Site Operations Plan

Niagara Falls Storage Site
Building 401 Demolition
Lewiston, New York

Contract No. W912P4-07-D-0003-0002

Prepared by:
TPMC-EnergySolutions Environmental Services, LLC

Prepared for:
U.S. Army Corps of Engineers (USACE)
Buffalo District
Buffalo, New York

US Army Corps of Engineers®
Buffalo District

August 2010
Site Operations Plan
Niagara Falls Storage Site
Building 401 Demolition
Lewiston, New York

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[ ] New Plan
[ ] Title Change
[ ] Plan Revision
[ ] Plan Rewrite

Effective Date
CERTIFICATION OF INDEPENDENT TECHNICAL REVIEW

COMPLETION OF INDEPENDENT TECHNICAL REVIEW

TES, LLC (TES) has completed the Niagara Falls Storage Site Operations Plan for the Niagara Falls Storage Site Building 401 Demolition Project, Lewiston, New York. Notice is hereby given that an independent technical review has been conducted that is appropriate to the level of risk and complexity inherent in the project, as defined in the Quality Control Plan. During the independent technical review, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of assumptions; methods, procedures, and material used in analyses; alternatives evaluated; the appropriateness of data used and level of data obtained; and reasonableness of the results, including whether the product meets the customer’s needs consistent with existing USACE policy.

7 July 2010
Preparer

28 May 2010
ITR Reviewer Preparer

CERTIFICATION OF INDEPENDENT TECHNICAL REVIEW

Significant concerns and the explanation of the resolution are as follows:

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As noted above, all concerns resulting from independent technical review of the plan have been resolved.

Signature/ITES Program Manager – Ph.D., CHP

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LIST OF ACRONYMS

ACM  Asbestos Containing Material
AEC  Atomic Energy Commission
APP/SSHP  Accident Prevention Plan/Site Safety and Health Plan
C&D  Construction and Demolition
CESHP  Corporate Environmental, Safety, and Health Program
CFR  Code of Federal Regulations
COR  Contracting Officer’s Representative
CWM  Chemical Waste Management, Inc.
DEMCO  DEMCO, Inc.
DOE  Department of Energy
ES  Energy Solutions
FUSRAP  Formerly Utilized Sites Remedial Action Program
HP  Health physics
HTRW  Hazardous, Toxic, and Radioactive Waste
LOOW  Lake Ontario Ordnance Works
MARC  Multiple Award Remediation Contract
NFSS  Niagara Falls Storage Site
NRC  Nuclear Regulatory Commission
NYS  New York State
OSHA  Occupational Safety and Health Administration
PCB  Polychlorinated Biphenyl
PEL  Permissible Exposure Level
PM  Project Manager
POTW  Publicly Owned Treatment Works
PPE  Personal Protective Equipment
QA  Quality Assurance
QCP  Quality Control Plan
QCS  Quality Control System
RCM  Radiation Control Manager
RCRA  Resource Conservation and Recovery Act
RMS  Resident Management System
SAP  Sampling and Analysis Plan
SOW  Statement of Work
TES  TerraneaPMC – Energy Solutions Environmental Services, LLC
TPMC  TerraneaPMC, LLC
TSCA  Toxic Substances Control Act
USACE  United States Army Corps of Engineers
WMP  Water Management Plan
WWTP  Wastewater Treatment Plant
1.0 INTRODUCTION

1.1 OVERVIEW

This document outlines the intended procedures to be used for the characterization and packaging of miscellaneous debris in Building 401 at the Niagara Falls Storage site (NFSS), demolition of Building 401 and the adjacent silos, and disposing of the demolition debris and other packaged wastes. Detailed procedures are presented in the Demolition Plan (TES, 2010c); Sampling and Analysis Plan (SAP) (TES, 2010d); and Waste Management, Transportation, and Disposal Plan (TES, 2010e). This Site Operations Plan may be altered during operations with permissions from TPMC-Energy Solutions Environmental Services, LLC (TES), the U.S. Army Corps of Engineers, Buffalo District (USACE), and other participants that may collectively benefit the project as a whole.

This work is being performed by TES under contract W912P4-07-D-0003-0002. TES has teamed with DEMCO, Inc. (DEMCO) for the structural demolition, including asbestos containing materials (ACM) abatement of Building 401. Contracting Officer’s Representative (COR) and technical oversight responsibilities for the tasks described in this document will be provided by the USACE, Buffalo District.

In order to streamline information and provide a useful field document, this Site Operations Plan describes the mobilization and demobilization activities for the project, the resource-loaded schedule, and site set-up/layout plan. The Spill Contingency Plan is included in the Waste Minimization Plan. The Emergency Management Plan is included with the Accident Prevention Plan/Site Safety and Health Plan (APP/SSHP) for the project (TES, 2010a).

This Site Operations Plan has been developed in accordance with the requirements of Part 1, Section 11.6, Site Operations Plan, of the MARC Descriptions and Specifications and the Statement of Work (SOW) included in the USACE Solicitation No. W912P4-10-R-0000, Niagara Falls Storage Site Building 401 Demolition (USACE, 2009a).

1.2 BACKGROUND

NFSS is part of the USACE Formerly Utilized Sites Remedial Action Program (FUSRAP). It is located at 1397 Pletcher Road, Lewiston, New York, and the Federal Government owns the site. The site was originally a part of the Lake Ontario Ordnance Works (LOOW). The primary use of the site from early 1940s through mid 1950s was for storage, trans-shipment, and disposal of radioactive materials from various sources.

Building 401 was initially the powerhouse for the production of TNT at LOOW, and certain sections of the building were also used to store radioactive materials. It was used for the production of Boron-10 from 1953 to 1959 and from 1965 to 1971 and a portion of the building was used as a waste storage facility used by the Atomic Energy Commission/Department of Energy (AEC/DOE). In 1971, all major systems and components of Building 401 were removed and the instrumentation and hardware disposed of as surplus material. This building has been largely inactive since, and evidence of bird and animal occupation has been observed. An interior asbestos abatement was performed on Building 401 during spring/summer 2002. Figure 1-1 shows the location of Building 401 at the NFSS.
Building 401 is a steel framed multi-story structure with a ridge height of approximately 76 feet encompassing 100,000 square feet. The main structural system of the building consists of steel and concrete load-bearing walls supporting what may be a transite roof. The interior walls are poured concrete, concrete block, and other construction materials. The exterior is comprised of sections of corrugated steel, and transite siding and roofing. Inside the building, there are multiple floors, which contain rooms and offices and building service areas (boiler rooms and tower areas). Additionally, Building 401 has three large concrete silos and the building floor is a concrete slab. Figures 1-2 and 1-3 are Building 401 floor plans.

USACE Solicitation No. W912P4-10-R-0000, Niagara Falls Storage Site Building 401 Demolition, and Scoping Information, dated September 2009, provides additional background information on the NFSS site and Building 401 (USACE, 2009a and 2009b).

1.3 SUMMARY OF WORK PLANNED

The work to be performed at the NFSS Building 401 site includes the following activities:

- Development of required plans
- Building 401 Engineering Survey, Asbestos Survey, and Structural Integrity Evaluation
- Mobilization activities (including road loading evaluation, utilities requirements, and pre-construction radiological survey)
- Removal/abatement of miscellaneous hazardous/radioactive waste and debris from Building 401
- Demolition of Building 401 and adjacent silos
- Characterization, segregation, volume reduction, and appropriate packaging of the wastes generated
- Loading, transportation, and disposal of packaged wastes at licensed/permited disposal facilities
- Demobilization activities (including cleanup, post-construction radiological survey, and restoration of the Building 401 site)
- Project Closeout including preparation of a comprehensive Project Completion Report

2.0 PRE-DEMOLITION ACTIVITIES

2.1 UTILITY REQUIREMENTS

TES will perform a geophysical survey to locate all underground utility lines within the work perimeter prior to the start of demolition. The located underground utility lines (gas, electric, water, sewer, telephone, etc.) will be shown on a drawing that will be presented to the USACE. After USACE acceptance, TES will disconnect and properly terminate all existing utility lines as required for building demolition. Basic utilities including water will be provided to TES by USACE at existing sources as available. TES will coordinate and be responsible for all hookup and drop services associated with provided utilities. TES will prepare a description of its utility
requirements and submit them to the USACE for acceptance. After receiving USACE’s written acceptance, TES will coordinate with the USACE COR for utility hookups and request an USACE person onsite as warrants/applies. TES will use generators to provide electrical service.

Currently, there are no sewer (sanitary or storm) connections at the site; they have been disconnected. TES will remove liquids and solids from site drains and sumps as needed to prevent overflow prior and during grouting. Any material removed from drains and sumps shall be segregated and sampled. This material should not be mixed with other waste streams until its contaminants have been determined. TES will then plug all drains and sumps and fill to grade to prevent any liquid from migrating off-site. TES will grout any foundation depressions greater than 6-inches deep. TES will collect all water from demolition activities, test for compliance with discharge requirements, and either transport the wastewater to an off-site treatment facility or reuse it for dust suppression as the data dictates. Sanitary wastewaters will be managed similarly. Additional details are provided in Section 3.1.

2.2 BUILDING 401 STRUCTURAL INTEGRITY EVALUATION

DEMCO will subcontract a professional structural engineer, licensed in New York State (NYS), to evaluate the structural integrity of Building 401. The engineering assessment will be performed in accordance with SEI/ASCE 11-99 Guideline for Structural Assessment of Existing Buildings. The structural integrity evaluation will include the current condition of the building and the recommended approach/sequencing for building/silo demolition. The evaluation will include the building and the three adjacent concrete silos.

TES will prepare a report that will detail the results of the structural integrity evaluation and submit it to the USACE. The report will be stamped and signed by the Licensed New York State Professional Engineer.

2.3 PERMITS

TES will obtain/provide the required permits/licenses to perform the Building 401 demolition. These permits include:

- Construction permits (additional details provided in the Demolition Plan; TES, 2010c)
- Crane operator’s certificate of competence (included in the Demolition Plan; TES, 2010c)
- Wastewater pretreatment permit (additional details in section 3.1)

The permits will be obtained prior to the start of the field effort. A stormwater permit will not be necessary as less than one acre of soil will be disturbed during the project.

2.4 ROAD LOADING EVALUATION

TES will evaluate the condition of NFSS roads that will be used to both access the Building 401 site and remove the packaged waste. TES will evaluate the routes trucks will follow to transport the wastes for maneuverability. The NYS licensed structural engineer will evaluate the load rating of the roads and their capability to support the projected waste/debris loads. The road loading evaluation will consider routine landfill truck traffic. The structural engineer will also recommend any required improvements/repairs (if any). Based on the results of the evaluation, TES will delineate the truck route(s) for the project. The waste transport truck route will avoid
the portions of Creek Road that pass alongside the Lewiston-Porter Elementary, Middle, and High Schools. The evaluation will be included as an Attachment to the Daily Construction Quality Control Report following its performance.

2.5 MOBILIZATION PLAN

TES will mobilize two office/lunch/meeting trailers to the site. Temporary hygiene facilities (e.g. “port-a-let” or equivalent), wash water, and drinking water will be provided and located throughout the site, as needed. At a minimum, these facilities will be established within close proximity to the decontamination station.

TES is required to provide security for the demolition work area and waste storage areas. Security will be maintained at the site during demolition/remedial activities. The existing site fence will continue to be used to restrict access to the site. A movable Jersey barrier gate that will be opened to allow ingress and egress from the site will replace the existing boulder entrance barrier. A similar gate will also be created into the adjacent Modern Landfill.

TES will conduct a pre-demolition inspection and retain video/photographic documentation of the existing site conditions prior to commencement of on-site work. Work zones will be delineated and posted to minimize the potential for “cross contamination”, and to establish boundaries for work areas. Figure 4 shows the proposed site layout for the demolition project.

TES will establish a buffer area of approximately 15 meters around the Building 401 work zone. This footprint will be covered with water permeable geotex fabric and covered with crushed stone to minimize any intrusion into native soils. The buffer zone will be radiologically surveyed prior to and after installation of the geotextile fabric and crushed stone.

Information on specific equipment to be used during the project is found in the Demolition Plan (TES, 2010c). Equipment brought onto the site will be operationally tested prior to project use. All equipment will be inspected on a daily basis and at frequencies identified per the manufacturer specifications, and maintained in a safe operating condition. In addition, all equipment mobilizing to the site will be radiologically surveyed or have a current survey provided prior to arriving on site. Only approved employees or designated sub-tier contractors (who have been trained and are qualified by their employer) will operate heavy equipment or trucks.

2.6 SITE ACTIVITIES

2.6.1 Site Security

TES will provide security for the Building 401 site, including access control in and out of the site during the project. Security will be provided from the initiation of mobilization activities to the completion of all demobilization activities. TES will replace the existing boulder road barrier with movable “jersey” barriers and will control the configuration to optimize site security. An entrance will also be created to the adjacent Modern Landfill using movable “jersey” barriers. TES anticipates using the existing chain link fence that surrounds the building perimeter for project security. TES will maintain the fence and restore it to pre-project condition at the conclusion of the field work. TES will also install additional fencing in some areas (See Figure 4), and a sight barrier covering to the exterior fence to limit visibility.
2.6.2 **Hazardous Materials**

TES will identify and quantify hazardous materials including lead, light ballasts, fluorescent light fixtures, mercury/sodium vapor lights, capacitors, and thermostats. Removal of these hazardous materials will be completed in a safe and efficient manner. The removed hazardous materials will be segregated and packaged separately from other building debris. The removed materials will be characterized using process knowledge and/or sampling and analysis to determine proper disposal requirements. These materials will be removed from Building 401, staged, and transported for disposal to an appropriate and authorized licensed and approved disposal site. TES will comply with 6NYCRR Part 360 and Part 380 requirements.

TES will also treat bird and animal waste. The procedure for animal waste treatment is located in Section 6.1 of the site Demolition Plan (TES, 2010c). Once treated, these materials will be transported and disposed with building debris at Modern Landfill’s C&D waste facility. TES understands that interior asbestos containing material (ACM) was removed from Building 401 in the spring and summer of 2002; however, this will be verified during the pre-demolition asbestos survey and if required any ACM remaining will be handled as required prior to demolition start. Our survey and removal will consider possible ACM.

Additional details are provided in the Demolition Plan, and SAP for the project (TES, 2010c and TES 2010d).

2.6.3 **Asbestos Survey**

Fifty-Six, Inc. will survey the entire building for ACM using a NYS certified and licensed asbestos inspector. Confirmed ACM will be removed prior to building demolition by a NYS certified and licensed abatement contractor in accordance with NYS Code Rule 56. Team subcontractor DEMCO will provide the NYS licensed asbestos inspector and is a NYS licensed asbestos abatement contractor.

2.6.4 **Debris Removal**

Removal of debris will be completed in a safe and efficient manner. The removed debris will be segregated and packaged separately from building debris. The removed debris will be sampled and analyzed to determine disposal requirements. Due to the nature of the project, debris will initially be considered contaminated, therefore, exposure to site workers will be limited and/or prevented.

Additional details are provided in the Demolition Plan, and SAP for the project (TES, 2010c and TES 2010d).

2.6.5 **Radiologically Contaminated Areas**

Building 401 contain areas with radiological contamination. TES health physics personnel will survey the building for radioactive contamination and delineate areas in excess of action levels allowing for unrestricted release in accordance with the SAP. Contaminated building material will be identified, segregated and marked so that material can be controlled and removed at the earliest point that access can be obtained. Once removed, radiologically contaminated material will be segregated and sent to an appropriate disposal facility (EnergySolutions’ Clive Landfill). Radioactively contaminated floor slab and footer sections will be marked for potential
remediation to meet unrestricted release for the removable radiological component (NRC Regulatory Guide 1.86 criteria; NRC, 1974).

Soil areas adjacent to Building 401 (within 15 meters) with elevated radiological levels will be covered with crushed stone and geotextile fabric in order to minimize disturbance during demolition activities. These areas will be delineated with snow fencing to keep personnel and equipment away.

Additional details on the management of radioactive contamination can be found in the APP/SSHP and Demolition Plan for the project (TES, 2010a and TES 2010c). Demolition activities

3.0 DEMOLITION

TES will complete the demolition of Building 401 and attached silos at the NFSS. The concrete floor slab and footer will remain. TES will remediate by scrabbling concrete surfaces that are visibly stained or radioactively contaminated in excess of levels above unrestricted release criteria for removable contamination (NRC Regulatory Guide 1.86).

Details on the Building 401 demolition are presented in the Demolition Plan that was prepared and signed by a professional engineer licensed in NYS specializing in structural engineering (TES, 2010c). The schedule for the project is presented in Attachment A.

3.1 WATER MANAGEMENT

TES has developed a Water Management Plan (WMP) describing the methods to be employed for management of surface water runoff, runoff from loading and/or staging areas, and water generated during decontamination activities. The WMP identifies the sources and use of potable water for dust suppression and equipment decontamination. This Plan also includes information on discharge permitting, anticipated effluent limits, wastewater treatment methods (if required), and effluent monitoring and reporting for wastewater that will be generated during the project. Treated wastewater will be discharged to the Lockport, New York, wastewater treatment plant (WWTP) or to a commercial treatment facility acceptable to the USACE, Buffalo District.

TES will minimize the potential spread of radiological and other contamination during Building 401 demolition by implementing water diversion as well as wastewater collection and management. Water diversion measures will consist of limiting areas where work with potentially contaminated debris occurs, implementing sedimentation and erosion control measures, and placing waste/debris on top of polyethylene plastic. In addition, all waste/debris piles will be covered to prevent the generation of contaminated runoff.

Wastewater will be collected using non-mobile polyethylene frac tanks, a pump powered by a gasoline fueled electric generator, and hose. The collected wastewater will be conveyed to a temporary on-site wastewater storage and treatment system consisting of frac tanks and a skid mounted bag filtration unit. Wastewater will be pumped from the collection system to one of the frac tanks where settling of suspended solids will occur. Wastewater will later be pumped out of the influent frac tank and treated using bag filtration to reduce the concentration of suspended solids. Treated wastewater will be stored in the effluent frac tank pending receipt of analytical results. The contents of the effluent frac tank will pumped out and transported to the Lockport, New York, WWTP or a commercial treatment facility acceptable to the USACE, Buffalo District.
for discharge, following receipt of monitoring results confirming that radiological effluent limits have been met.

Additional details on waste management can be found in water management section of the Waste Management Plan (TES, 2010e). Additional details on sample collection and analysis are contained in the project SAP (TES, 2010d).

3.2 DUST CONTROL METHODS

Dust control measures will be implemented during demolition to prevent spreading any contamination as well as maintaining the particulate level at the permissible exposure level (PEL) specified in 29 CFR 1926.55. The dust control program will consist of both dust suppression measures and continuous ambient air monitoring to verify the success of dust suppression. Dust controls to be implemented during the project are summarized below; a detailed description of the dust control program is included in the Demolition Plan (TES, 2010c) and the APP/SSHP (TES, 2010a) for the project.

Conventional methods will be used to suppress dust generated during demolition, including:

- Wetting demolition equipment and active demolition areas as required
- Covering waste/debris piles
- Hauling wastes/debris leaving the site in covered or closed containers
- Keeping vehicles speeds below 10 miles per hour on unpaved surfaces
- Applying a water spray during waste/debris handling and to unpaved vehicle access routes at the site, as required.

A spray nozzle and pump system will be used to suppress fugitive dust while preventing overly wet conditions, avoiding ponding and runoff, and conserving water. Potable water for dust suppression will be obtained from a nearby fire hydrant and managed as discussed in Section 3.1.

Project activities that could potentially cause the release of dust, such as building demolition, waste/debris piles, loading wastes/debris, transport of waste/debris, will be monitored for dust particulates and radioactivity in accordance with procedures described in the APP/SSHP for the project (TES, 2010a).

3.3 WASTE MANAGEMENT, TRANSPORTATION, AND DISPOSAL

Waste streams generated during this demolition project may include radiologically contaminated materials, regulated hazardous waste (RCRA, TSCA), mixed wastes (which contain both hazardous waste and radiological contamination, and uncontaminated materials). These wastes will include:

- Asbestos containing wastes
- Lead paint abatement wastes
- Universal wastes (fluorescent light bulbs, ballasts, batteries)
- TSCA wastes (PCB containing capacitors and other electrical equipment)
- Animal and bird wastes (carcasses, feces)
- Radiologically contaminated building debris
- Uncontaminated building debris
- Scrap metal

Due to the nature of the project, debris will initially be considered to be contaminated; therefore, exposure to crew members will be limited and/or prevented. TES will preferentially live load wastes, but have provisions for stockpiling wastes, if necessary. Waste containers will be surveyed for radiological contamination after they are filled. Waste stockpiles will be covered daily with secured, sturdy covers, side slopes will be less than 2H:1V, and total height will be less than 10 feet. TES will survey the waste stockpiles for radiological contamination. TES will characterize the waste by obtaining representative samples of the material to be disposed of prior to building demolition, as described in the SAP for the project (TES, 2010d). Wastes that have been characterized will be packaged for transport and disposal off-site at an appropriate, permitted facility. Two of the disposal facilities that will be used, Modern Landfill and CWM’s Model City facility, are adjacent to the NFSS.

Additional details on waste sampling and analysis are presented in the SAP for the project (TES, 2010d). Additional details on waste management are included in the Waste Management, Transportation, and Disposal Plan for the project (TES, 2010e).

3.4 SAFETY

TES is committed to the safety and health of our employees and subcontractors and has developed a Corporate Environmental, Safety, and Health Program (CESHP). TES believes that our people are the company’s most important assets and strives to provide them a safe and healthful work environment. By becoming actively involved in safety and health matters through implementation of our CESHP that includes employee communication, education, awareness, and involvement; TES will achieve its goals of reducing injury and illnesses and creating a safe and healthful work environment for all staff. TES reinforces the following to our employees; their responsibility to work safely and productively, being aware of and reporting hazards in their jobs and following recognized safe work practices, including the use of PPE.

TES has developed an APP/SSHP in accordance with the requirements located in USACE EM 385-1-1, 15 September 2008, “Safety and Health Requirements Manual”, Section 11.3 of the MARC Descriptions and Specifications, and the requirements of the Statement of Work (SOW) W912P4-10-R-0000 for the project (TES, 2010a). The APP/SSHP was prepared specifically for this project and describes who will have each of the specific responsibilities and how and when each of the applicable requirements will be performed.

TES will have a site safety and health officer (SSHO) and health physics (HP) technical support on-site at all times during field activities, commencing with mobilization and ending with demobilization. The HP technician will provide continuous monitoring of all debris for possible radioactive contamination during demolition activities.
3.5  COMMUNICATIONS

It is understood that communication throughout the project is imperative to the successful completion of the Building 401 demolition work. TES will work with all parties involved so that communication is possible at anytime with the site. Table 3-1 is the contact information for key project personnel.

The TES project manager will provide weekly updates via telephone or email to the USACE, COR. TES will use the web-based Resident Management System for Windows (RMS) for timely communications as outlined in the Quality Control Plan (QCP) (TES, 2010b).

3.5.1  Lines of Authority

TES is the prime contractor who has retained DEMCO to perform the asbestos abatement and demolition task. The DEMCO Building Demolition Site Supervisor will report directly to the TES Project Manager (PM). The TES PM will keep USACE and TES management current with the project progress.

3.5.2  Record Keeping

TES will maintain a field logbook that will document all field activities. Logbook entries will be complete and accurate enough to permit reconstruction of all field activities. All entries will be legible, written in black ink, and signed by the individual making the entry. The PM will be responsible for maintaining the logbook.

The following will be recorded on a daily basis and reported daily to TES:

- Log of the dates and times that site work takes place
- Personnel on-site
- Weather conditions
- Monitoring performed
- Equipment used
- Description of the demolition work each day
- Estimate of the material stockpiled each day.
- Waste/debris samples collected and sent for laboratory analysis
- Waste packaging methods and types of wastes packaged
- Record of waste/debris transported off-site for disposal
- Description of any accidents or spills which occur and a description of corrective measures taken

Any corrections within the logbook will be made by placing a single line through items to be corrected. The author’s initials and date will be placed adjacent to the lined out information.
3.5.3 **Quality Control Reporting**

TES will submit daily reports through the Quality Control System (QCS). Information provided in these reports will include, but not limited to the following:

- Contractor/subcontractors and their areas of responsibility
- Operating equipment
- Work performed
- Test or control activities performed
- Submittals reviewed
- Job safety evaluations
- Contractor’s verification statement

Additional details on the quality management for this project are located in the QCP (TES, 2010b).

3.5.4 **Meetings**

To ensure that lines of communication are open between all participating parties, the following meetings will be held during the active field work portion of the Building 401 demolition project.

- **Daily Coordination Meeting** - Supervisory personnel involved with demolition activities, water and waste management will meet to coordinate activities.

- **Weekly Coordination Meeting** - Each week at a designated time in the Building 401 site field office trailer with USACE personnel. TES will prepare an agenda and submit minutes of each meeting to USACE. The meeting minutes will indicate personnel in attendance, summarize issues discussed, and list action items to be completed.

- **Monthly Coordination Meeting** – TES will attend monthly coordination meetings with the USACE, Buffalo District Project Manger. The meetings will be to review the planned QCS progress payment data submission for errors and omissions.

3.5.5 **Community Relations**

TES will not communicate any information on the project to any outside entity. All inquiries received from outside sources will be referred to the USACE, Buffalo District Public Affairs Office for a response.

4.0 **POST DEMOLITION ACTIVITIES**

4.1 **CLEANUP**

TES will remove all debris/waste from the project site. The debris/waste will be sent to the appropriate landfill (radiological impacted debris – EnergySolutions’ Clive landfill; RCRA/universal wastes – CWM’s Model City Landfill; Asbestos wastes – Modern Landfill; C&D wastes – Modern Landfill; solid wastes - Modern Landfill). Scrap metal for recycling will be sent to Niagara Metals, LLC. After all wastes have been removed, and depending on the weather, TES will remove all temporary facilities and structures, and dismantle and properly
dispose of erosion and sediment control facilities. TES will maintain temporary facilities and structures for equipment/supplies storage during the winter months if the field work has not been completed.

Additional details on waste management procedures are presented in the Waste Management, Transportation, and Disposal Plan for the project (TES, 2010e).

Equipment/supplies that entered a radiological area will be surveyed and decontaminated, as necessary. Survey forms, records, procedures, and results will be available for USACE quality assurance (QA) audits and inspections prior to decontaminated equipment/supplies release from the site. The equipment/supplies will also be available for QA radiological survey by the USACE.

4.2 POST-CONSTRUCTION RADIOLOGICAL SURVEY

TES will perform a post-construction radiological survey of the Building 401 slab surface and the surrounding work areas (survey limit will be 15 meters outside of the actual work areas). The survey will be performed by health physics personnel as outlined in the Sampling and Analysis Plan (TES, 2010d). The results will be compared to the pre-construction radiological survey and NRC Regulatory 1.86 removable radiological component as set forth in the Quality Assurance Project Plan.

4.3 SITE RESTORATION

Disturbed areas will be restored to pre-demolition condition at the completion of cleanup and radiological survey activities. TES will leave the snow fence surrounding the areas with elevated radiological levels. TES will obtain video/photographic documentation of site conditions after site restoration activities are complete.

4.4 DEMOBILIZATION PLAN

Demobilization will begin once structural demolition and sorting, packaging, and transportation of all demolition debris and waste has been completed. Demobilization consists of several major tasks to be completed prior to vacating the work site. These major activities include:

- Completion of post-demolition radiological surveys
- Decontamination of Building 401 concrete slab to meet free release criteria for removable radioactive surface contamination
- Equipment decontamination
- Site restoration

Post demolition radiological surveys will first be performed on the remaining slab of the 401 building. These surveys will be used to determine the extent of the remaining contamination and to delineate the level of decontamination needed to achieve free-releasable status for removable surface contamination. A combination of scabbling and application of fixative may be used to complete this process depending on the findings of the slab survey. Special attention will be given to discolored areas or those areas that have been pre-identified as having elevated radiological contamination. Confirmatory surveying will be completed to verify that all appropriate conditions have been met for free-release. Surveys will also be conducted around the
perimeter of the work area to a distance of 15m to confirm that no additional contamination was tracked outside of the building footprint beyond those levels measured for existing contamination during the initial radiological surveys performed prior to demolition commencement.

Equipment will be surveyed out of the work area and transported to the pre-existing decontamination slab located within the NFSS site. All demolition requiring decontamination, as a result of surveys will be cleaned at this location. All decontamination liquid generated as a result of this effort will be collected in 500 gal polycarbonate frac-tanks, sampled, and disposed of in accordance with all applicable local, state, and federal regulations.

Once equipment has been cleaned, resurveyed, and cleared off of the site, demobilization will begin in conjunction with any site restoration that is required. Any damage that may have occurred as a result of demolition activities will be repaired and the site will be generally restored to pre-demolition status as required.

Once demobilization is complete, TES will generate a project close-out report for acceptance by the Buffalo USACE.

4.5 PROJECT COMPLETION REPORT

At the end of the project, TES will prepare and submit a final narrative completion report summarizing all activities associated with the demolition of Building 401. The completion report will include all project records, including lower-tier subcontractor(s) records, in accordance with all applicable codes, standards, and regulations. The completion report will also include all survey, characterization, and sampling and analysis results. The report will be submitted in loose-leaf binders that are labeled and indexed. Five copies will be provided. In addition to the project completion report, all project documents/records and work plans will be submitted on CD-ROM in electronic Adobe format.

5.0 PROJECT ORGANIZATION

5.1 KEY PROJECT PERSONNEL

The following key personnel will be involved in this project:

- **Program Manager** – [Name] is the Program Manager. His role is to facilitate the project via upper-level programmatic support.

- **Project Manager (PM)** – [Name] will be the Project Manager (PM). The PM will oversee the day-to-day activities on the project and shall be responsible for the development and implementation of the project, and to ensure that it is safely and satisfactorily completed in accordance with all applicable requirements. The PM is also responsible for the daily updates to the Quality Control System (QCS). He shall exercise stop work and shutdown authority when deemed necessary to ensure the safety of workers, the public, and the environment.

- **Building Demolition Site Supervisor** – [Name] will be the Building Demolition Site Supervisor. He will be responsible for the day-to-day demolition operations, ensuring that they adhere to all plans and procedures. He will advise the PM on all matters pertaining to demolition progress and completion.
- **Site Safety and Health Officer (SSHO)** – [Redacted] will be the SSHO. The SSHO is overall responsible for health, environmental, and safety procedures to be followed on the project in compliance with the TES Corporate Environmental, Safety, and Health and Safety Program and the project APP/SSHP. He will be on-site at all times when work is being performed.

- **Radiological Control Manager (RCM)** – [Redacted] will be the RCM for the project. He is responsible for oversight and review of all radiological activities and data. The RCM has the authority to direct such work, stop work (and restart based on consultation with the PM), and to take appropriate actions, as required, to address radiological emergency situations.

- **Contractor Quality Control Manager (CQCM)** [Redacted] will be the project CQCM. The CQCM is responsible for maintaining the project QA/QC in accordance with the requirements of SAP and appropriate management guidance. This individual will be responsible for participating in the project field activity readiness review, approving variances during field activities before work continues, approving, evaluating, and documenting the disposition of Nonconformance Reports (NCRs), overseeing and approving any required project training, and designing audit/surveillance plans followed by supervision of these activities. The CQCM reports directly to the PM.

Figure 5-1 shows the project organization chart. Resumes of the key project personnel are included in QCP (TES, 2010b).

### 5.2 PROJECT LABOR

TES’s labor policies meet all the requirements of its contract number W912P4-07-D-0003-0002 with the USACE. TES will use professional personnel from its member companies, TPMC and ES, each of which manages its personnel in accordance with its company practices and policies. Subcontractors will manage their personnel in accordance with their company policies.

TES will use union labor for all craft labor positions on this project.

All site workers will have Radiation Protection training meeting 10 CFR 19 and 20 requirements and the OSHA 40-hour HAZWOPER training. In addition, site workers will have passed HTRW physicals prior to arriving at the site. Additional details on the TES Health and Safety policy is found in the APP/SSHP for the project (TES, 2010a).

### 5.3 SUBCONTRACTORS

The subcontractor services anticipated for this project are:

- ACM waste disposal – Modern Landfill
- Asbestos survey – Fifty-Six, Inc.
- Asbestos abatement – DEMCO, Inc.
- Building demolition – DEMCO, Inc.
- Laboratory services – Test America
- RCRA waste disposal – Chemical Waste Management, Inc.
- Security - Wackenhut
- Solid waste disposal – Modern Landfill
- Scrap metal processing and recycling – Niagara Metals, LLC
- Subsurface utility location/markout - GPR Services, Inc.

The site supervisor will supervise subcontractors, verifying qualifications and use of properly operating equipment. The site superintendent will also direct the activities of the subcontractors, including work stoppage and/or taking appropriate emergency actions.
5.4 **PROJECT CONTACT LIST**

The following table exhibits contact information for all personnel holding key roles on the NFSS Building 401 Demolition Project.

**Table 1 - Project Personnel Contact Information**

<table>
<thead>
<tr>
<th>Name</th>
<th>Project Role</th>
<th>Company</th>
<th>Work Phone</th>
<th>Cell Phone</th>
<th>Email</th>
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<tr>
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</table>
6.0 SCHEDULE

The project resource loaded schedule will be updated weekly and provided to USACE weekly at the Weekly Coordination Meeting. The schedule anticipates initiating field activities during September 2010, completing demolition activities by December 2010, completing all field activities in March 2011, and submitting the Final Project Report in April 2011.

The project field activities will operate during daylight hours on normal workdays. At the PM’s discretion, work may be necessary on weekends and holidays to meet the project schedule, or to take advantage of favorable weather. The USACE COR or designated representative will be notified at least 24 hours prior to planned weekend or holiday work.

7.0 REFERENCES


ATTACHMENTS
Figure 1 - Niagara Falls Storage Site
Figure 2 - First Floor Plan of Building 401
Figure 3 - 2nd Floor Plan of Building 401
Figure 4 - Site Layout
Figure 5 - Project Organization Chart

USACE PM/COR

TES Program Manager

TES PM / CQM System Manager

Waste Manager
Site Supervisor
SS&H Officer / ACQM System Manager
Radiological Controls Engineer

Shipper/Broker
Operators
Laborers

QC / ACQM System Manager

Lead HP Specialist
HP Specialists