Prime Contract Office
P.O. Box 1663, MS M722
Los Alamos, New Mexico 87545
505-606-2276/Fax 505-665-5552

Date: August 9, 2011
Refer To: PCM-11-176

Kenneth A. Snyder
Contracting Officer
Los Alamos Site Office
U.S. Department of Energy
National Nuclear Security Administration
3747 West Jemez Road
Los Alamos, NM 87544

Subject: Transmittal of Decontamination and Decommissioning (D&D) CD-4/Closeout Report for Recovery Act Defense D&D Project VL-LANL-0040-D.R1

Dear Contracting Officer:

Attached is the CD-4/Closeout report for the Los Alamos National Laboratory Defense Environmental Cleanup, Decontamination and Decommissioning (D&D) – TA-21 Demolition of TA-21 Delta Prime (DP) East and West Facilities project VL-LANL-0040-D.R1. The report was developed in accordance with DOE Order 413.3A, Program and Project Management for the Acquisition of Capital Assets.

As of July 29, 2011, Los Alamos National Security, LLC (LANS) has achieved physical completion of the Recovery Act TA-21 D&D project. All punch list items have been completed and Los Alamos Site Office (LASO) comments have been incorporated into the CD-4 package. Subcontractors have been paid and there are no outstanding claims. All key performance parameters for this project have been met.

LANS has safely completed this project ahead of schedule and under the approved budget. LANS also completed the demolition of two additional building (21-149 and 21-150) through efficiencies realized in project execution and over 130 new jobs were created during this effort.

The project has had a significant impact on the skyline at TA-21 and is a result of collaborate effort of the LANS and LASO project teams. LANS is ready to support you in CD-4 validation and approval by LASO and the Acquisition Executive.


34991
Should you have any questions, please feel free to contact me or Bruce Schappell at 606-2337.

Sincerely,

Steve Shook
Prime Contract Chief

SS/am

Attachment: a/s

Cy: J. Ethridge, LANS-LLC, w/o attachment
    M. Graham, ADEP
    P. Henry, PADCAP, w/o attachment
    G. Rael, DOE/LASO
    I. Richardson, DIR, w/o attachment
    R. Snyder, OOM, LASO
    E. Trollinger, DOE/LASO
    PCM-DO Files
Los Alamos National Laboratory
American Recovery and Reinvestment Act (ARRA) Project

Critical Decision 4
American Recovery and Reinvestment Act
Environmental Cleanup Project
Demolition of TA-21 Delta Prime (DP) East and West Facilities

PBS VL-LANL-0040D.R1 Defense D&D – TA-21

DOE Environmental Management Program
Los Alamos Site Office
August 2011
LANL ARRA Sub Project -
Demolition of TA-21 Delta Prime East and West Facilities

Critical Decision 4

SIGNATURE PAGE

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<tr>
<td>Site</td>
<td>Los Alamos National Laboratory</td>
</tr>
<tr>
<td>Date</td>
<td>July 2011</td>
</tr>
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<td>Document Restriction</td>
<td>None</td>
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<td>EM Program Office POC</td>
<td>Everett Trollinger, Federal Project Director</td>
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Approvals:

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<th>Signature</th>
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<tr>
<td>Bruce Schappell, ARRA Executive Director, Los Alamos National Security, LLC</td>
<td><img src="signature_image" alt="Signature" /> Date: 8/9/11</td>
</tr>
<tr>
<td>Everett A. Trollinger, Federal Project Director, Los Alamos Site Office</td>
<td>Date:</td>
</tr>
<tr>
<td>George J. Rael, Environmental Project Office Manager, Los Alamos Site Office</td>
<td>Date:</td>
</tr>
<tr>
<td>Kevin Smith, Manager, Los Alamos Site Office</td>
<td>Date:</td>
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<tr>
<td>Jack Craig, Director, EM Consolidated Business Center</td>
<td>Date:</td>
</tr>
<tr>
<td>Revision No.</td>
<td>Date Approved</td>
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Attachment 2 - DP East and West Stimulus Program Office Support Task Scope Description
Attachment 3 - DP East and West Baseline Change Proposal Log
Attachment 4 - DP East and West Work Authorization Document
Attachment 5 - DP East and West Subcontract Final Project Closeout Reports (Attached CD)
Attachment 6 - IPABS Reconciliation Sheet
ACRONYMS AND ABBREVIATIONS

AOC  Area of Contamination
ARRA  American Recovery and Reinvestment Act
ARSEC  ARSEC Environmental, LLC
BCP  Baseline Change Proposal
CD  Critical Decision
CPI  Cost Performance Index
D&D  Decontamination and Decommissioning
DOE  U.S. Department of Energy
DP  Delta Prime
EAC  Estimate at Completion
EM  Office of Environmental Management
EMS  Environmental Management System
EMRAP  Office of Environmental Management Recovery Act Program
ES&H  Environmental, Safety and Health
FFCA  Federal Facilities Compliance Agreement
FFCO  Federal Facility Compliance Order
FPD  Federal Project Director
FY  Fiscal Year
GPS  Global Positioning System
HC  Hazard Category
IND  Industrial waste
IPABS  Integrated Planning, Accountability, and Budgeting System
IPT  Integrated Project Team
ISMS  Integrated Safety Management System
ITSI  Innovative Technical Solutions, Incorporated
IWD  Integrated Work Document
KPP  Key Performance Parameter
LANL  Los Alamos National Laboratory
LANS  Los Alamos National Security, LLC
LASO  Los Alamos Site Office
LLW  Low Level Waste
MDA  Material Disposal Area
M&O  Management and Operating
### ACRONYMS AND ABBREVIATIONS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
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<tr>
<td>MLLW</td>
<td>Mixed Low Level Waste</td>
</tr>
<tr>
<td>MR</td>
<td>Management Reserve</td>
</tr>
<tr>
<td>MSA</td>
<td>Management Self-Assessment</td>
</tr>
<tr>
<td>NMED</td>
<td>New Mexico Environment Department</td>
</tr>
<tr>
<td>NNSA</td>
<td>National Nuclear Security Administration</td>
</tr>
<tr>
<td>OMB</td>
<td>Office of Management and Budget</td>
</tr>
<tr>
<td>PBS</td>
<td>Project Baseline Summary</td>
</tr>
<tr>
<td>PCB</td>
<td>Polychlorinated Biphenyl</td>
</tr>
<tr>
<td>PEP</td>
<td>Project Execution Plan</td>
</tr>
<tr>
<td>PIC</td>
<td>Person-In-Charge</td>
</tr>
<tr>
<td>PMB</td>
<td>Performance Measurement Baseline</td>
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<td>POP</td>
<td>Project Operating Plan</td>
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<td>Personal Protective Equipment</td>
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<td>QA</td>
<td>Quality Assurance</td>
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<tr>
<td>QAP</td>
<td>Quality Assurance Plan</td>
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<tr>
<td>RARE</td>
<td>Recovery Act Readiness Evaluation</td>
</tr>
<tr>
<td>RCRA</td>
<td>Resource Conservation and Recovery Act</td>
</tr>
<tr>
<td>RCT</td>
<td>Radiological Control Technician</td>
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<tr>
<td>SPI</td>
<td>Schedule Performance Index</td>
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<td>SV</td>
<td>Schedule Variance</td>
</tr>
<tr>
<td>SWMU</td>
<td>Solid Waste Management Unit</td>
</tr>
<tr>
<td>TA</td>
<td>Technical Area</td>
</tr>
<tr>
<td>TPC</td>
<td>Total Project Cost</td>
</tr>
<tr>
<td>TSD</td>
<td>Task Scope Descriptions</td>
</tr>
<tr>
<td>TSFF</td>
<td>Tritium Systems Fabrication Facility</td>
</tr>
<tr>
<td>TSTA</td>
<td>Tritium Systems Test and Assembly</td>
</tr>
<tr>
<td>WAD</td>
<td>Work Authorization Document</td>
</tr>
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</table>
LANL ARRA Sub Project -  
LANL TA-21 Demolition of Delta Prime East and West Facilities  

Critical Decision 4

Purpose

US Department of Energy (DOE) Order 413.3A, Program and Project Management for the Acquisition of Capital Assets, requires that for projects over 20 Million Dollars, a Critical Decision 4 (CD-4) be prepared and submitted for approval upon completion of the project key performance parameters (KPPs).

As required, KPPs were established within the Los Alamos National Laboratory (LANL) American Recovery and Reinvestment Act (ARRA) Project, Project Execution Plan (PEP), dated January 2010, specifically for this subproject (Disposition of DP East and West Facilities and ancillary structures, VL-LANL-0040D.R1-Defense D&D). This subproject is more than $20 Million.

Critical Decision 4 is requested for this subproject and will mark the completion of the scope and key performance parameters (KPP) established under the ARRA project.

Background

President Obama signed the American Recovery and Reinvestment Act of 2009 (ARRA) into law on February 17, 2009. The intent of the ARRA is to provide stimulus to the U.S. economy by funding a variety of federal, state, and local projects that are already well defined and ready to implement.

The DOE Office of Environmental Management (EM) received $6 Billion through the ARRA to accelerate environmental cleanup work. The projects identified for this funding, focus on accelerating cleanup of soil and groundwater, transportation and disposal of waste, and cleaning and demolishing former weapons complex facilities. DOE EM has identified approximately $212 Million of this funding to support these activities at Los Alamos National Laboratory (LANL).

Los Alamos Site Office (LASO) had identified four subprojects for ARRA funding: cleanup of Material Disposal Area (MDA) B; installation of monitoring wells, deactivation and decommissioning (D&D) of structures at the Tritium Systems Test and Assembly (TSTA) facility; and D&D of structures at the Delta Prime (DP) East and West areas. The LANL ARRA Project scope, with the exception of the monitoring wells, is physically located at Technical Area (TA) 21. Figure 2.1-1 illustrates the location of TA-21 within the Los Alamos area. Figure 2.1-2 provides an aerial view of TA-21. This CD-4 documents the completion of D&D activities for the DP East and West Subproject.
Figure 2.1-1 TA-21 DP East and West Location within the Los Alamos Area
Figure 2.1-2 Aerial View of TA-21 (view to northwest)
DP East and West Scope

Specific work scope for the DP East and West Subproject was identified in *LANL Defense TA-21 DP East and West Recovery Act Project, Project Operating Plan (POP)*, Section 1. The POP provides a summary description of the work to be completed, as well as specific milestones for this subproject, of which all scope has been completed, refer to Attachment 1 - POP. At baseline definitization, the Total Project Cost identified in the POP was $58.5-million; and the Performance Management Baseline Cost was identified as $48-million. The POP identified the following subproject summary:

“DP East contains structures that were constructed from 1944 onwards for research and development of plutonium during and after the Manhattan Project and amount to approximately 107,000-sf of area. The purpose of these facilities was to produce metal and alloys of plutonium from the nitrate solution feedstock provided by other facilities. DP West was subsequently used for plutonium and uranium research and production through the late 1970s, by which time those activities were transferred to other facilities away from TA-21 and in the interim, the DP West structures became obsolete and no longer needed. In order to reduce Surveillance and Maintenance cost associated with managing obsolete nuclear facilities that have no further value, it was decided to D&D the structure, remediate the grounds and ultimately turn the area over to Los Alamos County for future development. DP East structures were used for polonium, actinide and tritium research. D&D of DP East involves demolition of two (2) large buildings and three (3) smaller buildings totaling approximately 50,000-sf of area. Cumulatively, these structures present a most visible and undesirable skyline to the public entering Los Alamos”

The DP West demolition scope consisted of demolitioning buildings TA-21-2, -3, -4, -5, -80, -89, -116, -149, -150, -210, -312, -313, -314, -315, and -328 to the ground level slabs. The demolition subcontractor, ARSEC Environmental, LLC (ARSEC), performed the DP West demolition scope of work.

The DP East demolition scope consisted of demolitioning buildings TA-21-152, -166, -167, -209, and -370 to sub-grade, including removing all sub-grade structures (with the exception of building 209, the basement was left in place) to a depth of 10 feet below final grade, and removing any contaminated soil above background, to depth of 10 feet below final grade, based on walkover radiological field screening scans. The demolition subcontractor, Innovative Technical Solutions, Incorporated (ITSI), performed the DP East demolition scope of work.

Specific milestones and schedule dates identified in the POP (Attachment 1), and listed below, were verified completed by the Los Alamos Integrated Project Team:

<table>
<thead>
<tr>
<th>Project Operating Plan Monthly Milestones</th>
<th>Planned Date</th>
<th>Status Thru July 31, 2011</th>
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<tr>
<td>DP East</td>
<td></td>
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<tr>
<td>Complete Clean Buildings D&amp;D</td>
<td>Jan-2010</td>
<td>Completed on 12/21/2010</td>
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<tr>
<td>Complete Demolition of DP East Buildings</td>
<td>Oct-2010</td>
<td>Completed on 12/21/2010</td>
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<tr>
<td>D&amp;D Closeout</td>
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<td>Completed on 7/31/2011</td>
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<td>DP WEST</td>
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<tr>
<td>Complete Clean Buildings D&amp;D</td>
<td>Jan-2011</td>
<td>Completed – 12/21/2010</td>
</tr>
<tr>
<td>Complete Demolition of DP West Buildings</td>
<td>May-2011</td>
<td>Completed on 12/21/2010</td>
</tr>
<tr>
<td>D&amp;D Closeout</td>
<td>Sep-2011</td>
<td>Completed on 7/31/2011</td>
</tr>
</tbody>
</table>
In addition to the specific milestones and summary schedule dates identified in the POP, the Office of Environmental Management also requires that milestones and schedule dates be identified within the Integrated Planning Accountability and Budgeting System (IPABS). For the DP East and West D&D Subproject, the following milestones were identified within IPABS, and have been verified as completed:

<table>
<thead>
<tr>
<th>Milestone ID</th>
<th>IPABS Milestone Field Code</th>
<th>Milestone Name</th>
<th>Baseline Completion Date</th>
<th>Forecast Date</th>
<th>Actual Date</th>
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<td>6068</td>
<td>VL-LANL-0040-D.R1-072</td>
<td>FPD Verification that DOE O 413.3A criteria are satisfied</td>
<td>8/5/2011</td>
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LANL ARRA Sub Project -
LANL TA-21 Demolition of Delta Prime East and West Facilities

Critical Decision 4

As required by DOE Order 413.3A, key performance parameters (KPPs) identified for the DP East and West D&D subproject are as follows:

<table>
<thead>
<tr>
<th>Original KPP</th>
<th>Met</th>
<th>Discussion (Include physical completion date)</th>
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<tbody>
<tr>
<td>Planning, mobilization and performance of hazardous material abatement and equipment removal of all DP East and West buildings</td>
<td>Yes</td>
<td>Hazardous material abatement and equipment removal was completed on February 17, 2011.</td>
</tr>
<tr>
<td>Structural demolition of above-grade structures for all the DP East and West buildings</td>
<td>Yes</td>
<td>Structural demolition of all above grade structures was completed on December 21, 2010</td>
</tr>
<tr>
<td>DP East: Remove and properly dispose of all slab and sub-slab structures (except the basement of building 209 will be left in place)</td>
<td>Yes</td>
<td>Removal and disposition of slab and sub-slab structures was completed on March 16, 2011</td>
</tr>
<tr>
<td>DP East: Remediate sub-structure soils based on clean-up criteria negotiated with the NMED and local stakeholders</td>
<td>Yes</td>
<td>Subsurface soil remediation was completed on March 11, 2011</td>
</tr>
</tbody>
</table>

Planned Baseline Scope, Cost, and Work Authorization

The detailed baseline scope and cost of the DP East and West Subproject was documented within the DP East and West Stimulus Program Office Support Task Scope Descriptions (TSD). The TSD were approved prior to initiating demolition and included the following information:

- Scope Description
- Deliverables
- Estimating Assumptions and Exclusions
- Risks to Project
- Estimate Stage and Method
- References/Legal Drivers
- Background and Specific Information
- Resource Dictionary
- Cost Estimate

The approved TSD supporting this subproject are included as Attachment 2.

Changes to the performance baseline were managed as described in the approved PEP, and baseline change control was documented as required. Changes were documented for review and approval in a Baseline Change Proposal (BCP). The DP East and West D&D Baseline Change Proposal Change Log is included in Attachment 3.

Work authorization for this subproject was performed using the TSD as part of the performance baseline. Authorization was completed in support of the subproject milestones and documented in a Work Authorization Document (WAD) which is included as Attachment 4.
Scope Completed and Verified as Complete

On December 21, 2010 the milestones supporting demolition of the DP East and West facilities, as identified in the POP, were verified as being completed. The final disposition of waste was verified as being completed on July 29, 2011. In support of achieving the KPPs, and milestones identified in the POP the following activities were completed:

- Rendered each building “cold and dark” — Included isolating and verifying that electric and other potential energy sources (e.g., steam lines, water, etc.) were disconnected.
- Remediated each building of hazardous materials (e.g., asbestos, polychlorinated biphenyls [PCBs], lead, etc.), and remove equipment containing radiological holdup material.
- Recycled uncontaminated equipment and systems, or salvaged where possible.
- Demolished all structures identified in the subproject, with the resulting waste disposed of based on characteristics, and acceptability of disposal site waste acceptance criteria (e.g., industrial waste [IND], low level waste [LLW], mixed low level waste [MLLW], etc.).
- Removed DP East and West structures.
- Eliminated future surveillance and maintenance cost associated with the DP East and West Facilities.
- Disposed of all waste generated. No hazard analysis is required post-demolition.
- Performed work under budget and met baseline schedule milestones, IPABS milestones, and POP milestones.

The remaining footprints (area beyond where the former DP East and West facilities occupied), are within the TA-21 site and are part of the Delta Prime (DP) Aggregate Site Work Plan. The scope of the DP Aggregate Site Work Plan is not part of ARRA work scope and falls within the scope of the base EM program under Soil and Groundwater Remediation and includes the completion of investigations and correctives measures evaluation and implementation at all SWMUs and AOCs in accordance with the March 2005 Compliance Order on Consent (Consent Order) with the New Mexico Environment Department (NMED). Upon completion of the DP Aggregate site work plan, the area may be considered for transfer as described in the Final Site-Wide EIS for Continued Operation of Los Alamos National Laboratory, Los Alamos, New Mexico, May 2008. Long Term Surveillance and Maintenance needs for the greater TA-21 area DP will be determined as cleanup progresses in closing the EM sites within TA-21. The remaining closure activities will be completed per the Consent Order requirements and will be handled through the Base Program. Any further monitoring requirements will also be handled through the Base Program.

The DP East and West Subproject completed all project scope within the established baseline and met all KPP’s. The following section provides a photographic summary of the project from inception to final site stabilization.
Photographic Summary of DP East and West Subproject

Photos included indicate demolition progress through completion.

TA-21 DP East before demolition

TA-21 DP East after demolition

TA-21-152 (DP East) before demolition

TA-21-152 (DP East) during demolition
Safety

The DP East and West Subproject has worked 68,433 hours without an injury or occurrence. LANS performed a local Verification for Readiness of the Demolition Subcontractor’s Readiness to Proceed with Demolition Activities. This Verification Review was assumed in the planning documentation, and was completed as indicated. In addition to the safety oversight activities performed by LASO, LANS, and the Subcontractor, the EM ARRA safety representatives also performed a safety oversight function, the results of which were documented in the Recovery Act Readiness Evaluation (RARE) Checklist.

The DP East and West subproject utilized the Integrated Safety Management System (ISMS) process to ensure work was performed in a safe and compliant manner. All work was performed utilizing approved work documents developed under the LANL Integrated Work Document (IWD) process. The subcontractors were required to have an approved Environmental, Safety & Health (ES&H) plan, developed in accordance with 10 CFR 851, Worker Safety and Health Program, prior to commencing field activities.

In accordance with the approved subcontractor ES&H Plan and associated work control process, the subcontractors developed a set of clearly defined work steps linked to specific hazards and controls utilizing the IWD. In this process a single Person-In-Charge (PIC) was identified with the responsibility and authority to manage and coordinate work; Pre-Job Briefings were held by the PIC using IWD validation; field walk-downs were performed to validate tasks, steps, hazards and controls were appropriately identified and implemented.
The subcontractor was required to have a LANL-approved, full-time dedicated ES&H professional on-site, who worked closely with the LANS management professionals to implement and administer the subcontractor’s approved ES&H Plan. In addition, the subcontractor was required to report and investigate all accidents, injuries and illnesses in accordance with 10 CFR 851.25(b), and analyze related data for trends and lessons learned in accordance with DOE O 225.1A, Accident Investigations. The subcontractors were required to ensure all workers were properly trained and qualified to safely perform all assigned tasks, with the appropriate Personal Protective Equipment (PPE) and utilizing accepted work management techniques. The subcontractor was required to demonstrate a “Zero Accident Performance” goal including zero non-permitted releases and zero regulatory non-compliance with respect to protection of the environment.

There was one (1) first aid injury during this subproject in June 2010 in the DP East area. An ITSI employee sustained a minor scratch on his arm while performing radiological surveys. There was one (1) recordable injury in December 2010 in the DP West area. An ARSEC employee complained of a sore back after dragging a fire hose across a short distance of the worksite. The employee was examined by a physician at a Santa Fe medical facility; the physician administered prescription medication for a muscle strain and recommended physical therapy.

Hazard Categorization & Readiness Reviews
The D&D project was completed and no nuclear facilities remain. Therefore, readiness reviews are not required. All hazards are less than category 3.

Construction
No additional infrastructure was constructed in support of the DP East and West Subproject.

Quality
The DP East and West Subproject was a demolition project and unlike a construction project, there are few Quality Assurance (QA) requirements that apply to a demolition project. The following QA documents were referred to and utilized during the execution of the demolition scope:

- **LANL Quality Assurance Plan for the Environmental Programs Directorate**, EP-DIR-QAP-0001, R3 - Defines the controls necessary to comply with contractual and Federal quality requirements.
- **LANL Environmental Protection Division (ENV) Quality Assurance Plan (QAP)**, ENV-DO-POL-QAP.1, Rev1 - promotes formality in the execution of quality affecting activities performed by the ENV and ensures compliance with SD330 LANL QAPs.
- **ARSEC Quality Assurance Manual**, Revision 0 - certifies their QAP addresses the requirements of 10CFR 830 M, Subpart A, Quality Assurance Requirements; DOE O 414.1C, Quality Assurance; ASME NQA-1-200, Quality Assurance Program Requirements for Nuclear Facilities; and ISO/ASQ Q9001-2000, Quality Management Systems Requirements.
- **Innovative Technical Solutions Incorporated (ITSI) Document** #PR-LA-ITSI-QA-002, meets the requirements of 10 CFR 830.120, Subpart A and DOE O 414.1c.

ITSI and ARSEC were both small business subcontractors to LANS and performed the work scope in support of the completion of the DP East (ITSI) and West (ARSEC) Subproject.
Safeguards and Security

There were no reported security incidents or investigations associated with the DP East and West Subproject. The Subcontractors experienced no security issues. The security risks were managed as follows:

- All visitors to the site were required to sign in and out of the contractor's project office which was a lockable office trailer at the site entrance.
- Controlled areas were roped off and clearly marked.
- Lockable transportainers were used for secure storage of tools, supplies and small equipment.
- The site was left in a safe condition each day with equipment secured, locked and staged in a pre-determined safe area.
- An Operational Security Plan was submitted to the LANS TA-21 Operations Center and approved before the start of D&D activities.
- All work was controlled and administered through the TA-21 Operations Center.
- All operations were conducted according to LANL Policy - PO 210 "Cyber Security Program". A project specific Cyber Security Plan was not required.

Permits and Licensing

The DP East and West Subproject was a demolition subproject, above-grade and below-grade structures were removed, and soil remediation performed, as necessary, per the authorized work scope. Since this was a demolition subproject as opposed to the construction of a new facility, operational permits and licensing were not required for purposes of transition or DP East and West Subproject closeout. In preparation for the demolition, a RAD-NESHAP Review of the TA-21 Remediation Activities was performed and documented in Rad-NESHAP Review of TA-21 Remediation Activates, LA-UR-09-07922, LANL, ENV-EAQ. This document summarizes compliance with 40CFR61 Subpart H requirements, and resulted in the addition of two new AirNet stations at the Los Alamos Airport in support of the entire ARRA Project and concluded that all requirements under 40 CFR 61 were met for the purpose of proceeding with demolition of the DP East and West Subproject. Storm Water Pollution Prevention Plans were administered and subcontractors complied with the requirements set forth in these plans for the DP East and West operations.

Operations and Maintenance Manuals

The DP East and West Subproject was a demolition subproject, above-grade and below-grade structures were removed, and soil remediation performed, as necessary, per the authorized work scope. Since this was a demolition project as opposed to the construction of a new facility, Operations and Maintenance Manuals are not required for purposes of transition or DP East and West Subproject closeout. However, in preparation for demolition, LANS prepared and executed procedures to ensure the safe practice of: identifying and de-energizing energy sources; removal of acidic waste lines/pipes; ensuring good radiation protection practices; penetration of walls and floors. These procedures were completed and utilized during demolition.
LANL ARRA Sub Project -
LANL TA-21 Demolition of Delta Prime East and West Facilities  
Critical Decision 4

Manufacturer's Warranties
The DP East and West Subproject was a demolition subproject, above-grade and below-grade structures were removed, and soil remediation performed, as necessary, per the authorized work scope. Since this was a demolition project as opposed to the construction of a new facility, manufacturer's warranties are not required for purposes of transition or DP East and West Subproject closeout.

As-Built Drawings
The DP East and West Subproject was a demolition subproject, above-grade and below-grade structures were removed, and soil remediation performed, as necessary, per the authorized work scope. Since this was a demolition project as opposed to the construction of a new facility, As-Built Drawings are not required for purposes of transition or DP East and West Subproject closeout. However, Global Positioning System (GPS) surveys were completed and documented and information provided to the LANL EM Base Program.

Financial Summary
The DP East and West Subproject completed all scope within the established performance baseline cost and schedule. This financial summary addresses cost and schedule performance through completion of all field activities during the DP East and West Subproject. The scope of the DP East and West Subproject was to demolish and remove the structures, slabs, and sub-grade structures, perform soil remediation as necessary, perform final site grading, and disposition all resulting waste.

Once all the outstanding costs and invoices are realized and the TPC is solidified, any unexpended funding could be authorized for additional work scope identified in the POP. An operating activity has already been identified per the EM Execution Framework and this operational activity is the placeholder for unexpended budget authority. Future scope is most likely in support of remediation and/or investigation of process waste lines that serviced DP East and West facilities.

Cost Performance

Cost Performance Index (CPI)
The DP East and West Subproject to date (end of June, 2011) with a CPI of 1.01. DP East and West Subproject actual costs as of end of June 2011 are $46,890,197.

Estimate at Completion (EAC):
The current EAC for the DP East and West Subproject to date (as of end of June 2011), through financial closeout is $48.6 million. The EAC reflects remaining commitments, including LANS costs associated with the financial closeout activities.

Remaining Commitments:
As of July 29, 2011, all waste has been been disposed, remaining activities include final invoicing of all waste disposition costs.
Contingency Log:
Refer to the Appendix, BCP Control Log, Attachment 3, for a summary of the DP East and West Subproject contingency utilization. The DP East and West Subproject completed all work with zero (0) contingency funds.

Schedule Performance
The DP East and West Subproject was completed within the baseline schedule and all key milestones per the PEP were achieved. The Schedule Performance Index (SPI) was 1.0 at the end of June, 2011.

Environmental Management System
LANS continuously updates its EMS. The TA-21 ARRA Stimulus Project, EMS Toolkit Resource TR 2.22 and 2.23 are updated.

Lessons Learned
There were no accidents or incidents during the performance of the DP East and West work scope that resulted in an unusual occurrence or off normal report. There were however, some efficiencies noted in the execution of the DP East and West Subproject that are positive lessons learned to be provided as part of the post CD-4 requirements.

Final DP East and West Subcontractor Project Closeout Reports
The majority of this work was performed under subcontract to LANS. Final Subcontractor Project Closeout Reports have been prepared and approved by LANS. ARSEC submitted one Final Subcontractor Project Closeout Report for the DP West area. ITSI submitted two Final Subcontractor Project Closeout Reports for the DP East area, one report for the Building 152 cluster of buildings, and one report for the Building 209 cluster of buildings. Copies of these Final Subcontractor Project Closeout Reports are contained in Attachment 5.
Attachment Listing

- Attachment 1 - DP East and West Project Operating Plan (POP)
- Attachment 2 - DP East and West Stimulus Program Office Support Task Scope Description
- Attachment 3 - DP East and West Baseline Change Proposal Log
- Attachment 4 - DP East and West Work Authorization Document
- Attachment 5 – DP East and West Subcontractors Final Project Closeout Reports (Attached CD)
  - ARSEC Final Subcontractor Project Closureout Report for the DP West Area
  - ITSI Final Subcontractor Project Closureout Report for the DP East, Building 152 Cluster
  - ITSI Final Subcontractor Project Closureout Report for the DP East, Building 209 Cluster
- Attachment 6 – IPABS Reconciliation Sheet
References

1. Los Alamos National Laboratory American Recovery and Reinvestment Act (ARRA) Project, Project Execution Plan, Dated January 2010
2. EM Recovery Act Program Portfolio Management Framework, dated July 10, 2009
3. US Department of Energy (DOE) Order 413.3A, Program and Project Management for the Acquisition of Capital Assets
4. LANL Quality Assurance Plan for the Environmental Programs Directorate, EP-DIR-QAP-0001, R3 — Defines the controls necessary to comply with contractual and Federal quality requirements.
5. LANL Environmental protection Division (ENV) Quality Assurance Plan, ENV-DO-POL-QAP.1,Rev1 promotes formality in the execution of quality affecting activities performed by the Environmental protection Division (ENV) and ensures compliance with SD330 LANL Quality Assurance Plan (QAPs).