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Waste Management, Transportation, and Disposal Plan

Volume I – Waste Management Plan

Niagara Falls Storage Site Building 401 Demolition Lewiston, New York

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

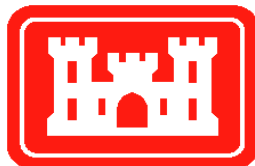
Prepared by:

TPMC-EnergySolutions Environmental Services, LLC




Prepared for:

U.S. Army Corps of Engineers, Buffalo District
Buffalo, New York



**US Army Corps
of Engineers®**
Buffalo District

August 2010

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Waste Management Plan


Niagara Falls Storage Site Building 401 Demolition Lewiston, New York

Authored By: [REDACTED] 10 AUG 2010
[REDACTED] Date

Reviewed By: [REDACTED] 10 AUG 2010
[REDACTED], PMP Date

Approved By: [REDACTED] 10 AUG 2010
[REDACTED], PM / CQC System Manager Date

- New Plan
- Title Change
- Plan Revision
- Plan Rewrite

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CERTIFICATION OF INDEPENDENT TECHNICAL REVIEW

COMPLETION OF INDEPENDENT TECHNICAL REVIEW

TES, LLC (TES) has DRAFTED the *Waste Management Plan* (volume 2 of the *Waste Management, Transportation, and Disposal Plan*) for the Niagara Falls Storage Site Building 401 Demolition Project located in Lewiston, New York. Notice is hereby given that an independent technical review has been conducted that is appropriate to address all regulatory and compliance issues appropriate to ensure management of all waste and materials generated as a result of the Niagara Falls Storage Site Building 401 demolition, as defined in the TES NFSS Waste Management 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.

Signature/TES Report Preparer

Date 28 MAY 2010



Signature/TES Independent Technical Reviewer

Date 28 MAY 2010



Signature/TES Independent Technical Reviewer

Date 28 MAY 2010



Independent Technical Review Team Members:

CERTIFICATION OF INDEPENDENT TECHNICAL REVIEW

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

Item	Technical Concerns	Possible Impact	Resolutions
Transportation and Disposal Plan			
1	See attached sheets		

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



Signature/

Date 28 MAY 10


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ACRONYMS

Bq	Becquerel
C&D	Construction and Demolition
CERCLA	Comprehensive Environmental Response, Compensation, Liability Act
CFR	Code of Federal Regulations
cm ²	Square Centimeter
COC	Chain of Custody
DOE	Department of Energy
DOE-EM	Department of Energy – Environmental Management
DOT	Department of Transportation
dpm	Disintegrations Per Minute
DQO	Data Quality Objective
EPA	Environmental Protection Agency
FSP	Field Sampling Plan
ft ²	Square Foot
FUSRAP	Formerly Utilized Sites Remedial Action Program
HMR	Hazardous Materials Regulations
IATA	International Air Transport Association
IDW	Investigation Derived Waste
ISMS	Integrated Safety Management Systems
LLRW	Low Level Radioactive Waste
NFSS	Niagara Falls Storage Site
NRC	Nuclear Regulatory Commission
NTS	Nevada Test Site
NYCRR	New York Official Compilation of Codes, Rules, and Regulations
NYSDEC	New York State Department of Environmental Compliance
PCB	Polychlorobiphenyls
PM	Project Manager
POTW	Publicly Owned Treatment Works
PPE	Personal Protective Equipment
QA	Quality Assurance
QC	Quality Control
RAM	Radioactive Material
RCRA	Resource Conservation and Recovery Act
TES	TMPC-EnergySolutions, LLC
TSCA	Toxic Substances Control Act
TSDF	Treatment, Storage, and Disposal Facility
USACE	United States Corps of Engineers
WAC	Waste Acceptance Criteria
WMP	Waste Management Plan

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1.0 INTRODUCTION

TMPC-EnergySolutions, LLC, (TES) has prepared this guidance document for use with the remediation of the Building 401 at the Niagara Falls Storage Site, Bldg 401 Facility (NFSS). This demolition is being conducted under the auspices of the Formerly Utilized Sites Remedial Action Program (FUSRAP) which is held in compliance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as well as the New York State Department of Environmental Compliance (NYSDEC).


The project has been authorized to perform the demolition and removal of inactive Building 401 facility. The waste generated from these activities will be disposed of at off-site disposal locations.

This waste management plan (WMP) applies to all wastes generated from the activities performed as a part of the remediation and demolition activities of the project. Wastes generated from remediation and demolition activities such as characterization and restoration, include associated secondary waste streams and management of waste during mobilization and demobilization phases of the project. These wastes will be managed in compliance with the directives in the WMP, federal regulations, and applicable state regulations dealing with sanitary and construction type waste.

This document establishes the framework to propagate programmatic strategies for managing waste from initial generation through final disposition. This plan addresses (1) pollution prevention, segregation, and waste minimization methods, (2) waste generation forecasts, (3) point of generation controls, (4) staging and storage requirements, (5) transportation, (6) treatment/recycling/disposal requirements, (7) required training, and (8) waste with no disposal path conditions.

TES will characterize waste in accordance with the applicable regulations, profile and procedure requirements, and the applicable Treatment, Storage, Disposal Facility (TSDF) waste acceptance criteria (WAC). Process knowledge will be used to the extent practical to minimize additional sampling. Additional sampling and laboratory analysis or noninvasive characterization methods will be performed as necessary when existing information is inadequate to make an accurate waste determination.

Sorting, segregation, and decontamination techniques will be performed to the extent practical to minimize the amount of regulated waste [Resource Conservation and Recovery Act (RCRA) and Toxic Substances Control Act (TSCA)] requiring treatment and disposal. Though this type of waste is not expected to be generated within the scope of this project, should the project require off-site treatment and disposal for these waste types, all appropriate authorities will be notified and all regulatory requirements satisfied prior to off-site shipment of any RCRA or TSCA-regulated material. All wastes will be evaluated for the best technical and cost effective disposition path with the following hierarchy:

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1. Recycle
2. Local Landfill Disposal Options; and
3. Commercial / Off-site Treatment, Storage, and Disposal Facility (TSDF).

TES will implement a program to track issues, corrective actions, and lessons learned. These items will be tracked in accordance with project Quality and Health Safety Programs.

2.0 PURPOSE AND SCOPE

2.1 PURPOSE

The purpose of this waste management plan (WMP) is to provide a systemic approach to the management of waste generated on the NFSS Building 401 Demolition Project that is designed to protect the health and safety of the worker, the public, and the environment.


The WMP provides an overall strategy for how waste management activities will be implemented for all primary and secondary wastes generated by the demolition of NFSS Building 401. The WMP will identify all types of solid and liquid waste streams expected to be generated, as well as the corresponding on-site and off-site disposal facilities needed to properly treat / dispose of the waste. In addition, this document describes the proper management of waste streams from generation to disposal, including characterization and segregation to meet the applicable disposal facility WAC.

2.2 SCOPE

The scope of this document is to set forth the requirements for managing legacy and newly generated waste for the NFSS Building 401 Demolition Project. The plan identifies the compliance drivers (codes, standards, laws, and regulations), organizational responsibilities, waste types, and specific elements that must be addressed during pre-planning, generation, management, and waste disposition.

This plan provides guidance for waste minimization, control, staging, and transportation of all wastes generated by the project. The majority of the waste generated at the site will include standard construction and demolition (C&D), solid waste [non-impacted material] that will classify the waste for a local landfill. Other waste streams that may be generated include characteristic hazardous waste, PCB waste, asbestos waste, and universal waste.

The TES team is responsible for the characterization and packaging of miscellaneous debris in Building 401 at NFSS, demolition of Building 401 and the adjacent silos, and packaging, loading, transporting, and disposing of the demolitions debris and other packaged wastes. This project will operate with the overall waste management guiding EPA hierarchy of reduce, reuse, recycle, dispose. As a result of process knowledge and historical characterization information, the TES waste management team assumes that the majority of remedial / demolition materials will be sent for recycle, disposed of at local landfill, or transported to Clive, UT for disposition within that facility.

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3.0 CODES, STANDARDS, LAWS, AND REGULATIONS

Unless indicated otherwise, the following codes, standards, laws, and regulations establish the minimum requirements for waste management and transportation related work:

10 CFR, Chapter 1 – Nuclear Regulatory Commission, Part 61

29 CFR, Part 1910, Occupational Safety and Health Standards

40 CFR, Chapter 1 – Environmental Protection Agency – Parts 260-299 and 700-78

40 CFR, Chapter 1 – Environmental Protection Agency – Part 330.440 Procedures for planning and implementing off-site response actions

49 CFR, Subchapter C – Hazardous Material Regulations – Parts 40, 100-185, 325, and 355-399

6 NYCRR, 360

6 NYCRR, 371.1, (c) (7)

6 NYCRR, 370 – 376

6 NYCRR, 380

4.0 RESPONSIBILITIES


Waste management activities have subset activities such as waste volume reduction, waste minimization and pollution prevention, packaging, and transportation and disposal. Waste management is the responsibility of all personnel performing work under this plan. Work procedures and processes are designated to minimize waste generation to the maximum extent practical. All TES team personnel and TES subcontractors are required to comply with this WMP and other applicable TES documents. Key positions for waste management are Project Manager, Waste Manager, Shipper, and Quality Assurance/Quality Control Representative. Their specific responsibilities are provided below.

4.1 PROJECT MANAGER (PM)

The PM is responsible for management and control of all activities associated with the NFSS Building 401 Demolition. The PM will ensure that personnel assigned to perform waste management activities do so in accordance with this plan and all appropriate procedures. In the event of an emergency, the PM, or designee, will make all appropriate notifications.

4.2 WASTE MANAGER

This lead position will serve as the point of contact for matters relating to characterization and management of wastes. The Waste Characterization/Transportation Lead is responsible for ensuring the proper characterization and management of wastes resulting

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from the activities associated with the project. Primary responsibilities include, but are not limited to, the following:

- Ensure that personnel involved in the management of waste are qualified and trained to perform job specific duties.
- Interface with waste generators and the Treatment, Storage, Disposal, or Recycling Facility (TSDF) on characterization/certification matters.
- Ensure that waste packages have proper certifications for the type of waste contained therein.
- Ensure that waste being shipped meets the appropriate TSDF WAC.
- Certify by signature (when required by the receiving facility) that waste is properly segregated, packaged, and prepared for shipment and meets the requirements of a waste profile and the WAC of the receiving facility.

4.3 WASTE SHIPPER

The Waste Shipper is responsible for providing the support needed to adequately identify, classify, contain, control, and communicate the hazards for waste being shipped off-site. A detailed description of the roles and responsibilities of the Waste Shipper are addressed in detail within the *TES Transportation Plan*.

4.4 QUALITY ASSURANCE/QUALITY CONTROL REPRESENTATIVE


The QA/QC representative will facilitate implementation of quality requirements and practices into waste management activities, and verify that these operations are being performed effectively, efficiently, and in accordance with the requirements of the waste management and transportation plan. The QA/QC representative will ensure that all quality requirements are met through the use of audits and surveillance.

5.0 WASTE GENERATION PLANNING AND FORECASTING

Waste forecasting is the process by which waste volume estimates are derived for each waste type to support the development of project schedules and cost estimates, and to serve as input for other Waste Management planning efforts (e.g., providing anticipated shipment schedule and quantity to Treatment/Storage/Disposal/Recycle Facilities). Waste forecasts will be developed to show anticipated waste generation rates by waste type throughout the entire project period and will be updated semi-annually. The forecasts will be provided to the project manager.

Minimization of the quantity of Low Level Radioactive Waste (LLRW) and hazardous waste requiring disposal will be a high priority during the project. Project management will incorporate waste volume minimization practices into site work and include the elements described below as an integral part of the remediation process.

On-site handling and packaging of waste, prior to transportation, will be performed in areas designated for these activities. Except for lead paint debris containing material, no

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other source of potential hazardous waste has been identified. No chemicals or other substances are anticipated to be used during remediation operations that may generate hazardous waste. To reduce or avoid the generation of hazardous wastes, project management will control the use of any chemical or other substance that could become a hazardous waste concern.

If hazardous wastes containing LLRW are identified during remediation, they will be stored on-site until approved for disposition. These materials will be managed according to federal, state, local, and site permitting requirements, consistent with project team procedures and license requirements for handling, storage, and transportation.


The project team will transport non-impacted waste to disposal facilities approved in advance by the U.S. Army Corps of Engineers (USACE). Hittman Transportation Services will provide transportation services for LLRW. As the generator, USACE will sign manifest, weigh bills, bills of lading, and other shipping documents.

5.1 PROJECT WASTE GENERATION PLANNING

Work will be planned, authorized, and accomplished under controlled conditions, using work plans, instructions, or procedures commensurate with the complexity and risk of the work. Processes important to waste disposition activities (e.g., characterization, radiological surveys, etc.) shall have controls or verification steps identified as part of operating procedures. Controls will be established to ensure the traceability of the waste from the point of generation through final disposition.

The waste that will be generated by this project does not include any licensed radioactive material. The primary sources of waste will include the following materials:

- Dust covering surfaces;
- Wood decking material;
- Rubbilized concrete and scrap steel;
- Abandoned vent duct, piping, conduit, and electrical cabinets;
- Roofing material;
- Potential asbestos containing material from pipe insulation, vent ducts, and roofing material;
- Dust and debris generated from the cleaning of building and equipment and elements such as structural steel (may contain lead and/or PCBs)
- Wire and associated insulation;
- Disposable personal protective equipment (PPE) used during remediation activities;
- Oil drained from equipment;
- Bird and animal waste inside of Building 401 and silos;

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- Construction & Demolition (C&D) waste throughout the course of the project; and
- Liquids generated through wet cleaning/cutting/dust suppression activities and decontamination activities.

5.1.1 POLLUTION PREVENTION/WASTE MINIMIZATION

TES will plan every activity to meet the obligations and responsibilities under Executive Order 12856, *Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements*, Executive Order 13423, *Strengthening Federal Environmental, Energy, and Transportation Management*, Executive Order 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*, Executive Order 13101, *Greening the Government through Waste Prevention, Recycling, and Federal Acquisition*, DOE Order 450.1A, *Environmental Protection Program*, and *The Pollution Prevention Act of 1990*. TES will minimize the generation of waste per the following EPA hierarchy:

- Reduce
- Recycle
- Dispose

Reduce. During project planning, every effort will be made to minimize the amount of waste generated by the following means:


- Use the least hazardous chemicals/products possible.
- Purchase only the amount of materials required.
- Limit the materials taken into contamination areas.
- Perform as many tasks as possible outside a contamination area as possible.
- Decontaminate items to the greatest extent practical.
- Aggressively sort and segregate materials.

Recycle. One of the major components of this demolition project is the intent to recycle all unaffected clean steel with local metal recycler – Niagara Metals.

TES will develop and implement a program for excess chemicals, products, etc. This will help reduce the number of products purchased as well as reduce the amount requiring waste disposal.

TES will recycle office wastes, including paper, plastic, aluminum cans, printer cartridges, etc. These items will be placed in designated locations/containers located on the project site. When sufficient quantities have been collected, they will be transported to a local recycling agency.

Dispose. TES will initiate and maintain required treatment/disposal contracts for all waste types generated. In all cases, TES will seek the most compliant, cost-effective alternative.

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The unnecessary generation of possible hazardous and LLRW wastes will be minimized by controlling chemicals brought on-site and by preventing unnecessary packaging materials, tools, and equipment from entering the regulated areas.

Health Physics technicians will conduct and document surveys of materials within the likely area of remediation to define the probable waste streams and to facilitate segregation of wastes. Decontamination activities will be planned to minimize the generation of secondary waste volumes due to the decontamination processes.

Remediation of areas of concern will generally occur from the top down when practicable to reduce the potential for contamination spread due to contaminated dust settling from above to already surveyed and remediated lower levels.

Minimal quantities of liquids will be used during remediation activities in order to reduce the amount of liquid wastes that may require treatment prior to disposal.

5.2 WASTE STREAM HANDLING AND DISPOSITION

The following sections provide general definitions of the waste streams that may be generated during the remedial action of the site. The list may not be inclusive of all wastes generated.

5.2.1 *Non-Contaminated, Non-Regulated Wastes and Recyclable Materials*


Sanitary wastes and other wastes that are not radioactive, hazardous (per RCRA/TSCA), or prohibited from land disposal by the State of New York, will be disposed of at the local commercial disposal facility (landfill). Uncontaminated, non-friable asbestos may be disposed of at the local landfill if specifically allowed by permit.

Materials that are considered by the project to be exempt from regulation, based on the intent to reclaim, recycle, or reuse will be released in compliance with State of New York Official Compilation of Codes, Rules, and Regulations (NYCRR) 6 NYCRR 371.1 (c)(7). As required by the regulation, a notification including all required information will be provided to the New York State Department of Environmental Conservation (NYSDEC) prior to utilizing the exemption or exclusion. Disposal options for non-contaminated, non-regulated, and recyclable materials include Niagara Metals and Modern.

5.2.2 *Chemical and Hazardous Waste*

Federal regulations define hazardous wastes as those solid wastes that are either specifically listed in the solid waste regulations (“F”, “U”, “P”, or “K”-listed wastes) or have particular characteristics (reactivity, ignitability, corrosivity, or leachability). Hazardous wastes include solids, liquids, and gases. In addition, New York regulations define certain wastes containing PCBs as hazardous waste.

Wastes generated from C&D activities (e.g. debris, materials) and maintenance activities (e.g., vehicle/equipment oil changes) that are determined to be hazardous wastes, per RCRA/TSCA regulations, will be packaged, treated, staged, transported, and disposed consistent with RCRA/TSCA and DOT regulations. These wastes will be disposed either by direct contract with a permitted Treatment Storage and Disposal Facility (TSDF) (e.g.

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Waste Management, Youngstown Landfill, NY) or indirectly through a contract with a qualified local hazardous waste broker.

The types of waste that may be disposed as indicated above include, but are not limited to: universal wastes, waste/recycle oil, friable asbestos, non-friable asbestos, PCBs, and RCRA/TSCA materials.

5.2.3 *Low Level Radioactive Waste*

Based on a review of the NFSS site historical data, anticipated radioactive waste streams will be limited to Low Level Radioactive Wastes (LLRW). LLRW will include, but is not limited to, demolition debris and asbestos containing material (ACM).

All radioactively contaminated wastes will be managed in accordance with CS-WM-PG-001, Radioactive Materials Management Program Commercial Services Projects.

5.2.4 *Non-Impacted Waste*

For the purposes of this plan, non-impacted wastes are those that are not considered hazardous under federal or state regulation. This would include such items as paper, cardboard, scrap metal, and woody debris (C&D).

5.2.5 *Universal Waste*

Universal waste is a category of waste materials not designated as hazardous but containing materials that need to be prevented from unconditional release into the environment. It is defined in 40 CFR 273 by the EPA and New York has corollary regulations regarding these materials (NYCRR). If universal waste is generated, a location for recycle/disposal will be evaluated and proposed for USACE approval. Universal waste will be handled according to CP-WM-PN-701, Universal Waste Management Plan.

Universal waste includes:


- Batteries,
- Pesticides,
- Mercury-containing equipment (including thermostats), and
- Lamps containing mercury (e.g., fluorescent lamps, including compact fluorescent lamps).

5.3 RELEASE OF POTENTIALLY CONTAMINATED ITEMS

Some items will be used in contaminated areas during the remedial action project. This typically includes potentially contaminated tools and equipment to be surveyed for unconditional release, in accordance with procedure CS-RS-PR-006, Unconditional Release of Tools, Equipment, and Waste Materials from Projects.

5.4 WASTE SEGREGATION

The volume of the different waste streams will be minimized by decontaminating areas and equipment where practical and by segregating waste as LLRW and unconditional

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released. Segregation of hazardous, asbestos, PCB, etc. waste streams will also be practiced where practical.

5.5 VOLUME REDUCTION

Bulky material will be dismantled or cut up to reduce volume for temporary storage and shipment when it is cost-effective.

5.6 WASTE TRACKING

Waste movement from generation to disposal will be tracked using an electronic database system and/or electronic spreadsheets. On-site containerized waste movements will be tracked using container identification labeling, move tags, and (optionally) a bar code printer/reader system. Off-site tracking will be implemented through logging of shipping manifests, supplementary transportation data, other notifications and documentation provided per subcontract, and documents provided in accordance with DOT and EPA regulations (e.g., certificates of treatment/disposal).

The tracking systems will provide the capability to identify for each waste container, the type of container, the type of waste contained, the container location, the volume of waste contained, the pertinent Waste Stream Profile, date loaded, date disposed, related container or waste material certifications, etc.

As the information for each container is received and logged into the tracking system, the supporting documentation will be compiled into a record package for that container. Upon receiving and logging the Certificate of Disposal, the record package will be transferred to Records Management Organization.

The procedure for implementing the waste tracking process, including the necessary tracking forms and documents will be provided to the project manager.


5.7 WASTE STORAGE ON-SITE

Any unpackaged waste stored while project personnel are not on site shall be covered using reinforced tarpaulin such as TR55, manufactured by Reef Industries or an USACE-approved equal. The cover shall be properly anchored and ballasted using 40 pound sand bags or USACE-approved equal. The height of the stored materials shall be limited to 8 feet. The cover material shall be considered radiologically contaminated and disposed at the licensed/permitted disposal facility after completing the waste transportation.

6.0 WASTE STREAM CHARACTERIZATION

There are several different potential waste generation activities during this remedial action project. A general discussion regarding the generation, sampling, and disposal of remedial action wastes is presented in the following sections.

USACE will be listed as the generator for all waste that is shipped for disposal from this remedial action project. No LLRW will be shipped until USACE has notified and received concurrence from the state regulatory officials in which the disposal facility is located. LLRW will be shipped to a licensed and approved TSD in accordance with

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federal guidelines. Currently, Energy Solutions Bulk Waste Facility, Clive, Utah is the designated facility for LLRW.

Waste will be appropriately characterized to identify radiological contaminant concentrations to address the requirements in Title 10 Code of Federal Regulations (10 CFR) Part 61, as well as non-radiological hazardous waste characteristics as required by the U.S. Environmental Protection Agency (EPA) and in Title 40 CFR (CFR), Parts 260 and 265. Characterization of waste for radiological and non-radiological constituents will assure waste is in compliance for acceptance and disposal off-site. The designated off-site disposal facility for the NFSS site LLRW is EnergySolutions in Clive, Utah.

Characterization of waste will include waste sampling, testing, and analysis for each waste stream and is detailed in the Waste Sampling Analysis Plan.

6.1 PERSONAL PROTECTIVE EQUIPMENT

Waste PPE generated by remedial activities (including used respirator cartridges and disposable protective coveralls) will be placed in plastic bags, marked and labeled, and then disposed of concurrently with the building debris and other wastes destined for an approved disposal facility. Void space within intermodal containers can be used for the disposal of the plastic bags as void space allows. If no void space is available, consideration of the lowest cost disposal option will be made.


6.2 SAMPLING WASTE

All investigation derived waste (IDW) generated from sampling activities will be considered LLRW and be treated accordingly until proven otherwise from analysis.

6.3 DEMOLITION WASTE

Demolition waste will be stored in appropriate containers (intermodals, roll-offs, etc.) within a designated area. Demolition waste may include concrete, steel, tile, utility pipes/wiring, plastic, etc. The demolition waste will be sampled and analyzed by the project team as necessary to provide the basis for disposal facility selection. If radiological activity meets the free release criteria according to the unconditional release procedure CS-RS-PR-006, Unconditional Release of Tools, Equipment, and Waste Materials from Projects, and the release limits, as outlined in NRC Regulatory Guidance 1.86, the waste will be dispositioned as non-impacted waste. No mixing of waste streams will be used to achieve non-impacted status. Transportation to an appropriate disposal facility is discussed in the Waste Transportation and Disposal Plan.

Building materials and other potentially affected remedial action wastes (such as PPE, etc.) exceeding normally existing background levels as defined in the TES Sampling and Analysis Plan, will be disposed of at a TSDF licensed for its disposal such as the EnergySolutions facility in Clive, UT. There are facilities outside New York that allow disposal of material that meets Reg Guide 1.86 as non-radioactive. The project team will provide documentation of waste characterization prior to disposal of waste. The disposal of all project wastes will be in accordance with all applicable state and federal regulations.

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6.4 CONSTRUCTION WASTE

Construction waste may be generated during reconstruction of the building and may include plastic, wood, waste concrete, etc. Construction waste is anticipated to be non-impacted waste. If radiological activity meets the criteria outlined in CS-RS-PR-006, Unconditional Release of Tools, Equipment, and Waste Materials from Projects, and it meets the release limits, as outlined in the TES Sampling and Analysis Plan, the waste will be dispositioned as non-impacted standard C&D solid waste. Mixing of waste streams will not be used to achieve non-impacted status. However, if the construction waste is suspected of coming into contact with remedial action wastes or assessed to be radiological contaminated and/or possibly hazardous, the waste material will be surveyed and/or sampled, and analyzed in accordance with regulatory requirements to make a disposition determination. Transportation to appropriate disposal facilities is discussed in the Waste Transportation and Disposal Plan. The disposal of all project wastes will be in accordance with all applicable state and federal regulations.

6.5 HAZARDOUS WASTE

Based on process knowledge of the site it has been determined that there is the potential for hazardous waste to be generated during the remedial action. If hazardous waste is generated, it will be packaged, stored, and transported for disposition in accordance with CS-WM-PR-002, Procedure for Transportation of RAM and LLRW from Project Sites and 40 CFR and 49 CFR regulatory requirements.

6.6 NON-HAZARDOUS WASTE


Material that does not exceed levels set by the TES Sampling and Analysis Plan for unrestricted release (“free release”) criteria for radioactive material (typical demolition/construction wastes such as empty concrete bags, material storage pallets, etc) will be segregated and disposed of at an approved landfill. The project team will survey, and/or sample and analyze waste prior to deciding the disposition of this non-radioactive waste. The team will also transport this material to a local landfill and USACE will sign manifests, weigh bills, and bills of lading. The disposal of all project wastes will be in accordance with all applicable state and federal regulations.

7.0 WASTE STREAM PACKAGING, TRANSPORT, AND DISPOSTION

General Requirements pertaining to packaging, transport, and disposal are described in the Waste Transportation and Disposal Plan and outlined below. TES will ensure that all waste destined for off-site TSDFs will comply with the “Off-site rule” contained within 40 CFR 300.400, which governs the disposal of waste within the CERCLA guidelines, and subsequently, FUSRAP sites.

7.1 NON-EXEMPT (LOW LEVEL RADIOACTIVE WASTE) SOLID WASTE

Non-exempt solid waste includes any solid, semi-solid, liquid, or contained gaseous radioactive material that is discarded. Radioactive waste will be generated by decontaminating areas and equipment, demolition material, construction material, PPE, and monitoring media. LLRW is currently planned to be disposed at Energy Solutions in Clive, Utah.

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Non-exempt solid waste that is to be shipped from the NFSS site will be identified, packaged, and transported in accordance with the project Waste Transportation and Disposal Plan and the most recent revision to the applicable DOT Hazardous Materials Regulations (HMR) at 49 CFR and any applicable state regulations that are more stringent than DOT regulations.

7.1.1 Non-Exempt (Low-Level Radioactive Waste) Waste Package Characterization

The HMR indicates that non-exempt (LLRW) solid waste must contain radionuclides where both the activity concentration and the total activity in the consignment exceeds the exemption values specified in the table in 49 CFR 173.436 (or derived according to the instruction in 49 CFR 173.433) for the material to be regulated for purposes of transportation.

7.1.2 Non-Exempt (Low-Level Radioactive Waste) Waste Package Contamination

The HMR defines non-fixed contamination as the presence of a radioactive substance on a surface in quantities in excess of 4.0 becquerels per square centimeter (Bq/cm²) [220 disintegrations per minute (dpm)/cm² or 22,000 dpm/100cm²] for beta and gamma emitters and low toxicity alpha emitters. Non-fixed and fixed contamination is contamination that can and cannot be removed from a surface during normal conditions of transport, respectively.

The level of non-fixed contamination on the external, surfaces of each package offered for transport from the site will be kept at levels below the regulatory limits. In addition, the level of non-fixed contamination may not exceed the beginning of transport limits set forth in Table 9 in 49 CFR 173.443.

Since NFSS remediation waste shipments from the facility will be under exclusive use consignment, the permissible package non-fixed contamination levels at any time during shipment may be up to 10 times the limits discussed above. Additional vehicle survey requirements apply and will be implemented pursuant to 49 CFR 173.443 (c) and (d).


7.1.3 Non-Exempt (Low-Level Radioactive Waste) Waste Packaging

All LLRW material to be shipped for disposal will be packaged according to regulations in 49 CFR.

7.1.4 Non-Exempt (Low-Level Radioactive Waste) Waste Package Storage and Transportation

Waste is intended to be packaged close to the point of generation or at a designated location with the regulated are of the site. Packaging of the materials will incorporate usage of approved disposal containers such as intermodals.

After packaging the waste, the waste container can be relocated to an on-site staging area where it can be prepared for shipment. If necessary, the waste container will be placed in a storage area within the regulated area. Filled waste containers will be moved to an area to be prepared for shipment at an appropriate designated time, to be loaded for shipment to a licensed disposal site. The waste will be transported either unpackaged (formerly strong tight container) or in industrial packaging as required per DOT regulations.

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7.2 HAZARDOUS WASTE

RCRA was passed by Congress in 1976 to address the problem of how to safely manage and dispose of municipal and industrial waste generated nationwide. RCRA creates a framework for the proper management of hazardous and non-hazardous waste. Federal regulations only set a baseline standard with which everyone involved with hazardous wastes must comply. Frequently, states choose to adopt more stringent regulations than federal regulations.

RCRA addresses the “cradle to grave” management of hazardous waste. This includes the generation, storage, treatment, transportation, and disposal of hazardous wastes. Hazardous waste to be shipped from the facility will be identified, packaged and transported in accordance with the most recent revision of the following: 40 CFR Chapter I, EPA Regulations; 49 CFR 100-185, DOT Hazardous Materials Regulations (HMR); and any applicable state regulations that are more stringent than EPA and DOT regulations.

7.2.1 *Hazardous Waste Packaging and Characterization*

Current regulations indicate that a material must contain solid wastes that are either specifically listed in the solid waste regulations (“F”, “U”, “P”, or “K”-listed wastes) or have particular characteristics (reactivity, ignitability, corrosivity, or leachability). Additionally, New York regulations include certain wastes containing PCBs as hazardous wastes. Hazardous wastes include solids, liquids, and gases.

7.2.2 *Hazardous Waste Packaging*


Before transporting hazardous waste or offering hazardous waste for transportation off-site, the waste must be packaged in accordance with the applicable DOT regulations on packaging under 49 CFR 173 and 178.

7.2.3 *Hazardous Waste Package Storage and Transportation*

Waste is intended to be packaged close to the point of generation or at a designated location within the regulated area, of the site. After packaging the waste, the container can be relocated to an on-site staging area where it can be prepared for shipment. If necessary, the waste container will be placed in a 90-day storage area established within the regulated area and the appropriate measures will be taken to ensure that the container is stored and inspected according to CP-SF-110, Storage and Inspection of Radiological/RCRA Hazardous Waste (Mixed Waste).

7.3 NON-HAZARDOUS WASTE

For the purposes of this plan, non-hazardous wastes are those that are not considered hazardous under federal or state regulation. This would include such items as paper, cardboard, scrap metal, wood debris, demolition material, construction material, PPE, and monitoring media. These materials will be collected in roll-offs or similar receptacles for disposal at a local licensed/permitted landfill as non-impacted waste.

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7.4 SAMPLING WASTE

For the purposes of this plan, sample wastes are those materials that are generated during sampling activities. As outlined in the FSP, each waste stream will be sampled to verify compliance with disposal facility waste acceptance requirements. The sampled material will be handled, packaged, stored, and transported in accordance with all applicable regulations.

7.4.1 Sample Waste Packaging, Storage, and Transportation

All sample waste will be tracked with a Chain of Custody (COC) form provided by the laboratory documenting, at a minimum, sample identification numbers, dates, times, locations, and waste streams. The samples will be packaged and stored according to specifications provided by the analyzing laboratory. Transportation of sample waste will be in compliance with International Air Transport Association (IATA) Dangerous Goods Regulations.

8.0 DISPOSITION STRATEGY


8.1 OVERVIEW

TES will characterize and package all waste in accordance with this WMP, applicable TSDF WAC, and FSP as applicable. All wastes shall be evaluated for the best technical and cost effective disposition path with the following hierarchy:

1. Reuse/recycle (clean steel)
2. Commercial Disposal (clean/free-release)
3. Commercial disposal (LLW)
4. Commercial TSDF for treatment/disposal (RCRA, TSCA, Universal, etc.).

8.2 WASTE WATER

All collected surface water and decontamination waste water will be collected in portable composite frac-tanks for storage and testing. TES anticipates generating only a small amount of water during the course of the project due to storm water and demolition face misting. However, surface water and contact water will be collected in frac-tanks where verification testing/scanning will be performed to confirm that it is uncontaminated. All waters collected during the project are anticipated to be disposed of at the City of Lockport Waste Water Treatment Plant. Confirmatory testing will be performed to ensure that all water slated for disposition at the City of Lockport Waste Water Treatment Plant is in compliance with the approved facility WAC. Water collected from run-off and site operations may be used for dust suppression provided representative sampling analysis yield results that are within the limits for wastewater discharge for the City of Buffalo, NY (Ordinance Chapter 82, Section 10075.7{d}).

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8.3 LOW-LEVEL RADIOACTIVE WASTE (LLRW)

Low-Level Radioactive Waste that is generated during the demolition operations will be shipped to an approved disposal facility such as the Clive Bulk Waste Facility in Clive, UT. It is anticipated that one (1) waste profile will be created to handle specific wastes that will be generated as a result of this operation. All waste streams will follow the respective approval process of the TSDF, which includes the document generation, review and approval of characterization determinations, and final disposal site determination. The waste management team will begin interfacing the Clive waste acceptance team far in advance of intended shipments to insure that all administrative requirements are met prior to moving onto the next step. This process ensures that proper characterization determinations are made and that the correct waste codes are assigned to the waste stream to ensure that the CERCLA generated wastes are compliant prior to disposal. The Clive Facility, due to the low volume of waste to be generated, represents the most cost effective means of disposition for solid waste generated as a result of this project. An overview of disposition options is presented in the following sections.


8.4 HAZARDOUS WASTE AND MIXED LOW-LEVEL RADIOACTIVE WASTE (MLLRW)

Though it is not anticipated that the TES will generate RCRA-regulated waste, the operations team shall sort and segregate any RCRA-regulated items/materials to minimize the amount of waste that must be treated and disposed as RCRA.


RCRA Waste shall be packaged and shipped to the Model City Waste Management facility for treatment and disposal. All appropriate authorities will be notified and all proper regulatory requirements satisfied prior to off-site shipment of any RCRA-regulated material.

8.5 TSCA-REGULATED AND LLW

For TSCA-regulated LLW, all viable commercial options will be taken into consideration as disposition pathways. Though TSCA-regulated waste is not anticipated in high volumes (other than ACM), dependent upon the waste stream and cost considerations to the government, an appropriate TSDF will be selected. All appropriate authorities will be notified and all proper regulatory requirements satisfied prior to off-site shipment of any TSCA-regulated material. Solids that cannot be incinerated shall be managed in accordance with 40CFR761 requirements. PCB remediation waste is defined in 40CFR761.61.

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Example Waste Stream by Generating Activity	Non-Radioactive				Radioactively Contaminated				
	Discharge to Outfall/Sewer	Recycle/POTW	Solid/Industrial	RCRA/Universal	LLW (Class A)	LLW	RCRA	PCB	Asbestos
<i>Mobilization/Demo</i>									
Wood		X							
Equipment		X							
Debris ^a			X						
<i>Sampling and Characterization</i>									
Contact waste from sampling					X				
Debris from Sampling					X				X
<i>Abatement</i>									
Debris			X						X
Equipment			X						
Switches/Ballast				X					
Free Liquids from trenches						X			
Storm water		X							
<i>Demolition</i>									

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Example Waste Stream by Generating Activity	Non-Radioactive				Radioactively Contaminated				
	Discharge to Outfall/Sewer	Recycle/POTW	Solid/Industrial	RCRA/Universal	LLW (Class A)	LLW	RCRA	PCB	Asbestos
Storm Water		X							
Construction Debris			X						
Clean Steel			X						
Contaminated Steel					X				
Siding									X
<i>Secondary Streams</i>									
Equipment		X							
Work area boundary control waste			X						
Packaging			X		X				
PPE					X				
Decontamination Liquid		X							
Sanitary Waste			X						


a. Debris is a RCRA term defined as “solid material exceeding a 60-mm particle size that is: a manufactured object, or plant or animal matter, or natural geologic material.”

b. Sanitary wastes will be picked up for discharge to clean landfill.

LLW = low-level waste.

RCRA = Resource Conservation and Recovery Act.

PCB = polychlorinated biphenyl.

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9.0 OFF-SITE ANALYSIS QUALITY ASSURANCE AND DATA QUALITY OBJECTIVES

In order to ensure that quality radiological and hazardous data necessary to accurately characterize waste awaiting disposal is obtained, data quality objectives have been established in reference to, and discussed in detail within the Field Sampling Plan (FSP) and QAPP.

The data obtained from this characterization effort will be used to direct the disposal of waste in accordance with the WAC of the chosen disposal sites. All waste streams, outlined in Section 7.0, will be characterized in accordance with the requirements outlined in the FSP by a certified laboratory in accordance with the waste disposal facility WAC to ensure accurate disposition.


10.0 WASTE DISPOSITION

Estimated waste quantities and guidance for disposal and/or recycling are provided below:

10.1 WASTE QUANTITY ESTIMATES

The NFSS Bldg 401 was built consisting of structural steel and concrete forming a two story building with 100,000 ft² under the roof. An estimated 6,000 tons of material is expected to be removed from the site. The following lists the estimated quantities of material to be removed:

Waste Stream Classification	Description	Estimated Waste Volume	Packing Methods	Estimated Container Needs	TSDRF
Debris – Clean	Construction and Demolition Debris	150 tons + 3600 tons for beneficial reuse	Dump Truck	150 covered dump trucks	Modern Landfill
ACM/Asbestos – Non-friable	Transite siding and interior ACM	100 tons	Intermodal	4 x 40' intermodal	Modern
Waste Water – Clean	Contact/Surface/ and Decon. Water	~2000 gal.	Poly. Frac. Tank/Vac. Truck	4 x 500gal tanks	City of Lockport POTW
LLRW – Class A	Contaminated Steel and Debris	90 tons	Intermodal	4 x 20' intermodal	Clive Bulk Waste Fac.
Steel – Clean	Steel for recycle	800 tons	Intermodal	28 x 40' intermodal	Niagara Metals
Universal Waste/RCRA	Hazardous light ballasts, switches, etc.	6 tons	B-25 container	2 x B-25 boxes	CWM

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10.2 PROCESSING AND RECYCLING

Any waste materials to be considered for processing or recycling are required to meet the requirements detailed in CS-RS-PR-006, Unconditional Release of Tools, Equipment, and Waste Materials from Projects. If identified as meeting the release criteria, arrangements will be made with a local processing or recycling center (e.g., Modern, Niagara Metals) for disposition provided by Energy Solutions and USACE approve the receiving facility.

10.3 WASTE DISPOSAL

Non-radioactive wastes that meet the requirements outlined in CS-RS-PR-006, Unconditional Release of Tools, Equipment, and Waste Materials from Projects, will be dispositioned in accordance with local and state requirements associated with area land disposal facilities.

Release of equipment and packages from the site to unrestricted areas will meet the requirements outlined in CS-RS-PR-006, Unconditional Release of Tools, Equipment and Waste Materials from Projects.

All hazardous waste generated as a result of this activity will be handled, packaged, transported, and disposed of in accordance with Sections 6.0 and 11.0 of this plan.

11.0 WASTE CERTIFICATION

A Certificate of Destruction, Disposal, or Placement is required for all FUSRAP wastes disposed of off-site. These certificates will provide a complete record of the final disposition of the wastes. The certificates will identify the individual quantities of material received at the disposal facility, the disposal method, and location where the material is finally placed after disposal.

12.0 SPILL CONTINGENCY PLAN

Throughout the course of the project, TES will implement a Spill Contingency Plan (Attachment A). This plan describes the measures that shall be taken to prevent, control, and clean up spills of oil, hazardous materials, and other pollutants. It also identifies the potential sources of pollution that may reasonably be expected to affect the quality of storm water at the site.


13.0 PROBLEM IDENTIFICATION AND CORRECTIVE ACTIONS

13.1 TRACKING AND CORRECTIVE ACTIONS

TES will implement a program to track issues, corrective actions, and incorporate lessons learned to prevent recurrence. This program is described in further detail in the Construction Quality Management plan.

13.2 STOP WORK AUTHORITY

TES will implement a project philosophy based on the U.S. Department of Energy's Integrated Safety Management System across all activities, including plans/procedures that will ensure waste is managed with consideration to the following objectives:

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Protect the public from exposure to radiation from radioactive materials

Protect the environment

Protect workers, including following requirements for radiation protection.

TES workers have the authority to stop work when the task poses an imminent risk to the individual or the environment.

14.0 MANAGEMENT AND INDEPENDENT ASSESSMENTS

14.1 MANAGEMENT ASSESSMENTS

TES has established a formalized management assessment process to evaluate the adequacy and effectiveness of procedure implementation, work performance, and contract performance deliverables and expectations. This assessment process requires managers at every level to assess the performance of the activities assigned to their function and document their observations and findings.

14.2 INDEPENDENT ASSESSMENTS

Independent assessments (or audits) are routinely planned, scheduled, and conducted to evaluate compliance with environmental, health, safety, quality, and regulatory requirements, the adequacy of work performance, and to promote continuous improvement. These planned assessments are separate from and in addition to management assessments. Assessment schedules, and the allocation of resources needed to meet these schedules, are based on the status, hazard, and complexity of the activity or process being assessed. Schedule flexibility allows performance of additional assessments of TES activities for identified areas of concern. The assessment process includes follow-up by project management to assure corrective actions are implemented when deficiencies are identified.

15.0 REFERENCES / ATTACHMENTS

Regulations

EPA, 2004, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Update IIIB, November


Executive Order 12856, *Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements*

Executive Order 13101, *Greening the Government through Waste Prevention, Recycling, and Federal Acquisition*

Executive Order 13423, *Strengthening Federal Environmental, Energy, and Transportation Management*

Executive Order 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*

Solid Waste Management Act of 1968

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10 CFR Part 71, Nuclear Regulatory Commission, “Packaging and Transportation of Radioactive Material”

10 CFR Part 830, Department of Energy, “Nuclear Safety Management”

29 CFR Part 1910, Occupational Safety and Health Administration, Subpart H, “Hazardous Materials”

29 CFR Part 1910, Occupational Safety and Health Administration, Subpart N, “Materials Handling and Storage”

29 CFR Part 1926, Occupational Safety and Health Administration, “Safety and Health Regulations for Construction”

40 CFR Parts 260-265, Environmental Protection Agency (EPA), Resource Conservation and Recovery Act (RCRA)

49 CFR Parts 100-185, Research and Special Programs Administration

Applicable Procedures

CP-PG-WI-002, Container Inspection

CP-SF-110, Storage and Inspection of Radiological/RCRA Hazardous Waste (Mixed Wastes)

CP-WM-PN-701, Universal Waste Management Plan

CS-FO-PR-002, Calibration and Maintenance of Radiological Survey and Sampling Equipment Procedure

CS-RS-PG-002, Respiratory Protection Program


CS-RS-PR-006, Unconditional Release of Tools, Equipment, and Waste Materials from Projects

CS-WM-PG-001, Radioactive materials Management Program for Commercial Services Projects

CS-WM-PR-002, Procedure for Transportation of RAM and LLRW from Project Sites

Attachments

ATTACHMENT A – Spill Contingency Plan

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ATTACHMENT A

Spill Contingency Plan


1.0 PURPOSE AND SCOPE

This Spill Contingency document is a coordinated plan that describes the measures that shall be taken to prevent, control, and clean up spills of oil, hazardous materials, and other pollutants. It also identifies potential sources of pollution that may reasonably be expected to affect the quality of storm waster at the site.

2.0 GENERAL

2.1 DEFINITIONS

- **Best Management Practices (BMPs)** – Measures or practices used to reduce the amount of pollution entering surface water, air, land, or groundwater. BMPs may take the form of a process, activity, or physical structure.
- **Discharge** – Discharge of a pollutant, which means the addition of any “pollutant(s)” to “waters of the state” from any “point source” including, but not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping.
- **Emergency Response Coordinator** – Designated person accountable for spill prevention and response preparation.
- **Harmful Quantity** – Discharges of oil that: (a) violate applicable water quality standards or (b) cause a film or sheen upon or discoloration of the surfaces of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.
- **Material handling** – Storage, loading, unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product, or waste product.
- **Oil** – Oil of any kind or in any form including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil.
- **Point Source** – Any discernible, confined, and discrete conveyance, such as a pipe, ditch, channel, etc., from which pollutants are or may be discharged into waters of the state.
- **Potential Discharge** – Any incident or other circumstance which constitutes a substantial threat of oil to be discharged.
- **Significant Materials** – Includes, but is not limited to, raw materials, fuels, solvents, detergents, hazardous substances, fertilizers, pesticides, and waste products that have the potential to be release with storm water discharges.

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- **Spill Contingency Plan** – A series of steps and activities to (1) identify sources of pollution or contamination on a site and (2) select and carry out actions that prevent or control the pollution of storm water discharges.
- **Storm Water** – Storm water runoff, snowmelt runoff, and surface runoff and drainage.

2.2 RESPONSIBILITIES

Project Manager –

- Ensure personnel are trained regarding associated hazards of the materials used and appropriate spill response procedures.
- Coordinate emergency activities relating to control and cleanup of a hazardous material to minimize any hazards to personnel or the environment
- Are familiar with the contents of the Spill Contingency Plan
- Ensure personnel are trained in the appropriate spill control procedures in accordance with the Spill Contingency Plan.

Project Personnel –

- Are aware of the circumstances and situations that may contribute to oil spills and leaks.
- Develop adequate understanding of the Spill Contingency Plan, including known spill events, potential malfunctioning components on equipment, and the most recent spill control developments.
- Understand how to deal with spills, leaks, and other potential emergencies involving significant materials, including oils and petroleum products.

Radiation Control Manager (RCM) –

- Notifies the appropriate regulatory agencies of reportable spills of radioactive material.


3.0 SITE INFORMATION

3.1 SITE INFORMATION

Owner: Buffalo USACE
Location: Town of Lewiston, Niagara County, NY
Telephone: 716-879-4268

3.2 SITE CONTACTS

- Harold Leggett, Buffalo USACE Construction Inspector, (716) 609-0538

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- Brian Steils, Buffalo USACE COR, (716) 879-4421

4.0 DESCRIPTION OF POTENTIAL POLLUTANT SOURCES

4.1 SUMMARY OF POTENTIAL POLLUTANT SOURCES

An evaluation of the site found the following sources to present potential sources of pollutants:

- **Vehicle and Equipment Maintenance**

To complete the contract Scope of Work, the project will have several specific pieces of equipment on the site including shears, forklifts, etc. Maintenance for these vehicles will be conducted on site in a designated area. Leaks and spills of motor oil, hydraulic fluids, coolants, and other lubricants pose potential sources of pollutants.

- **Transfer Operations**

During filling operations by outside vendors and the transfer of fuels into containers or vehicle tanks by on-site personnel, there is a potential for spillage or leaks of petroleum products onto the pavement.

- **Loading and Unloading Areas**

Loading and unloading of waste materials will be performed in a designated area on site. Conveyances will be loaded and unloaded using material handling vehicles.

- **Outdoor Storage of Radioactive Materials**

Waste containers that are strong tight will be utilized and stored in a designated area on site. These containers may be steel or plastic drums and boxes and may contain dry active waste, waste liquids, or radioactive materials.

4.2 INVENTORY OF EXPOSED MATERIALS

Chemicals, oil and petroleum products, and wastes that are stored on site will be in strong tight containers or covered areas. An inventory of chemicals stored on site will be available. Flammable liquids and aerosols will be stored in flammable storage cabinets. Other liquid materials will be stored over secondary containment. Products (i.e. chemicals, oil, etc.) will be stored as recommended by manufacturer.


5.0 MEASURES AND CONTROLS – BEST MANAGEMENT PRACTICES

5.1 GOOD HOUSEKEEPING

Good housekeeping requires the maintenance of a clean and orderly project site.

5.2 VEHICLE AND EQUIPMENT STORAGE AREAS

Material handling vehicles and other equipment used on site will be stored or parked in a designated area. Dry cleanup methods such as drip pans, absorbent, and absorbent pads will be used for vehicles leaking fluids.

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5.3 FUELING AREA AND OPERATIONS

Fuels used will be brought on site by outside vendors. When unloading oil and other petroleum products, the following will be implemented:

- Fill tanks to less than 80% capacity.
- Avoid topping off tanks during filling operations.
- Ensure that a spill kit is accessible during the transfer operation.
- Contain and clean up spills and leaks immediately.

5.4 EMPLOYEE TRAINING

Employee awareness training of information contained in this plan shall be conducted prior to working in impacted areas. Training shall include, but is not limited to:

- Summary of this plan.
- Spill prevention, response, and control procedures.
- Fueling procedures.
- Housekeeping practices.

5.5 MANAGEMENT OF RUNOFF

The site will utilize practices and structures for controlling, diverting, and managing storm water runoff. These items are discussed in detail in the Demolition Plan.

6.0 EMERGENCY RESPONSE PROCEDURES


6.1 SPILL CLASSIFICATION

Classifying the magnitude of a spill is necessary to determine the appropriate level of response. Spill level (I, II, or III) is based upon the following considerations:

- Type of spill,
- Extent of personnel, environment, and property affected,
- Level of expertise required to respond to or abate the spill,
- Extent of personnel evacuation,
- Cleanup and decontamination requirements.

Level I Spill

A Level I Spill is a spill that normally would not constitute an emergency but which indicates a potential safety or environmental problem exists at the site. These spills can usually be contained or abated utilizing equipment and personnel immediately available at the location. Examples include non-hazardous or small volume spills, drips, and small leaks that do not migrate from the operating area of the site.

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Level II Spill

A Level II Spill is a spill where actual conditions may affect the safety or health of employees, protection of the environment, or the safeguarding of the facility. Emergency response personnel are activated or available for activation depending on the type and severity of the spill. Level I Spills may be upgraded to Level II Spills.

Examples include hazardous material spills, spills of significant materials, chemical releases, spills that ignite, and spills that migrate from the operating area of the site into storm drains.

Level III Spill

A Level III Spill constitutes a major emergency requiring response from off-site emergency teams. Level I or II Spills may be upgraded to Level III.

Examples include significant spills, spills related to natural disasters, large hazardous spills, spills resulting in an explosion or large-scale fire, and spills that migrate outside the facility fence line.

6.2 RESPONSE TO A SPILL

Spills response actions will be dictated by the classification of a spill.

WARNING

Response to spills shall depend on personal level of training and the magnitude of the spill. Personnel shall only perform those functions for which they have been trained.

Level I Spill Response Actions:

- a) Stop the spill if possible.
- b) Clear the affected area.
- c) Apply absorbents to prevent the migration of the spill.
- d) Clean up the spill immediately.
- e) Properly dispose of spill cleanup wastes.


Level II and III Spill Response Actions

- a) Stop the spill if possible.
- b) Notify others in the immediate area.
- c) Implement the Emergency Response Plan.

6.3 SPILL RESPONSE EQUIPMENT

Spill response equipment will be located on site. Spill response equipment includes, but is not limited to, the following items:

- Fire Extinguishers

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- First Aid Equipment
- Eyewash/Showers
- Spill Kits

7.0 GUIDELINES AND REGULATIONS

There are four primary Federal statutes that require release reporting including CERCLA, the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA), the Hazardous Material Transportation Act of 1974 (HMTA), and the Clean Water Act (CWA).

Because CERCLA defines hazardous substances to include CWA hazardous substances and toxic pollutants, the Clean Air Act (CAA) hazardous air pollutants, the RCRA hazardous wastes, and the TSCA imminently hazardous chemical substances, releases of the substances are also subject to CERCLA reporting requirements.

The following reporting guidelines will be followed as applicable:

- CERCLA Section 103 (40 CFR Part 300 and Part 302)
- EPCRA Section 304 (40 CFR Part 355)
- HMTA Section 1808 (49 CFR Part 171)
- CWA Section 311 (40 CFR Part 110 and Part 300)