> Karen S. Shears	
15B. CONTRACT/OFFEROR	15C. DATE SIGNED 09/15/2011	16B. UNITED STATES OF AMERICA Signature on File	16C. DATE SIGNED 09/16/2011
<i>(Signature of person authorized to sign)</i>		<i>(Signature of Contracting Officer)</i>	

NSN 7540-01-152-8070
Previous edition unusable

STANDARD FORM 30 (REV.
10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED DE-AM0 9-05SR2 2 413/DE-DT0 00133 5/013	PAGE 2	OF 4
---------------------------	--	-----------	---------

NAME OF OFFEROR OR CONTRACTOR
SEC FEDERAL SERVICES CORPORATION

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>C. In accordance with FAR 52.243-2 Changes, Cost Reimbursement, if the above change causes an increase or decrease in the estimated cost of, or the time required for, performance of any part of the work under this contract, whether or not changed by the order, or otherwise affects any other terms and conditions of this contract, the Contracting Officer shall make an equitable adjustment in the estimated cost and schedule, or both; amount of any fixed fee; and other affected terms. The Contractor must assert its right to an adjustment under this clause no later than October 17, 2011. The Contractor's proposal for this task order change shall include credits resulting from any effort deleted or otherwise not required as a result of this change. It is anticipated that estimated cost and available base and/or award fee for this authorized work will be negotiated no later than December 2011. The Contractor is required to institute Change Order Accounting in accordance with FAR 52.243-6 for the incurred costs for this effort.</p> <p>FOB: Destination Period of Performance: 03/30/2010 to 12/08/2011</p>				

NSN 7540-01-152-8067

OPTIONAL
FORM 336 (4-86)
Sponsored by GSA
FAR (48 CFR)
53.110

The purpose of this task order modification is to authorize SEC to proceed with the following scope of work:

3026D Legacy Material Disposition and Preparation for Demolition

The contractor shall assess those initial facility conditions described in the Task Order Statement of Work and other applicable source documents provided to the Contractor and upon which the contractor's proposal and Task Order scope were based against those changed conditions encountered in 3026D Cell A in March 2011. The changed conditions are described in the declaration of a Potentially Inadequate Safety Analysis, Evaluation of the Safety of the Situation, and subsequent Justifications for Continued Operation (JCO) and documentation submitted to the DOE (References 5-10) and corresponding DOE Safety Evaluation Reports issued in response to the JCO submittals (References 11-12), and to propose the technical approach and cost for implementing 3026D D&D preparation in response to these changes.

The Contractor shall develop a technical proposal/specification and detailed cost estimate for performing ORNL Building 3026D legacy material removal and preparation for demolition (D&D). This proposal and cost estimate are to address the changes in scope and technical approach required due to change in facility conditions in 3026D Cell A from those described in the SEC Preliminary Hazard Screening (PHS) document (Reference 1), as derived from the safety basis documents and facility descriptions (References 2-4), referenced in Section C.4.1 of Task Order DE-DT0001335.

The Contractor shall proceed with its selected technical approach. Any procurements requiring an expenditure of \$25,000.00 or more prior to the definitization of this change order shall be submitted to DOE for approval prior to incurrence of the expense.

Deliverables:

The following elements and supporting applicable documentation are required as part of the proposal. Other deliverables may be required dependent on the Contractor's selected approach:

- Crosswalk between that scope of work covered under the Task Order Statement of Work (SOW) and that separate scope required as a result of changed facility conditions;
- Identification of those elements within the current Task Order SOW scope necessary to accomplish the required end state that remain unchanged, and which are therefore not part of the technical proposal scope and cost estimate;
- Description of the proposed technical approach for the discrete change in Task Order scope, including systems requirements and specifications for significant equipment and long-lead procurements that form the basis for cost estimation;
- Clearly identify key interfaces, decisions points, and performance indicators in the design and execution of the proposed scope;
- Verification steps following D&D preparation to ensure that radiological criteria for open air demolition are met;
- Detailed cost proposal and critical path schedule;
- Identify any changes to the proposed activities, schedule and cost that would occur as a consequence of obtaining additional Cell A characterization data that could potentially allow downgrade of facility categorization, either by inventory determination or analysis;

References:

1. *SEC-SB-60, Rev. 1*, Preliminary Hazard Screening for the 3026 Complex Decontamination, Demolition, and Disposal Project, Oak Ridge National Laboratory, Oak Ridge, Tennessee, *October 2010, SEC Federal Services Corporation (SEC), Oak Ridge, Tennessee.*
2. *PHS-OR-3026D-690*, Preliminary Hazard Screening for Building 3026 D, Segmenting Hot Cell Facility, *Bechtel Jacobs Company LLC, September 2000.*
3. *PHS-OR-3026-0997, Rev. 0*, Preliminary Hazard Screening for Buildings 3026C, 3026 D and Filter House 3140, *Bechtel Jacobs Company LLC, November 2006.*
4. *ES-OR-3026-003, Rev. 0*, Evaluation of Safety for Potential Change in Nuclear Hazard Category for Buildings 3026C and 3026C Based on Reevaluation of the Existing Safety Basis Documentation, *Bechtel Jacobs Company LLC, February 2005.*
5. *USQD-3026-001, PISA on Characterization of 3026 Facility*, March 2011, SEC, Oak Ridge, Tennessee.
6. *ESS-3026-001*, Evaluation of a Potential Incorrect Characterization of 3026 Facility, *March 2011, SEC, Oak Ridge, Tennessee.*
7. *JCO-3026-001*, Justification for Continued Operation Relative to the Discovery of Potential Additional Radiological Inventory for the 3026 Complex Decontamination, Demolition, and Disposal Project, Oak Ridge National Laboratory, Oak Ridge, Tennessee, March 31, 2011
8. *JCO-3026-001, Rev. 1*, Justification for Continued Operation Relative to the Discovery of Potential Additional Radiological Inventory for the 3026 Complex Decontamination, Demolition, and Disposal Project, Oak Ridge National Laboratory, Oak Ridge, Tennessee, August 3, 2011
9. *HCP-COR-144, Letter to John Eschenberg*, DOE Contract No. DE-AM09-05SR22413, Task Order DE-DT0001335: Building 3026C/D JCO and Approved SER Characterization Sampling Notification Requirements and Hazard Categorization - American Reinvestment and Recovery Act (ARRA), *May 16, 2011, Oak Ridge, Tennessee.*
10. *Neveau, R., S. Green, and C. S. Price*, 3026-D Hot Cell Characterization Status Report Internal Characterization of Hot Cells A, B1 & B2, *May 17, 2011, SEC, Oak Ridge, Tennessee.*
11. *SER-SEC-JCO-3026D/Cell A-11-05, Rev. 0*, Safety Evaluation Report for the Justification for Continued Operation Following the Discovery of Additional Radiological Inventory in the 3026 Complex Decontamination, Demolition, and Disposal Project, *March 2011, Department of Energy Oak Ridge Office, Oak Ridge, Tennessee.*
12. *SER-SEC-JCO-3026D/Cell A-11-05, Rev. 1*, Safety Evaluation Report for the Justification for Continued Operation Following the Discovery of Additional Radiological Inventory in the 3026 Complex Decontamination, Demolition, and Disposal Project, *August 10, 2011, Department of Energy Oak Ridge Office, Oak Ridge, Tennessee.*

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE		PAGE OF PAGES 1 1	
2. AMENDMENT/MODIFICATION NO. 014		3. EFFECTIVE DATE See Bolck 16C	4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)
6. ISSUED BY CODE		00518	7. ADMINISTERED BY (If other than Item 6) CODE		00518
Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831			Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831		
8. NAME AND ADDRESS OF CONTRACTOR (No., street, country, State and ZIP Code) SEC FEDERAL SERVICES CORPORATION Attn: MARK DUFF 2800 SOLWAY ROAD KNOXVILLE TN 379313015			(X)	9A. AMENDMENT OF SOLICITATION NO.	
				9B. DATED (SEE ITEM 11)	
			X	10A. MODIFICATION OF CONTRACT/ORDER NO. DE-AM09-05SR22413 DE-DT0001335	
				10B. DATED (SEE ITEM 13)	
CODE 825678758		FACILITY CODE		03/30/2010	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended. is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)
See Schedule

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A
X	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ 0 _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

TAS: : 89 0253 : : TAS Recovery Act ORNL Hot Cells Project
The purpose of this modification is to

- Add Michael E. Redmon, Project Manager to the Section J, Attachment E as Key Personnel.
- Authorize an additional \$200,000.00 in not to exceed value for the work added in mod 009 for a total not to exceed value of \$600,000.00.

All other terms and conditions remain unchanged.
Period of Performance: 03/30/2010 to 12/08/2011

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (<i>Type or print</i>)		16A. NAME AND TITLE OF CONTRACTING OFFICER (<i>Type or print</i>)	
		Karen S. Shears	
15B. CONTRACT/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
(Signature of person authorized to sign)	09/15/2011	Signature on File	10/25/2011
		(Signature of Contracting Officer)	

NSN 7540-01-152-8070
Previous edition unusable

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE		PAGE OF PAGES 1 2	
2. AMENDMENT/MODIFICATION NO. 015		3. EFFECTIVE DATE See Bolck 16C	4. REQUISITION/PURCHASE REQ. NO. 12EM000134		5. PROJECT NO. (If applicable)
6. ISSUED BY Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831		CODE 00518	7. ADMINISTERED BY (If other than Item 6) Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831		CODE 00518
8. NAME AND ADDRESS OF CONTRACTOR (No., street, country, State and ZIP Code) SEC FEDERAL SERVICES CORPORATION Attn: MARK DUFF 2800 SOLWAY ROAD KNOXVILLE TN 379313015			(X)	9A. AMENDMENT OF SOLICITATION NO.	
				9B. DATED (SEE ITEM 11)	
			X	10A. MODIFICATION OF CONTRACT/ORDER NO. DE-AM09-05SR22413 DE-DT0001335	
				10B. DATED (SEE ITEM 13) 03/30/2010	
CODE 825678758		FACILITY CODE			

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended. is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)
See Schedule

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE X	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A FAR 52.243-2 Changes - Cost Reimbursement
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ 0 _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

TAS: : 89 0253 : : TAS Recovery Act ORNL Hot Cells Project

The purpose of this modification is to extend the period of performance to March 27, 2012.

This extension is granted due to receipt of the contractor's proposal in response to the unilateral change in Mod 013. It is recognized that an extension to the period of performance is requested by that proposal, but it is unlikely to be fully negotiated before the end of the previously recognized period of performance.

Section F.1 is deleted in its entirety and replaced with the following:

"F.1 PERIOD OF PERFORMANCE

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER <i>(Type or print)</i>		16A. NAME AND TITLE OF CONTRACTING OFFICER <i>(Type or print)</i>	
		Karen S. Shears	
15B. CONTRACT/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
(Signature of person authorized to sign)	09/15/2011	Signature on File	11/28/2011
		(Signature of Contracting Officer)	

NSN 7540-01-152-8070
Previous edition unusable

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED DE-AM0 9-05SR2 2 413/DE-DT0 00133 5/015	PAGE 2	OF 2
---------------------------	--	-----------	---------

NAME OF OFFEROR OR CONTRACTOR
SEC FEDERAL SERVICES CORPORATION

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>The period of performance for hte Recovery Act work specified in Section C, SOW, shall be for the period of performance beginning as of the effective date of this task order and not to exceed March 27, 2012 (notwithstanding Clause H.999 as related to "Covered Funds" definition)."</p> <p>All other terms and conditions remain unchanged. FOB: Destination Period of Performance: 03/30/2010 to 03/27/2012</p>				

NSN 7540-01-152-8067

OPTIONAL
FORM 336 (4-86)
Sponsored by GSA
FAR (48 CFR)
53.110

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE		PAGE OF PAGES 1 2	
2. AMENDMENT/MODIFICATION NO. 016		3. EFFECTIVE DATE 01/18/2012	4. REQUISITION/PURCHASE REQ. NO. 12EM000892		5. PROJECT NO. (If applicable)
6. ISSUED BY Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831		CODE 00518	7. ADMINISTERED BY (If other than Item 6) Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831		CODE 00518
8. NAME AND ADDRESS OF CONTRACTOR (No., street, country, State and ZIP Code) SEC FEDERAL SERVICES CORPORATION Attn: MARK DUFF 2800 SOLWAY ROAD KNOXVILLE TN 379313015			(X)	9A. AMENDMENT OF SOLICITATION NO.	
				9B. DATED (SEE ITEM 11)	
			X	10A. MODIFICATION OF CONTRACT/ORDER NO. DE-AM09-05SR22413 DE-DT0001335	
				10B. DATED (SEE ITEM 13) 03/30/2010	
CODE 825678758		FACILITY CODE			

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended. is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)
See Schedule

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE X	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A FAR 52.243-2 Changes - Cost Reimbursement
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ 0 _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

TAS: : 89 0253 : TAS Recovery Act ORNL Hot Cells Project
The purpose of this modification is to:

- Increase the authorization to expend funds for Task Order Line Item 3026 in Modification 008 by \$1,021,000.00, from \$10,227,000 to \$11,248,000. Funds have previously been obligated to the Task Order.
- Increase the Not to Exceed amount of the work authorized in Modification 013 by \$679,000.00, from \$1,000,000 to \$1,679,000 from funds previously obligated under the Task Order.

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (<i>Type or print</i>)		16A. NAME AND TITLE OF CONTRACTING OFFICER (<i>Type or print</i>) Karen S. Shears	
15B. CONTRACT/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA Signature on File (Signature of Contracting Officer)	16C. DATE SIGNED 01/18/2012

NSN 7540-01-152-8070
Previous edition unusable

STANDARD FORM 30 (REV.
10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED DE-AM0 9-05SR2 2 413/DE-DT0 00133 5/016	PAGE 2	OF 2
---------------------------	--	-----------	---------

NAME OF OFFEROR OR CONTRACTOR
SEC FEDERAL SERVICES CORPORATION

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	3. Appoint Laura Wilkerson as COR in the STRIPES system. Delivery: 03/30/2010 Delivery Location Code: 00522 Oak Ridge Office U.S. Department of Energy Oak Ridge Office 230 Warehouse Road Oak Ridge TN 37830 FOB: Destination Period of Performance: 03/30/2010 to 03/27/2012				

NSN 7540-01-152-8067

OPTIONAL FORM
336 (4-86)
Sponsored by GSA
FAR (48 CFR) 53.110

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE		PAGE OF PAGES 1 1	
2. AMENDMENT/MODIFICATION NO. 017		3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO. 12EM001180		5. PROJECT NO. (If applicable)
6. ISSUED BY Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831		CODE 00518	7. ADMINISTERED BY (If other than Item 6) Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831		CODE 00518
8. NAME AND ADDRESS OF CONTRACTOR (No., street, country, State and ZIP Code) SEC FEDERAL SERVICES CORPORATION Attn: MARK DUFF 2800 SOLWAY ROAD KNOXVILLE TN 379313015			(X)	9A. AMENDMENT OF SOLICITATION NO.	
				9B. DATED (SEE ITEM 11)	
			X	10A. MODIFICATION OF CONTRACT/ORDER NO. DE-AM09-05SR22413 DE-DT0001335	
				10B. DATED (SEE ITEM 13) 03/30/2010	
CODE 825678758		FACILITY CODE			

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended. is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)
See Schedule

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A
X	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ 0 _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

TAS: : 89 0253 : : TAS Recovery Act ORNL Hot Cells Project
The purpose of this modification is to appoint Wendy Cain as ACOR.
FOB: Destination
Period of Performance: 03/30/2010 to 03/27/2012

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER <i>(Type or print)</i>		16A. NAME AND TITLE OF CONTRACTING OFFICER <i>(Type or print)</i>	
		Karen S. Shears	
15B. CONTRACT/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
		Signature on File	02/22/2012
(Signature of person authorized to sign)		(Signature of Contracting Officer)	

NSN 7540-01-152-8070
 Previous edition unusable

STANDARD FORM 30 (REV. 10-83)
 Prescribed by GSA
 FAR (48 CFR) 53.243

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE		PAGE OF PAGES 1 2	
2. AMENDMENT/MODIFICATION NO. 018		3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO. 12EM001436		5. PROJECT NO. (If applicable)
6. ISSUED BY Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831		CODE 00518	7. ADMINISTERED BY (If other than Item 6) Oak Ridge U.S. Department of Energy P.O. Box 2001 Oak Ridge TN 37831		CODE 00518
8. NAME AND ADDRESS OF CONTRACTOR (No., street, country, State and ZIP Code) SEC FEDERAL SERVICES CORPORATION Attn: MARK DUFF 2800 SOLWAY ROAD KNOXVILLE TN 379313015			(X)	9A. AMENDMENT OF SOLICITATION NO.	
				9B. DATED (SEE ITEM 11)	
			X	10A. MODIFICATION OF CONTRACT/ORDER NO. DE-AM09-05SR22413 DE-DT0001335	
CODE 825678758			FACILITY CODE	10B. DATED (SEE ITEM 13) 03/30/2010	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended. is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)
See Schedule

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE X	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A FAR 52.243-2 and Mutual Agreement of the Parties
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ 1 _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

TAS: : 89 0253 : : TAS Recovery Act ORNL Hot Cells Project
The purpose of this modification is to:

1. definitize the change order opened in Modification 009. The terms agreed to are as follows:

Total Cost: \$598,342.00
Fixed Fee: \$32,909.00

Total Cost and Fee: \$631,251.00

Continued...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER <i>(Type or print)</i>		16A. NAME AND TITLE OF CONTRACTING OFFICER <i>(Type or print)</i>	
/s/ Scott Ellis		Barbara J. Jackson	
15B. CONTRACT/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
Bus, Gov. And Legal Affairs Mgr.	03/12/2012	/s/ Barbara J. Jackson	03/12/2012
(Signature of person authorized to sign)		(Signature of Contracting Officer)	

NSN 7540-01-152-8070
Previous edition unusable

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED DE-AM0 9-05SR2 2 413/DE-DT0 00133 5/018	PAGE 2	OF 2
---------------------------	--	-----------	---------

NAME OF OFFEROR OR CONTRACTOR
SEC FEDERAL SERVICES CORPORATION

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>This agreement settles all claims against the work described in Mod 009.</p> <p>2. Extended the period of performance from march 27, 2012 to March 30, 2013. This extension is justified by the contractor's proposal on the change order in Mod 013 which has not yet been fully Destination. FOB: Destination Period of performance: 03/30/2010 to 03/30/2013</p>				

NSN 7540-01-152-8067

OPTIONAL FORM 336
(4-86)
Sponsored by GSA
FAR (48 CFR) 53.110



EXHIBIT 21.1

LIST OF SUBSIDIARIES OF PERMA-FIX ENVIRONMENTAL SERVICES, INC. (THE "COMPANY")

Treatment

Perma-Fix of Florida, Inc. ("PFF"), a Florida Corporation, is a 100% owned subsidiary of the Company.

Diversified Scientific Services, Inc., ("DSSI") a Tennessee Corporation, is a 100% owned subsidiary of the Company.

East Tennessee Materials and Energy Corporation, ("M&EC") a Tennessee Corporation, is a 100% owned subsidiary of the Company.

Perma-Fix of Northwest Richland, Inc. ("PFNWR"), a Washington Corporation, is a 100% owned subsidiary of the Company.

Perma-Fix Northwest, Inc. ("PFNW"), a Washington Corporation, is a 100% owned subsidiary of the Company.

Services

Schreiber, Yonley & Associates ("SYA"), a Missouri corporation, is a 100% owned subsidiary of the Company.

Safety and Ecology Corporation ("SEC"), a Nevada corporation, is a 100% owned subsidiary of the Company.

Safety and Ecology Radcon Alliance, LLC ("SECRA"), a Nevada corporation, is a 75% owned subsidiary of the Company.

Safety and Ecology Corporation Limited ("SECL"), a United Kingdom corporation, is a 100% owned subsidiary of the Company.

Safety and Ecology Holdings Corporation ("SEHC"), a Nevada corporation, is a 100% owned subsidiary of the Company.

Safety and Ecology Federal Services Corporation, a Nevada corporation, is a 100% owned subsidiary of the Company.

Discontinued Operations

Perma-Fix of Orlando, Inc. ("PFO"), a Florida Corporation, is a 100% owned subsidiary of the Company.

Perma-Fix of South Georgia, Inc. ("PFSG"), a Georgia Corporation, is a 100% owned subsidiary of the Company.

EXHIBIT 23.1

Consent of Independent Registered Public Accounting Firm

Perma-Fix Environmental Services, Inc.
Atlanta, Georgia

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (No. 333-158472, 333-115061, 33-85118, 333-14513, 333-43149, 333-70676, and 333-87437) and Form S-8 (No. 333-153086, 333-124668, 333-110995, 333-80580, 333-3664, 333-17899, 333-25835, and 333-76024) of Perma-Fix Environmental Services, Inc. and subsidiaries (the "Company") of our reports dated March 15, 2012, relating to the consolidated financial statements and financial statement schedule, and the effectiveness of the Company's internal control over financial reporting, which appear in this Form 10-K.

/s/BDO USA, LLP

Atlanta, Georgia
March 15, 2012



EXHIBIT 31.1

CERTIFICATIONS

I, Louis F. Centofanti, certify that:

1. I have reviewed this annual report on Form 10-K of Perma-Fix Environmental Services, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of the internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 15, 2012

/s/ Louis F. Centofanti

Louis F. Centofanti
Chairman of the Board
Chief Executive Officer



EXHIBIT 31.2

CERTIFICATIONS

I, Ben Naccarato, certify that:

1. I have reviewed this annual report on Form 10-K of Perma-Fix Environmental Services, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of the internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 15, 2012

/s/ Ben Naccarato

Ben Naccarato

Chief Financial Officer and Chief Accounting Officer

EXHIBIT 32.1

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Perma-Fix Environmental Services, Inc. ("PESI") on Form 10-K for the year ended December 31, 2011 as filed with the Securities and Exchange Commission on the date hereof (the "Form 10-K"), I, Dr. Louis F. Centofanti, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Form 10-K fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. §78m or §78o(d)); and
- (2) The information contained in the Form 10-K fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: March 15, 2012

/s/ Louis F. Centofanti

Dr. Louis F. Centofanti
President and
Chief Executive Officer

This certification is furnished to the Securities and Exchange Commission solely for purpose of 18 U.S.C. §1350 subject to the knowledge standard contained therein, and not for any other purpose.

EXHIBIT 32.2

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Perma-Fix Environmental Services, Inc. ("PESI") on Form 10-K for the year ended December 31, 2011 as filed with the Securities and Exchange Commission on the date hereof (the "Form 10-K"), I, Ben Naccarato, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Form 10-K fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. §78m or §78o(d)); and

(2) The information contained in the Form 10-K fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: March 15, 2012

/s/ Ben Naccarato

Ben Naccarato

Chief Financial Officer and Chief Accounting Officer

This certification is furnished to the Securities and Exchange Commission solely for purpose of 18 U.S.C. §1350 subject to the knowledge standard contained therein, and not for any other purpose.
