



Unexpected Waste Action Plan

Nebraska Department of Roads

February 2015

UNEXPECTED WASTE ACTION PLAN



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LIST OF ACRONYMS

ACM	Asbestos Containing Material
ASTM	American Society for Testing and Materials
BTEX	Benzene, Toluene, Ethylbenzene and Xylenes
C&D	Construction and Demolition
CFR	Code of Federal Regulations
DRO	Diesel Range Organics
ESM	Environmental Section Manager
FHWA	Federal Highway Administration
FLST	Flammable Liquid Storage Tank
GRO	Gasoline Range Organics
LOC	Limits of Construction
NDEQ	Nebraska Department of Environmental Quality
NDOR	Nebraska Department of Roads
Plan	Unexpected Waste Action Plan
PM	Project Manager
RAP	Remedial Action Plan
ROW	Right of Way
RSL	Regional Screening Levels
SAP	Sampling and Analysis Plan
SDC	Site Discovery Checklist
TCLP	Toxicity Characteristic Leaching Procedure
TPH	Total Petroleum Hydrocarbon
VCP	Voluntary Cleanup Program

PREFACE

Nebraska Department of Roads (NDOR), early in its Project Development and environmental evaluation process, seeks to identify solid wastes or contamination that could be encountered during project construction. A guidance manual for that process, entitled “NDOR Hazardous Material Assessment Guidance Manual,” is being prepared independent of this document. If there are records or physical evidence of waste/contamination identified during the Project Development process, impacts of the project on the waste or contamination are evaluated. If there are impacts, construction special provisions are prepared to avoid the waste/contamination, to minimize project impacts, or to have the contractor remove and dispose of the waste/contamination safely, in accordance with current laws and regulations.

This “Unexpected Waste Action Plan (Plan)” has been developed as a guide for NDOR staff, Local Project Agencies (LPA), and Responsible Charge (RC) personnel in the event of an *unexpected* discovery of waste or contamination during excavation for road construction projects. Throughout Nebraska’s history, common household trash/waste, construction debris, and manufacturing wastes were commonly disposed of through burial. Modern solid waste disposal regulations did not take effect until the mid-1970s. Additionally, leaks of waste or chemical products (from pipelines, buried or above-ground tanks, lagoons, and other facilities) have contaminated soils, groundwater, and surface water. Locations of waste burial or contamination sites are not always documented and available for discovery during the Project Development early hazardous materials review. Discovery of unexpected waste/contamination during project excavation typically results in increased cost and schedule delays. This guidance has been developed to assist the user in responding to an unexpected discovery of waste/contamination in the most efficient, effective way, while addressing safety; notifying the appropriate individuals; properly identifying, handling, and disposing of the waste/contamination; and documenting and reporting the discovery. Training will be provided to ensure that the user understands the Plan to use it effectively and correctly. The user will be trained on such topics as: unexpected waste and possible contamination identification, roles and responsibilities, procedures for contacting appropriate agencies, and procedures for properly disposing of the unexpected waste.

SECTION 1.0 INTRODUCTION

1.1 Introduction

In the event that unexpected waste or contamination is discovered within Nebraska Department of Roads (NDOR) right-of-way or Limits of Construction (LOC), the appropriate response actions will need to be completed to address the waste and possible contaminants according to current laws and regulations. Following the discovery of waste or contamination, NDOR is responsible for protecting public safety, notifying appropriate persons/agencies, characterizing the waste material through proper testing, removing and possibly disposing of the waste material, and documenting completion of the response actions.

This Unexpected Waste Action Plan (Plan) provides guidance to NDOR staff, Local Project Agencies (LPA), Responsible Charge (RC) personnel and contractors when unexpected waste or contamination is discovered. This Plan applies to construction or maintenance projects involving ground disturbance activities where waste or contamination is unexpectedly discovered. The procedures outlined in this Plan do not apply to spills or releases during construction projects that are the responsibility of the Contractor. Those procedures would be covered in the Contractor's spill response procedures, following all laws and regulations per NDOR Standard Specifications. This Plan also does not cover operations or spills and releases at NDOR facilities (e.g.; Maintenance Yards, District Offices), where incidents are covered by specific guidance for those facilities.

1.2 Purpose and Scope

The purpose and scope of this Plan are as follows:

- Identify roles and define responsibilities when unexpected waste or contamination is discovered during construction projects.
- Provide procedures for protecting the public; contacting appropriate local, state, and federal agencies; and characterizing¹ unexpected waste.
- Provide procedures for disposing of unexpected waste or contamination, if required, and documenting decisions, activities, and required regulatory reporting.

¹ Characterization would include a preliminary determination of waste type and estimation of the approximate volume of the discovery.

1.3 Roles and Responsibilities

Clear identification of roles and responsibilities of NDOR personnel is necessary to properly execute response actions to the discovery of unexpected waste or contamination. The actions and decisions required upon the discovery of unexpected waste or contamination are defined in the following roles and responsibilities:

1.3.1 Identification of a Responsible Party

NDOR shall identify, using available resources (e.g. right-of-way records, etc.) the party responsible for the unexpected waste or contamination. If a responsible party can be identified, it shall be notified of the discovery by the NDOR Construction Project Manager (PM), whose role and responsibilities are identified in Section 1.3.2 regarding the need for recovery and removal actions.

1.3.2 NDOR Construction Project Manager

If the party responsible for generating the unexpected waste or contamination, within the Right-of-Way, cannot be identified, NDOR will properly identify, characterize and dispose of the waste material.. The NDOR construction PM is responsible for implementing this Plan. The NDOR construction PM will assume the lead role in addressing the issue and will be the central point of contact for all discussions and decisions. It is the NDOR construction PM's responsibility to bring together the appropriate NDOR staff to assure proper response procedures are followed, as well as to convey the information to all participants, which may include subcontractors and/or local, state, and federal agencies.

The NDOR construction PM is responsible for assuring that an Initial Site Evaluation is conducted and a Site Discovery Checklist (SDC) form is completed (Attachment 1). Based on the results of the Initial Site Evaluation the Environmental Section Manager (ESM) will be contacted. The initial waste discovery responsibilities will include the following actions:

1. Ensure that all Field Crew employees have stopped work in the area of discovery and the site is secured (cordoned off, fenced, taped, or other method to identify a no-entry zone).

2. Assess the situation, and take appropriate measures to protect workers and public safety. Appropriate measures may include, but not be limited to cordoning off the area to establish a safe perimeter, evacuating if necessary (making sure that personnel are upwind or crosswind), and identifying waste, if possible, but ensuring that unauthorized personnel do not do any exploratory or investigative work that would result in further worker or public safety and/or environmental exposure.
3. PM shall immediately contact the ESM of the NDOR Project Planning and Development Division for assistance in identifying needs for waste assessment, contaminant identification, and contact of appropriate agencies or contractors (PM may do this in absence of ESM). The ESM will arrange for on-call consultant assistance as needed.
4. Document the Initial Site Evaluation on the SDC Form (Attachment 1) and in the Site Manager database.
5. Obtain clearance from appropriate agencies or ESM before giving notice to crew to resume work.
6. Develop a Field Change Order, if needed, for the Prime Contractor to execute.

1.3.3 Field Crew (Contractor employees, NDOR employees)

The primary responsibility of the Field Crew is to recognize the presence of unexpected waste or contamination (using knowledge from hazmat training). The Field Crew member who discovers the waste or contamination is responsible for the following actions:

1. Immediately notify his or her supervisor, who shall be responsible for immediately notifying the NDOR construction PM.
2. Stop work in the area of discovery until further instruction is received from the NDOR construction PM.
3. Clear employees from the area to a safe distance, and secure the area as directed by the NDOR construction PM.

1.3.4 NDOR Environmental Section Manager (ESM)

The ESM or the staff of the ESM will be the liaison between the environmental regulatory agencies and the NDOR construction PM. Typically the agencies will include the Nebraska Department of Environmental Quality (NDEQ), the Nebraska State Fire Marshal, the U.S. Environmental Protection Agency (when applicable), the Nebraska

State Patrol and FHWA on federally funded projects. The ESM will determine which on-call consultant will be used for investigation, waste characterization, and response plan development. The ESM will keep District management informed and assist with change orders to cover the environmental investigation. The ESM will assist in determining if a specialty contractor is needed, and will assist the Construction office and the Prime Contractor as needed in locating said contractor.

1.3.5 Nebraska Department of Environmental Quality (NDEQ)

If waste that exhibits contamination is discovered during an NDOR construction project, NDEQ will be notified by the NDOR ESM. NDEQ will be asked for assistance in interpretation and review of the NDOR selected method for management and disposal of contaminated materials that were found. NDEQ will inform NDOR of the interpretation related to the disposal method selected (allowed or not allowed), and any testing or other possible reporting that may need to be done to satisfy NDEQ's regulatory requirements.

1.3.6 NDOR Communications Division Manager

The NDOR Communications Division Manager will be notified by the ESM that potential unexpected materials have been discovered. The Communications Manager will coordinate the initial site evaluation information with the District Engineer and ESM and then communicate with other agencies' public affairs staff, media - as needed, and local residences/businesses if there is a public health risk.

1.3.7 NDOR ROW Division

The ROW Division Manager and ROW Design Engineer will be notified by the ESM that potential unexpected materials have been discovered. The ROW staff will coordinate with the ESM and then coordinate with affected landowners if there is a need to gain access to adjacent properties to contain or cleanup the unexpected waste discovery. If the situation is not an emergency (i.e., not a threat to public health and safety), the ROW staff will acquire rights-of-entry and temporary/permanent easements as required to complete the assessment and clean-up work. In an emergency situation (i.e., threat to public health and safety), the ROW staff or the PM will attempt to secure a (written or verbal) right-of-entry, but NDOR, the contractor at NDOR's direction, or a hazmat consultant/contractor

will proceed to investigate and/or contain the potential hazmat material if required per Nebraska Statute § 39-1324 which allows entry to public and private property.

1.3.8 Nebraska State Fire Marshal

The Flammable Liquid Storage Tank (FLST) Division of the Nebraska State Fire Marshal's Office will provide assistance if there is discovery of an unknown underground storage tank containing flammable or combustible material. The FLST Division will determine if the discovery is a threat to safety and, if so, will direct activities to eradicate the threat. The FLST Division will also inform NDOR of the documentation and reporting that must be done to satisfy its needs.

1.3.9 Local Agencies

Police/Sheriff/State Patrol: The Police department within the city jurisdiction, the Sheriff's office within the county jurisdiction, or the Nebraska State Patrol for the interstate shall be notified if an emergency situation occurs, such as a threat to human health and safety, or if the discovery is made after normal business hours. The local Police department or Sheriff's Office is responsible for addressing any emergency situation.

Fire: The Fire department shall be notified if an emergency situation occurs, such as a threat to human health and safety, or if the discovery is made after normal business hours. The Fire department is responsible for normal response to any emergency situation.

1.3.10 NDOR Environmental Consultant/Contractor

The NDOR Environmental Consultant/Contractor responds to the ESM's request for services, as needed for possible contamination (either non-hazardous or hazardous) that occurs during NDOR construction activities.

If it is determined that contamination is present, the NDOR Environmental Consultant/Contractor will be responsible for the following:

1. Developing a sampling and analysis plan
2. Developing or adapting a Health and Safety Plan to address risk posed by contamination
3. Characterizing the waste through sampling and analysis and estimating volume of waste material

4. Developing steps to mitigate contamination
5. Determining disposal options and documentation needs for the disposal facility
6. Documenting disposal of the waste to support NDOR construction PM as needed
7. Providing documentation to NDOR ESM and other appropriate agencies for review.

1.3.11 Federal Highway Administration (FHWA)

The FHWA shall be contacted by the ESM within 48 hours of discovery if federal funds are being used on the project or will need to be used to assist in cleanup of contaminated material. The NDOR State Construction Engineer will be responsible for reporting the discovery to FHWA in the event the ESM is unavailable. Alternate contacts provided on Figures 3-1 to 3-6 shall respond as needed. If NDOR seeks additional federal funds for response actions, NDOR State Construction Engineer will provide FHWA with due diligence documentation and rationale for actions taken. This documentation shall include justification regarding why federal funds should be available for costs associated with the identification and removal of contaminated soils, wastes or hazardous materials. Such requests and associated documentation will follow the guidelines and policies outlined in the FHWA's *Interim Guidance-Hazardous Waste Sites Affecting Highway Project Development*, 1988 and the *Supplemental Hazardous Waste Guidance*, 1992.

1.3.12 Environmental Protection Agency (EPA)

EPA has delegated authority to NDEQ; however, EPA would become involved in certain situations, such as contamination associated with a superfund site. EPA will inform NDOR of any testing or other possible reporting that may need to be done to satisfy EPA's regulatory requirements.

1.4 Unexpected Waste Action Plan Organization

This Plan is organized in the following way:

- Section 1.0 – Introduction
- Section 2.0 – Recognition and Identification of Unexpected Waste or Contamination
- Section 3.0 – Unexpected Waste Discovery Procedures
- Section 4.0 – Unexpected Waste Characterization Procedures
- Section 5.0 – Waste Disposal
- Section 6.0 – Documentation and Reporting

SECTION 2.0 RECOGNITION AND IDENTIFICATION OF UNEXPECTED WASTE OR CONTAMINATION

Identification and evaluation of unexpected waste and/or possibly contaminated materials is the first step in the response action. The terms unexpected waste and contaminated materials are intended to refer to either solids or liquids.

2.1 Unexpected Waste Types

During construction, typical unexpected wastes may be encountered, that may or may not be contaminated. These waste types include, but are not limited to, the following:

- Construction and demolition debris
- Municipal solid waste
- Contaminated waste
- Other wastes

Descriptions of each waste type are provided in the following subsections. Photographic examples of each waste type are included as Attachment 2.

2.1.1 Construction and Demolition (C&D)

C&D waste is defined and regulated by NDEQ Title 132 - Integrated Solid Waste Management Regulations.

C&D waste is defined as waste that results from land clearing; the demolition of buildings, roads, or other structures; or construction projects per NDEQ Environmental Guidance Document, Construction and Demolition Waste in Nebraska (see Attachment 3.1). C&D waste includes, but is not limited to the following:

- Fill materials
- Wood (including painted and treated wood)
- Land-clearing debris other than yard waste
- Wall coverings (including wallpaper, paneling, and tile)
- Drywall, plaster, and non-asbestos insulation
- Roofing shingles and other roof coverings
- Pipe, metals, and plumbing fixtures
- Glass and plastic

- Carpeting
- Electrical wiring

Fill materials are solid waste that consist only of one or more of the following: sand, gravel, stone, soil, rock, brick, concrete rubble, asphalt rubble, or similar material.

C&D waste does not include:

- Friable asbestos waste, which is discussed further in subsection 2.1.3.1
- Hazardous waste, which is discussed further in subsection 2.1.3.2
- Household waste and appliances, which are discussed further in subsection 2.1.4.1
- Tires, which are discussed further in subsection 2.1.4.2
- Special waste, which is discussed further in subsection 2.1.4.3
- Liquid waste, which is discussed further in subsection 2.1.4.4
- Fuel tanks, which are discussed further in subsection 3.6.2.1
- Drums, which are discussed further in subsection 3.6.2.2
- Putrescible waste, which is a solid waste that contains organic matter capable of being decomposed by microorganisms, and of such a character and proportion as to cause obnoxious odors and to be capable of attracting or providing food for birds or animals.
- Individual solid waste
- Corrugated cardboard
- Waste that contains polychlorinated biphenyls (PCBs)

2.1.2 Municipal Solid Waste

Municipal solid waste is defined and regulated by NDEQ Title 132 – Integrated Solid Waste Management Regulations. Municipal solid waste is any household waste and/or the combination of household waste with industrial or commercial solid waste. Solid waste, as defined in Nebraska regulations, means any garbage, refuse, or sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility, and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, and mining operations as well as from community activities.

Household waste is defined and regulated by NDEQ Title 132 - Integrated Solid Waste Management Regulations, Chapter 1, Section 049. Household waste is defined by NDEQ as any material (including garbage, trash, and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas).

2.1.3 Contaminated Waste

Contamination refers to the presence of any material or chemical contained within the soil, surface water, or groundwater that may require assessment, remediation, or special handling, or that has a potential for liability. This category includes a wide variety of wastes whose characteristics may indicate possible contamination:

- Drums, barrels, or sealed containers of varying sizes
- Underground storage tanks
- Stained or discolored earth in contrast with adjoining soil
- Petroleum hydrocarbon odors or other chemical odors that emanate when the earth is disturbed
- Oily residue or sludge intermixed with earth
- Sheen on groundwater/surface water
- Unknown viscous or liquid substances
- Cinders, slag, and other combustion products like ash

2.1.3.1 Asbestos (both friable and non-friable)

Friable asbestos is asbestos in a form that can be crumbled, pulverized, or reduced to powder by hand pressure. Asbestos has been used in commercial products such as the following: pipe and boiler insulation; sprayed-on acoustical and decorative textures; vinyl floor tile and linoleum; and cementations, transite, or slate siding and roofing per NDEQ Environmental Fact Sheet, General Asbestos Information (NDEQ, 2000) (see Attachment 3.2). Guidance on asbestos removal and disposal can be found in Nebraska Department of Health and Human Services Title 178, Chapter 22.

2.1.3.2 Hazardous Waste

Hazardous waste is defined as a solid waste or a combination of solid wastes, which because of their quantity, concentration, physical, chemical, or infectious characteristics, or is defined as a hazardous waste by Title 128- Nebraska Hazardous Waste Regulations, may:

- Cause, or significantly contribute to, an increase in mortality or an increase in serious, irreversible, or incapacitating reversible illness; or
- Pose a substantial present or potential hazard to human health or animal health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

2.1.4 “Other” Wastes

2.1.4.1 Household Appliances

Discarded household appliances, as defined in the NDEQ Environmental Guidance Document (see Attachment 3.3), shall mean clothes washers and dryers, water heaters, heat pumps, air conditioners, dehumidifiers, refrigerators, freezers, trash compactors, dishwashers, conventional ovens, ranges, stoves, and wood stoves. Guidance on disposal can be found in NDEQ Title 132 - Integrated Solid Waste Management Regulations, Chapter 1.

2.1.4.2 Waste Tires

Waste tires are defined and regulated by NDEQ Title 132 - Integrated Solid Waste Management Regulations, Chapter 14. A waste tire is a tire that is no longer suitable for its general intended purpose because of wear, damage, or defect.

2.1.4.3 Special Waste

Special wastes are defined as solid waste, with the exception of waste that is regulated as a hazardous waste, that possesses physical, chemical, or biological characteristics that make it different from general household, or C&D waste, and that requires special handling, treatment, or disposal methodologies in order to protect public health, safety, and the environment. Wastes are classified as special

wastes by NDEQ on a case-by-case basis. Examples could be landfills containing animal parts from slaughtering operations or soils contaminated by industrial operations. Further information pertaining to special waste can be found in NDEQ Title 132 - Integrated Solid Waste Management Regulations, Chapter 13.

2.1.4.4 Liquid Waste

Liquid waste is defined as any waste that contains free liquids that will readily separate from the solid portion of a waste under ambient temperature and pressure as determined by the Paint Filter Liquids Test Method 9095B (test method dated November 2004) included in “*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*” (Environmental Protection Agency Publication SW-846, Update IIIB).

Leachate is any liquid, including any suspended components in the liquid that has percolated through or drained from either non-hazardous or hazardous waste. Further information regarding liquid waste can be found in NDEQ Environmental Guidance Document Liquid Waste Restricted from Landfills (see Attachment 3.4) and Title 132 - Integrated Solid Waste Management Regulations, Chapters 1 and 3.

SECTION 3.0 UNEXPECTED WASTE DISCOVERY PROCEDURES

The initial steps to be taken when unexpected waste or possible contamination (either non-hazardous or hazardous) is encountered within the right-of-way or LOC of a project are outlined in the following sections and are summarized in Figures 3-1 through 3-6. Most, if not all, of the actions described below will be initiated by the NDOR construction PM. If the NDOR construction PM (or the on-site authorized representative) or the Field Crew contractor (or his/her subcontractors) discovers unexpected waste or possible contamination, he/she shall stop work immediately and notify the NDOR construction PM or the on-site authorized representative.

3.1 Stop Work

When unexpected waste or possible contamination (non-hazardous or hazardous) is discovered any involved party (i.e., prime Field crew contractor, Field crew subcontractors or NDOR staff) shall be responsible to immediately report the waste discovery to the NDOR construction PM and suspend construction activities in that area.

The prime Field Crew contractor, Field Crew subcontractors, or NDOR personnel shall not be allowed to handle or disturb the contaminated material or the surrounding soil until further direction from the NDOR construction PM

3.2 Secure the Site

The area where the wastes are discovered shall be secured, as will be presented in the annual training, to protect worker and public safety. In addition, the NDOR construction PM and/or the Field Crew contractor shall determine whether worker safety and public exposure concerns (for example, odors, liquids, or other physical characteristics) exist.

3.3 Notify NDOR Construction PM

The Field Crew contractor or NDOR employee who discovers the waste shall immediately notify the NDOR construction PM. The NDOR construction PM shall refer to Figure 3-1 for guidance on notification procedures and initial site evaluation activities. The NDOR construction PM shall notify the NDOR ESM to begin the chain of communication regarding documentation,

notification of appropriate agencies, and identification of an NDOR Environmental Consultant/Contractor, if needed.

3.4 Document Site and Nature of Discovery

The NDOR construction PM shall generate an entry into Site Manager to initiate documentation of the discovery in the project log. Initial reporting shall provide basic information about the site and specific nature of the discovery or possible contamination, such as the following:

- Date and time of discovery
- Site location
- Type of material discovered
- Possible contamination present
- Estimated quantity of discovery
- Documentation on how the site was secured
- Photographs

The PM shall complete the SDC (see Attachment 1) and it will become part of the Construction Contract's records entered into Site Manager.

3.5 Conduct Initial Evaluation of Waste Types

An initial site evaluation shall be completed by the NDOR construction PM with assistance from the ESM to determine the type of contamination or unexpected waste encountered (as identified in Section 2.0). NDOR construction PMs will receive scheduled and on-going training to assist in determining the waste types. Final determination of the waste characteristics will typically be based upon analytical results. The type of waste encountered will determine the requirements for notification, characterization, and disposal.

3.5.1 Non-Contaminated Material

If the material is determined by the NDOR construction PM or ESM not to exhibit characteristics of contamination, a normal disposal process for solid waste can be followed, per NDEQ Title 132 – Integrated Solid Waste Management and NDOR Standard Specifications. Characterization procedures for verifying that the material is non-contaminated are described in Section 4.1. Refer to Figure 3-2 for notification, characterization and disposal of construction and demolition debris and municipal waste.

3.5.2 Potentially Contaminated Material

If the NDOR construction PM or ESM identifies any of the contaminant characteristics described in Section 2.0, the following notifications will be made:

- The NDOR construction PM shall notify emergency personnel if needed, the District Construction Engineer (DCE), NDOR's Construction Division Engineer, the NDOR ESM, and the FHWA Area Engineer (if the project is federally funded).
- The ESM shall notify NDEQ and all other affected agencies.
- The NDOR Construction PM shall, if possible or practical, identify and notify the party responsible for the unexpected waste or contamination to engage them in the recovery and disposal process and to support recovery of expenses associated with the actions to be performed by NDOR or NDOR's Environmental Consultant/Contractor.
- Refer to Figures 3-2 through 3-6 for notification, characterization, and disposal procedures (characterization procedures for contaminated material are described in Section 4.2).

3.6 Agency Coordination

The NDOR ESM will perform and document all agency coordination for the project file, unless he or she directs otherwise.

3.6.1 Release Notification Requirements - NDEQ

It is the duty of any responsible party to notify NDEQ of any release or suspected release of an oil or hazardous substance as a result of activities related to discovery of unexpected waste. The procedures outlined in this section do not apply to spills or releases during construction projects that are the responsibility of the Contractor. Those procedures would be covered in the Contractor's spill response procedures, following all laws and regulations per NDOR Standard Specifications. Notification will be completed in the following manner:

Immediate notification is required per NDEQ Title 126 – Rules and Regulations Pertaining to the Management of Waste, Chapter 18, Section 2 for the following situations:

- Release which occurs beneath the surface of the land or impacts or threatens waters of the state or threatens the public health and welfare, regardless of the quantity of an oil or hazardous substance.
- Release upon the surface of the land of an oil in a quantity that exceeds 25 gallons, or of a hazardous substance which equals or exceeds 100 pounds or its reportable quantity under Section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 as amended (40 [Code of Federal Regulations] CFR 302) and Section 329(3) of the Emergency Planning and Community Right-to-Know Act of 1986 (40 CFR 355), whichever is less.
- Discharge of oil, in any amount that causes a sheen or discoloration on the surface of a body of water; violates applicable water quality standards; and/or causes a sludge or emulsion to be deposited beneath the surface of the water or on adjoining shorelines.

Notification is not required per NDEQ Title 126 – Rules and Regulations Pertaining to the Management of Waste, Chapter 18, Section 2, for a release if any of the following conditions are met:

- The release is confined and expected to stay confined within a building or otherwise wholly enclosed structure, owned by the responsible party, in which the floors and walls are adequately impervious to the released substance(s) and is cleaned up within 24 hours of its discovery
- The release is in compliance with conditions established in State statutes, regulations or permits
- Any release upon the surface of the land of oil or hazardous substances that do not exceed the reportable 25-gallon quantity for oil or for a hazardous substance less than 100 pounds or its reportable quantity under Section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act (discussed above) and which will not constitute a threat to public health and welfare, the environment, or a threat of entering the waters of the state and provided that the release is cleaned up.

NDEQ retains full authority to require further actions of the responsible party although the release or suspected release is not reportable under the above conditions.

3.6.2 Tanks, Drums, Other

Agency contacts, in the event of the discovery of an unknown underground storage tank, drums and containers, and/or hazardous waste are discussed in the following subsections:

3.6.2.1 Unknown or Unregistered Underground Storage Tanks

Existing underground storage tanks will typically be identified during the preliminary design phase of a project, when a Hazardous Material Assessment is completed. “Unknown” tanks are those tanks not identified on the drawings or specifications but encountered during a project. Upon finding an unknown tank, the ESM shall notify the following agencies:

- NDEQ at (402) 471-2186 – Ask for the Emergency Response Program Coordinator during office hours (from 8:00 a.m. to 5:00 p.m. Monday through Friday) or (402) 471-4545 to reach the Nebraska State Patrol Dispatch after office hours
- State Fire Marshal’s Office – Flammable Liquid Storage Tank Division at (402) 471-9465

Refer to Figure 3-3 for notification, characterization, and disposal procedures for unknown tank discoveries. Title 159 – State Fire Marshal Rules and Regulations for Underground Storage Tanks, Chapters 2 and 19 and the NDOR 2002 Construction Manual Division 1100.20 – Underground Tanks provides the necessary guidance for tank closure activities. If a release occurs or evidence of contamination is apparent, follow the procedure outlined in Section 4.2.

No NDEQ-required site assessment activities per the NDOR 2002 Construction Manual, Division 1100.20 are necessary for excluded tanks. Excluded tanks include the following:

- Farm tanks holding 835 gallons or less
- Tanks on or above the floor of underground areas such as basements
- Tanks storing heating oils used on the premises where it is stored
- Tanks holding 110 gallons or less

In the event an excluded tank is identified during construction activities, the ESM shall notify the Nebraska State Fire Marshal's Office of the discovery and removal activities. If product remains in the tank, a release occurs, or contamination is apparent, follow the procedure outlined in Section 4.2.

3.6.2.2 Drums and Containers

Abandoned, buried drums and smaller sealed containers on the NDOR right-of-way or within the LOC shall not be handled or disposed of by NDOR or the Field Crew contractor until the contents are verified. Extreme caution should be exercised around drums or containers of unidentified contents. Upon finding an unknown drum or container the guidelines identified in Figure 3-4 shall be followed, and the ESM shall do the following:

- Contact NDEQ at (402) 471-2186 during office hours (from 8:00 a.m. to 5:00 p.m. Monday through Friday) or (402) 471-4545 to reach the Nebraska State Patrol Dispatch after office hours.
- Arrange for an NDOR Environmental Consultant/Contractor to identify contents of the containers and determine if the contents are hazardous. If contents are determined to not be hazardous, proper disposal procedures for solid waste, per Title 132 – Integrated Solid Waste Management Regulations and NDOR Standard Specifications, shall be followed. If contents are determined to be hazardous, procedures in Section 3.6.2.3 shall be followed.

3.6.2.3 Hazardous Waste

It shall be the duty of the ESM to immediately notify NDEQ of any discovery of a hazardous substance, regardless of the quantity, which occurs beneath the surface of the land or impacts or threatens waters of the state or the public health and welfare.

Notification shall be made by telephone to NDEQ during office hours, from 8:00 a.m. to 5:00 p.m. Monday through Friday. After hours and holidays, reports shall be made to the Nebraska State Patrol. All information known at the time of

discovery is to be included, such as time of occurrence, quantity and type of material, location, and any corrective or cleanup actions presently being taken.

- NDEQ's Hazardous Waste Compliance Assistance Specialist at (402) 471-8308
- Nebraska State Patrol at (402) 471-4545

3.6.2.3 "Other" Wastes

In the event waste tires, asbestos, household appliances, special waste, or liquid waste is discovered, the following agencies shall be notified:

- NDOR – ESM at (402) 479-4418
- As needed, NDEQ at (402) 471-2186

Refer to Figure 3-5 for notification, characterization and disposal of “other unexpected waste types.

SECTION 4.0 UNEXPECTED WASTE CHARACTERIZATION PROCEDURES

4.1 Non-Contaminated Material Characterization

Contamination is not always readily visible; thus, samples may need to be collected and analyzed to verify that the material is uncontaminated and meets the criteria for disposal as a solid waste. The NDOR construction PM or the NDOR Environmental Consultant/Contractor shall contact the anticipated disposal facility where the wastes will be transported to determine what sampling requirements are necessary for disposal. Each facility may have its own analytical documentation requirements. A typical sampling program for waste characterization is provided in Table 4-1.

**Table 4-1
Non-Hazardous Waste Analytical Methodology**

Matrix	Analyte	Analytical Method ¹	Container ²	Preservative	Holding Time
Soil	TCLP ³ Metals	1311/SW6010B	1- 8 oz jar	4° C	6 months
Soil	TCLP Volatiles	1311SW/8260	1- 8 oz jar	4° C	6 months
Soil	Ignitability	40 CFR §261.21	1- 4 oz jar	4° C	6 months
Soil	Reactivity	40 CFR §261.23	1- 4 oz jar	4° C	6 months

Notes:

¹ SW-846, *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*

² The laboratory will supply the appropriate sized containers for each analyte according to SW-846.

³ Toxicity Characteristic Leaching Procedure (TCLP)

The analytical results will be compared to 40 CFR 261, Toxicity Characteristics. A waste is nonhazardous if that waste does not meet the criteria of ignitability, corrosivity, reactivity, or toxicity, which are further defined in Section 4.2.1.2.

4.2 Contaminated Material Characterization

NDOR may use one of the On-Call Environmental Consultants/Contractors to identify and characterize potentially contaminated material through sampling and analytical testing. The ESM will be responsible for approving all Contractor/Consultant plans and proposed corrective actions.

The Environmental Consultant's/Contractor's investigation should include the following:

- Assessment of worker safety and public exposure concerns
- Development of a sampling and analysis plan to characterize the waste type
- Determination of the handling, treatment, and/or disposal requirements for any contaminated media unearthed as part of the construction process
- Recommendations for a preventative action plan to avoid additional issues and to minimize NDOR liability
- Determination of corrective actions (i.e., soil and/or groundwater cleanup, environmental monitoring or implementation of engineering or institutional controls) necessary to be in place that allow the prime construction contractor to resume work

The NDOR Environmental Consultant/Contractor may need to develop additional specifications to complete portions of construction within contaminated areas to address handling, storage, treatment, and disposal requirements for the contaminated waste.

The following subsections identify a course of action that may be followed by the selected NDOR Environmental Consultant/Contractor in the event of the discovery of contaminated material.

4.2.1 Sampling and Analysis Plan

If contamination is suspected, NDEQ may require NDOR to develop and submit a written sampling and analysis plan (SAP) in accordance with a schedule and format established by NDEQ to characterize and manage the contaminated waste. The SAP (approved by NDOR's ESM) would be subject to NDEQ's review and approval. The NDOR Environmental Consultant/Contractor will prepare the SAP, and upon approval of the SAP, or as directed by NDEQ, NDOR shall implement the approved activities.

4.2.1.1 Petroleum-Contaminated Material

The type of analysis conducted and the sampling procedures used are dependent on the matrix (soil or water) and type of contaminant involved. A typical sample analytical program for petroleum-contaminated material is provided in Table 4-2.

**Table 4-2
Petroleum-Contaminated Material Analytical Methodology**

Matrix	Analyte⁴	Analytical Method	Container	Preservative	Holding Time
Soil	TPH – DRO ¹	Modified 8015	1- 4 oz jar	4° C	6 months
Soil	TPH – GRO ¹	Modified 8015	1- 4 oz jar	4° C	6 months
Soil	BTEX ²	8020	1- 4 oz jar	4° C	6 months
Soil	TCLP Metals ³	1311/SW6010B	1- 8 oz jar	4° C	6 months

¹ Analytical results will be compared to NDEQ Voluntary Cleanup Program (VCP) values.

² Analytical results will be compared to U.S. Environmental Protection Agency Regional Screening Levels (RSL) and NDEQ VCP values.

³ Analytical results will be compared to 40 CFR 261, Toxicity Characteristics.

⁴ Acronyms: Total Petroleum Hydrocarbon (TPH); Diesel Range Organics (DRO); Gasoline Range Organics (GRO); Benzene, toluene, ethylbenzene and xylenes (BTEX); Toxicity Characteristic Leaching Procedure (TCLP).

4.2.1.2 Hazardous Material

A waste is characterized as hazardous if that waste is ignitable, corrosive, reactive, or toxic. The waste is assigned the waste code(s) associated with the characteristic(s) making it hazardous.

A solid waste exhibits the characteristic of ignitability if a representative sample of the waste has any of the following properties:

- It is a liquid, other than an aqueous solution containing less than 24 percent alcohol by volume and has a flashpoint less than 60°C (140°F), as determined by a Pensky-Martens Closed Cup Tester, using the test method specified in ASTM Standard D-93-79, or D-93-80, or a Setaflash Closed Cup Tester, using the test method specified in ASTM Standard D-3278-78.
- It is not a liquid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard.
- It is an ignitable compressed gas, as defined in 49 CFR Part 173 and as determined by the test methods determined in that regulation (i.e., any material or mixture having in the container an absolute pressure exceeding 40 p.s.i. at 70°F or, regardless of the pressure at 70°F having an absolute

pressure exceeding 104 p.s.i. at 130°F; or any liquid flammable material having a vapor pressure exceeding 40 p.s.i. absolute at 100°F as determined by ASTM Test D-323) or equivalent test methods.

- An oxidizer is a substance such as a chlorate, permanganate, inorganic peroxide, or a nitrate, that yields oxygen readily to stimulate the combustion of organic matter.

A solid waste exhibits the characteristic of corrosivity if a representative sample of the waste has either of the following properties:

- It is aqueous and has a pH less than or equal to 2 or greater than or equal to 12.5, as determined by a pH meter using Method 9040C in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" EPA Publication SW-846.
- It is a liquid and corrodes steel (SAE 1020) at a rate greater than 6.35 mm (0.250 inch) per year at a test temperature of 55°C (130°F) as determined by Method 1110A in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication SW-846

A solid waste exhibits the characteristic of reactivity if a representative sample of the waste has any of the following properties:

- It is normally unstable and readily undergoes violent change without detonating.
- It reacts violently with water.
- It forms potentially explosive mixtures with water.
- When mixed with water, it generates toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment.
- It is a cyanide or sulfide bearing waste which, when exposed to pH conditions between 2 and 12.5 can generate toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment.
- It is capable of detonation or explosive reaction if it is subjected to a strong initiating source or it is heated under confinement.

- It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure.
- It is a forbidden explosive or Class 1.1, 1.2, or 1.3 explosive as defined in 49 CFR Part 173.

A solid waste (except manufactured gas plant waste) exhibits the characteristic of toxicity if, using the Toxicity Characteristic Leaching Procedure, Test Method 1311 in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,” EPA Publication SW-846.

Chemical analysis or physical testing is generally used for the determination of hazardous waste characteristics. A typical sample analytical program for hazardous determinations is provided in Table 4-3.

**Table 4-3
Hazardous Waste Analytical Methodology**

Matrix	Analyte	Analytical Method ¹	Container ²	Preservative	Holding Time
Soil	TCLP Metals	1311/SW6010B	1- 8 oz jar	4° C	6 months
Soil	TCLP Volatiles	1311SW/8260	1- 8 oz jar	4° C	6 months
Soil	Ignitability (Flashpoint)	40 CFR §261.21	1- 4 oz jar	4° C	6 months
Soil	Corrosivity (pH)	40 CFR §261.22	1- 4 oz jar	4° C	6 months
Soil	Reactivity	40 CFR §261.23	1- 4 oz jar	4° C	6 months

¹SW-846, *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*

²The laboratory will supply the appropriate sized containers for each analyte according to SW-846.

The analytical results will be compared to 40 CFR 261, Toxicity Characteristics. If the analytical results indicate that the material is non-hazardous, the material can be disposed of by the normal processes for solid waste described in Section 5.0.

4.3 Remedial Action Plan (RAP)

Remedial action will be dependent on the results of the analytical analyses. A RAP would be prepared by the NDOR Environmental Consultant/Contractor. Construction PM will be

responsible for oversight of the execution of the RAP. Actions such as, but not limited to, environmental monitoring and limiting public access may be included as remedial action responsibilities. NDOR's ESM will submit the RAP to NDEQ for approval. Upon NDEQ's approval of the RAP, NDOR will arrange for the appropriate contractor to implement the plan. The remedial action for an oil or hazardous substance release shall proceed in a timely and diligent manner. Actions such as, but not limited to, soil and/or groundwater cleanup and/or disposal, environmental monitoring and limiting public access may be included as remedial action responsibilities.

Cleanup shall be to the extent that will prevent a hazard to human health, to human safety, and to the land and waters of the state as stated in the approved RAP. The Voluntary Cleanup Program (VCP) approach may be used to clean up contaminated properties while maintaining compliance with all applicable state and federal environmental regulations. Clean up criteria will be determined with guidance from NDEQ. Cleanup standards may be obtained from different programs and/or regulations. This may include follow-on sampling or monitoring, by NDOR staff, environmental staff or as appropriate, contractor, to verify completion.

4.3.1 Permitting

Prior to implementing the RAP, NDEQ shall be contacted to determine if a permit is necessary to complete remedial work. An emergency permit may be issued for a non-permitted activity or for an activity whose existing permit does not cover the authority for which application for the emergency permit is made. Refer to Title 126 – Rules and Regulations Pertaining to Management of Waste, Chapter 2 for permit application and procedures. The emergency permit:

- May be oral or written. If oral, it shall be followed in 5 days by a written emergency permit;
- Shall not exceed 120 days in duration but may be renewed for an additional 60 days where the permittee can demonstrate that the circumstances justify such extension and that the permittee made good faith efforts to complete the permitted activity or operation within the 120 days;
- Shall clearly specify the wastes to be handled and the manner and location of their disposal; and

- May be terminated by the Director at any time without process if he or she determines that termination is appropriate to protect human health and the environment.

SECTION 5.0 WASTE DISPOSAL

The various options for disposal of solid waste and contaminated waste in landfill and recycling facilities are described below. In some construction scenarios, waste may be left in place. This would include non-contaminated waste and NDOR would receive documented approval from NDEQ regarding the necessary conditions to leave waste in place.

In other situations, waste materials will need to be excavated and properly disposed of. If unexpected wastes must be removed from the construction area and properly disposed of, there are a number of considerations that must be examined. For example, the following items are banned from landfills statewide:

- Waste oil
- Lead acid batteries (car batteries)
- Household appliances
- Unregulated hazardous waste (except household quantities)
- Recyclable waste tires

Therefore, it is possible that some wastes that are removed from the construction area must be segregated and taken to different locations. The options and considerations for disposal of unexpected and/or contaminated waste are described below.

5.1 Non-Contaminated Waste Disposal

Following discovery and characterization of the waste material, if the analytical results indicate the waste material is non-hazardous, the waste can be disposed of by the normal processes for solid waste, per NDEQ Title 132 – Integrated Solid Waste Management Regulations and NDOR Standard Specifications. The disposal facility that will be used shall be contacted by the NDOR construction PM or NDOR Environmental Consultant/Contractor to verify disposal requirements. The following subsections identify examples of solid waste processing facilities, which are described in Title 132 – Integrated Solid Waste Management Regulations, Chapter 1, as any facility where solid wastes are processed, and shall include, but not be limited to, solid waste, compost sites, materials recovery facilities, recycling centers, and solid waste transfer stations.

5.1.1 Municipal Solid Waste Disposal Area

Municipal Solid Waste Disposal Area is defined as a publicly or privately owned discrete area of land or excavation that receives household waste, alone or in combination with other types of wastes, such as commercial solid waste, industrial waste, non-hazardous sludge, or conditionally exempt small-quantity generator waste, and that is not a land application unit, surface impoundment, injection well, or waste pile. The term “landfill” may be used interchangeably with Municipal Solid Waste Disposal Area. The Integrated Waste Management List of Permitted Facilities can be found at <http://www.deq.state.ne.us/IntList.nsf/Web+List?OpenView&Start=1&Count=125> (see Municipal Solid Waste Landfill) and is also provided in Attachment 4. Check website for most current information.

5.1.2 Materials Recovery Facility

Materials Recovery Facility is defined as any facility at which solid waste is processed for the purpose of resource recovery (such as a tire recycling facility). Certain types of recovered waste can be hauled to an appropriate recovery facility. The facility shall be contacted to determine minimum quantities or waste restrictions. The Integrated Waste Management List of Permitted Facilities can be found at <http://www.deq.state.ne.us/IntList.nsf/Web+List?OpenView&Start=1&Count=125> (see Materials Recovery Facility) and is also provided in Attachment 4. Check website for most current information.

5.1.3 Construction and Demolition Disposal Facility

A Construction and Demolition Disposal Facility is defined as any facility where the following waste types are disposed: waste which results from land clearing; the demolition of buildings, road, or other structures; or construction projects. The Integrated Waste Management List of Permitted Facilities can be found at <http://www.deq.state.ne.us/IntList.nsf/Web+List?OpenView&Start=1&Count=125>, (see Construction and Demolition Waste Landfill Facility) and is also provided in Attachment 4. Check website for most current information. The Construction and Demolition Waste in Nebraska brochure can be found at www.deq.state.ne.us under Publications & Forms, Guidance Documents and is provided as Attachment 3.1. Check website for most current information.

5.2 Contaminated Materials Waste Disposal

5.2.1 Petroleum-Contaminated Materials

Petroleum-contaminated materials are solid wastes when actively managed as wastes (excavated for treatment and disposal). All solid wastes are required to have a hazardous waste determination. The type of analysis conducted and the sampling procedures used are dependent on the matrix (soil, water) and type of contamination involved. For assistance on making a hazardous waste determination, refer to Title 128 – Nebraska Hazardous Waste Regulations, Chapter 3 and 4.

Treatment and disposal requirements are dependent on different types of petroleum-contaminated materials. If the contaminated material is determined to be hazardous, refer to Section 5.2.2.

Non-hazardous petroleum-contaminated materials can be disposed of at a municipal solid waste landfill. Each municipal solid waste landfill may have its own sampling and analysis disposal requirements. The NDOR construction PM or ESM shall contact the landfill prior to delivering contaminated material.

An alternative treatment to disposal in a municipal solid waste landfill is disposal by land application. A permitted land application facility is defined as a site where contaminated materials are repeatedly land applied onto the sample plot(s) of land or incorporated into the soil surface for agricultural purposes, for treatment and disposal.

For further information regarding municipal solid waste and/or land application disposal for petroleum-contaminated material, refer to Title 132 – Integrated Solid Waste Management Regulations. NDEQ Environmental Guidance Documents *Management of Petroleum-Contaminated Materials* and *Oil and Petroleum Related Wastes* are provided as Attachment 3.5.

5.2.2 Hazardous Wastes

Wastes generated from the cleanup of hazardous substances shall be disposed of in accordance with Title 128 – Nebraska Hazardous Waste Regulations.

Following the data collection and characterization identified in Section 4.2.1.2, NDEQ shall be contacted by the NDOR construction PM or Environmental Consultant/Contractor to discuss disposal options and requirements, which will be documented by notes, e-mail or phone log in the project file. Each Subtitle C hazardous waste landfill may have differing analytical and disposal requirements and will need to be contacted prior to shipment.

5.3 “Other” Wastes

The following wastes have special handling and disposal requirements as solid waste.

5.3.1 Household Appliances

Appliances that cannot be disposed of in landfills include clothes washers and dryers, water heaters, heat pumps, air conditioners, dehumidifiers, refrigerators, freezers, trash compactors, dishwashers, conventional ovens, ranges, stoves, and wood stoves.

NDEQ recommends household appliances be recycled, with special consideration given to appliances that contain CFCs, such as air conditioners, refrigerators, and freezers. Appliances containing CFCs, when delivered for recycling, should have the CFCs removed, or arrangement must be made to have the CFCs removed. NDEQ recommends that appliances containing CFCs be segregated and stored to aid in the proper removal of CFCs. Only those persons who are trained and certified for recovery can remove CFCs. Contact the U.S. Environmental Protection Agency Stratospheric Ozone Protection Hotline at 1-800-296-1996 for further information regarding disposal of any appliances containing CFCs. For more information regarding CFCs and household appliances, refer to Title 132 – Integrated Solid Waste Management Regulations, Chapter 1. A Nebraska Recycling Directory can be found at www.deq.state.ne.us. An NDEQ Environmental Guidance Document *CFCs and Household Appliances/Vending Machines* can be found at www.deq.state.ne.us under Publications & Forms, Guidance Documents, and is provided as Attachment 3.3. Check website for most current information.

5.3.2 Asbestos

NDOR shall contact a licensed contractor to remove, handle, and dispose of all asbestos containing material (ACM) waste in accordance with the requirements of Title 129 – Nebraska Air Quality Regulations. For information regarding licensed contractors and further information regarding asbestos removal and disposal, contact the Nebraska Asbestos Control Program (HHS).

- Regulation and Licensure – (402) 471-0548
- Inspection and Notification – (402) 471-6507

The NDEQ Environmental Guidance Document *General Asbestos Information* can be found at www.deq.state.ne.us under Publications & Forms, Guidance Documents, and is provided as Attachment 3.2. Check website for most current information.

5.3.3 Waste Tires

5.3.3.1 Recyclable Waste Tires

Land disposal of recyclable waste tires in any form is prohibited. Recyclable waste tires are managed by a Waste Tire Processor or Recycler or a Tire Retailer for the purpose of reusing, recycling, or shipping the waste tires out of state. A list of approved Waste Tire Haulers and Recyclers is included as Attachment 5. A list of waste tire haulers and recyclers can be found at www.deq.state.ne.us. Check website for most current information.

5.3.3.1 Non-recyclable Tires

A non-recyclable tire means a press-on solid tire, a solid pneumatic shaped tire, or a foam pneumatic tire. Non-recyclable tires may be disposed of at a permitted solid waste landfill.

5.3.4 Special Wastes

Special waste, such as waste containing animal parts from slaughtering operations or soils contaminated by industrial operations, shall not be disposed of at any place except a permitted solid waste disposal area that is operated and maintained in compliance with NDEQ regulations and authorizations, unless NDEQ grants prior written approval for an alternate location and management method. The Integrated Waste

Management List of Permitted Facilities can be found at <http://www.deq.state.ne.us/IntList.nsf/Web+List?OpenView&Start=1&Count=125> and is also provided in Attachment 4. Check website for most current information. For more information, refer to Title 132- Integrated Solid Waste Management Regulations, Chapter 1 and Chapter 13.

5.3.5 Liquid Wastes

Bulk or non-containerized liquids cannot be disposed of in a permitted solid waste landfill. In addition, any waste or special waste that contains free liquid is banned from permitted landfills.

The following liquid waste may be disposed of in a permitted municipal solid waste landfill by the following methods:

- Liquid waste in a small container (similar in size to that normally found in a household).
- Liquid waste in a container designed to hold liquids for use or personal consumption rather than bulk storage.
- Liquids or wet wastes that fail the Paint Filter Test may be mixed with soil or other dry wastes prior to disposal at the solid waste landfill.

Any liquid waste, containerized or bulk that is also a special waste must be pre-approved by NDEQ before disposal by the Field Crew contractor. The ESM will provide approval for disposal to the NDOR Contractor PM. The solid waste landfill manager may set regulations addressing liquid wastes that are more stringent than state or federal regulations.

For more information, refer to Title 132 – Integrated Solid Waste Management Regulations, Chapter 1 and Chapter 3. An NDEQ Environmental Guidance Document *Liquid Wastes Restricted from Landfills* is provided as Attachment 3.4.

SECTION 6.0 DOCUMENTATION AND REPORTING

Regardless of the type of waste discovered, the location, the volume, or the disposition, each occurrence shall be documented using the SDC form in Attachment 1 (filed in the construction project's Site Manager database).

The NDOR construction PM, with the support of the ESM, has the primary responsibility to generate and maintain a thorough record of the unexpected waste discovery and the necessary response actions. Documentation includes noting all actions taken from the time the initial notification was received up to closure with regulatory agencies as well as any tests of waste materials, plans generated for disposal, and documentation of disposal volumes. The NDOR Construction PM shall ensure that all requirements are fulfilled to meet sampling, handling, disposal, and reporting procedures.

If the waste is contaminated, a copy of the required sampling, analysis, and disposal report(s) must be submitted to NDEQ for documentation that appropriate assessment and cleanup activities were performed. Should contamination be allowed to remain in place or contaminated soils are reused as fill material, volumes and locations shall be noted on the final as-built drawings.

The NDOR construction PM shall complete the SDC documentation in Site Manager by carefully noting all actions taken from the time of initial discovery through proper disposal, reporting, and resumption of work in the area. A copy of the SDC will be sent to the State Construction Engineer and the ESM.

6.1 Reporting for Discovery of Hazardous Wastes

NDEQ may require a written final report for all discoveries of petroleum-contaminated material or hazardous waste as stated in Title 126 – Nebraska Department of Environmental Quality, Chapter 18. NDEQ will notify NDOR if a report is required. If required, the report will be due within 15 days after remedial action has been completed or, if no remedial action occurs, within 15 days of the discovery. The report shall contain, at a minimum, the following information:

- Date, time, and duration of the discovery
- Location of discovery

- Person or persons causing and responsible for the discovery
- Type and amount of oil or hazardous substance discovered
- Cause of the discovery
- Environmental damage caused by the discovery
- Actions taken to respond to, contain, and clean up the discovery
- Location and method of ultimate disposal of the oil or hazardous waste and other contaminated materials
- Any known or anticipated acute or chronic health risks associated with the discovery
- When appropriate, advice regarding medical attention necessary for exposed individuals

Figures

Figure 3-1

Procedure for Identification and Notification of Unexpected Waste

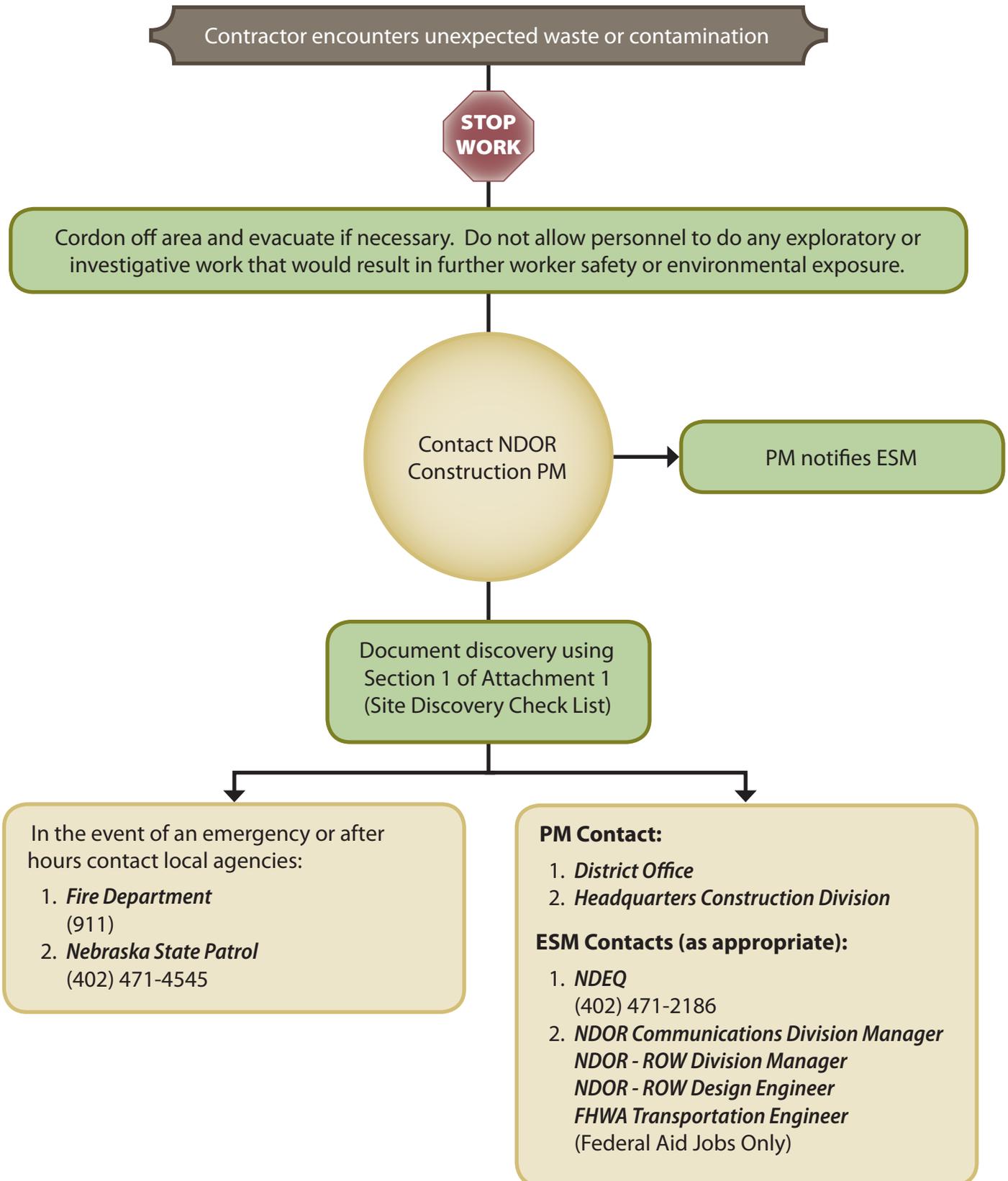


Figure 3-2
Procedure for Characterization and Disposal of
Construction and Demolition Debris and Municipal Waste

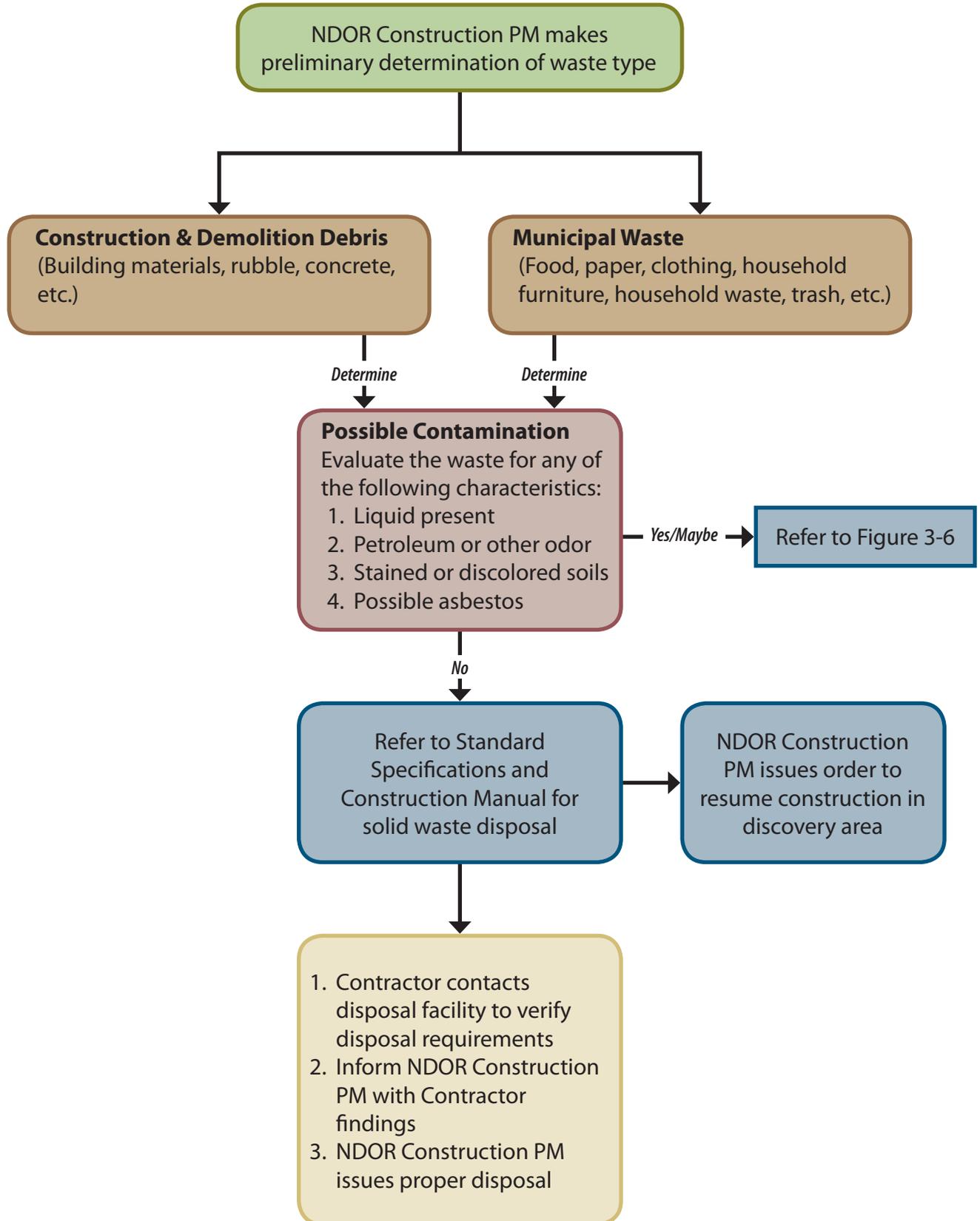


Figure 3-3 Procedure for Notification, Characterization, and Disposal of Unknown Underground Storage Tank

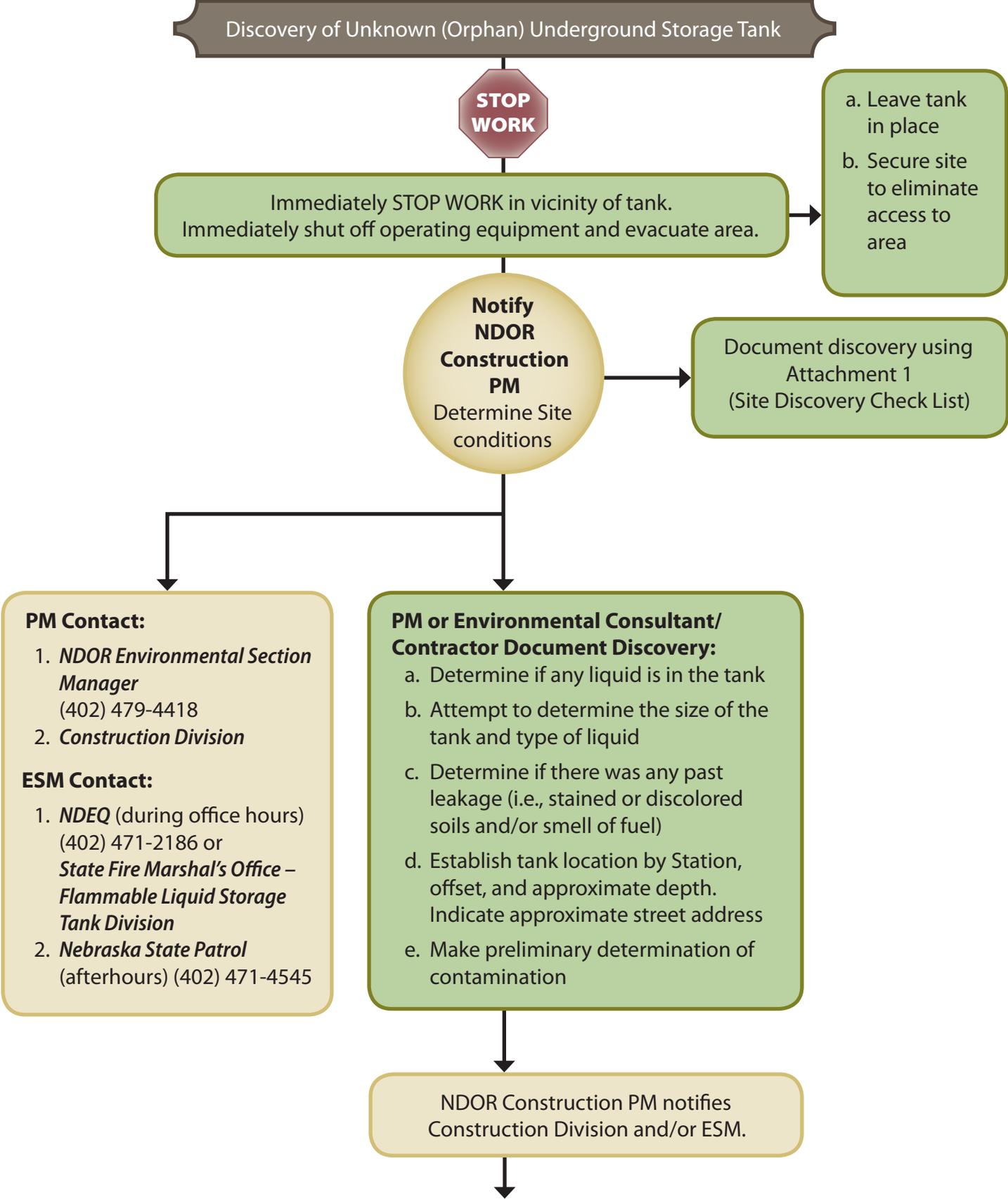
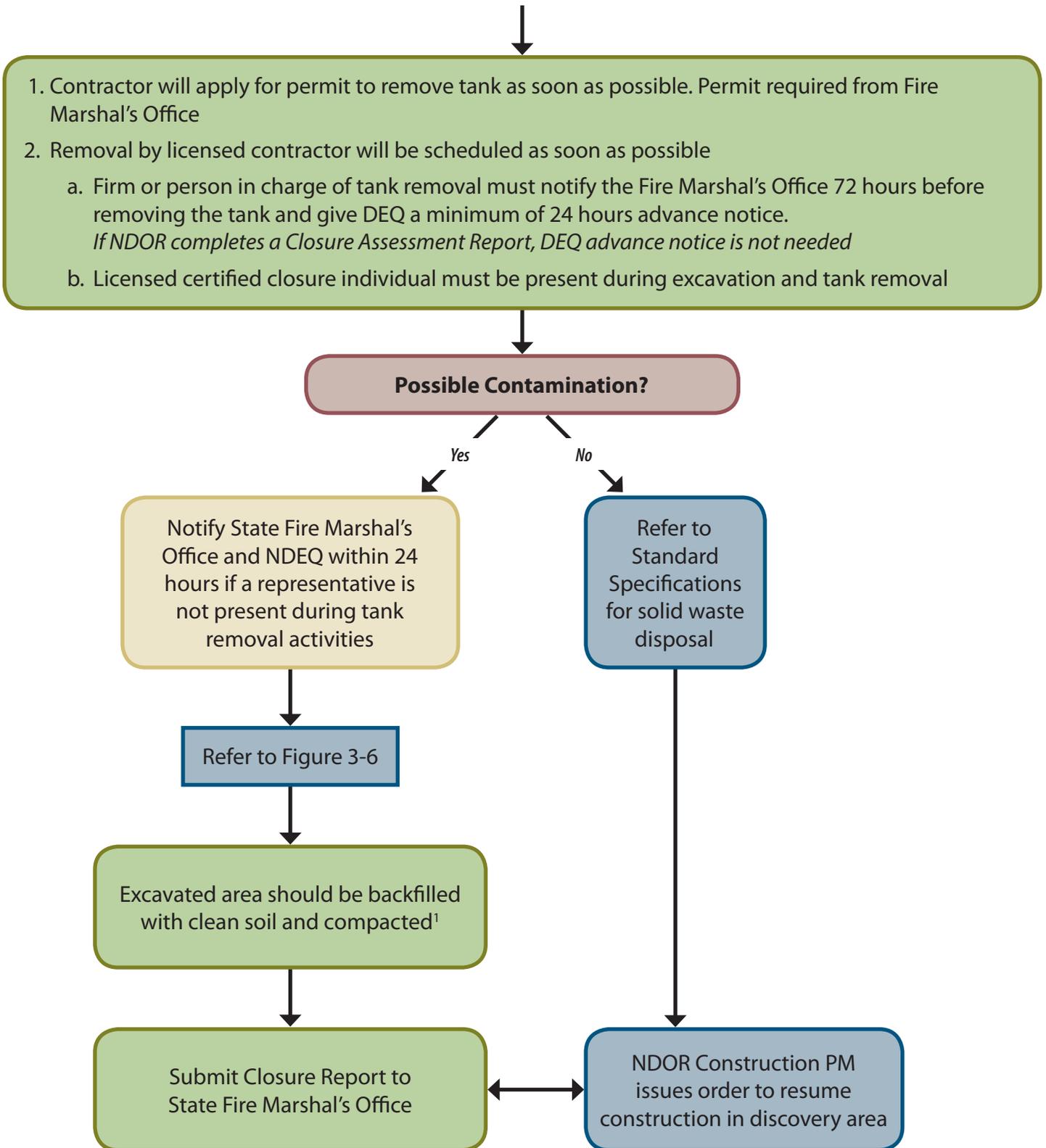


Figure 3-3
(continued)



Notes:

1. For more information refer to Title 159, Rules and Regulations for Underground Storage Tanks

Figure 3-4
Procedure for Notification, Characterization, and Disposal of
Drums or Containers

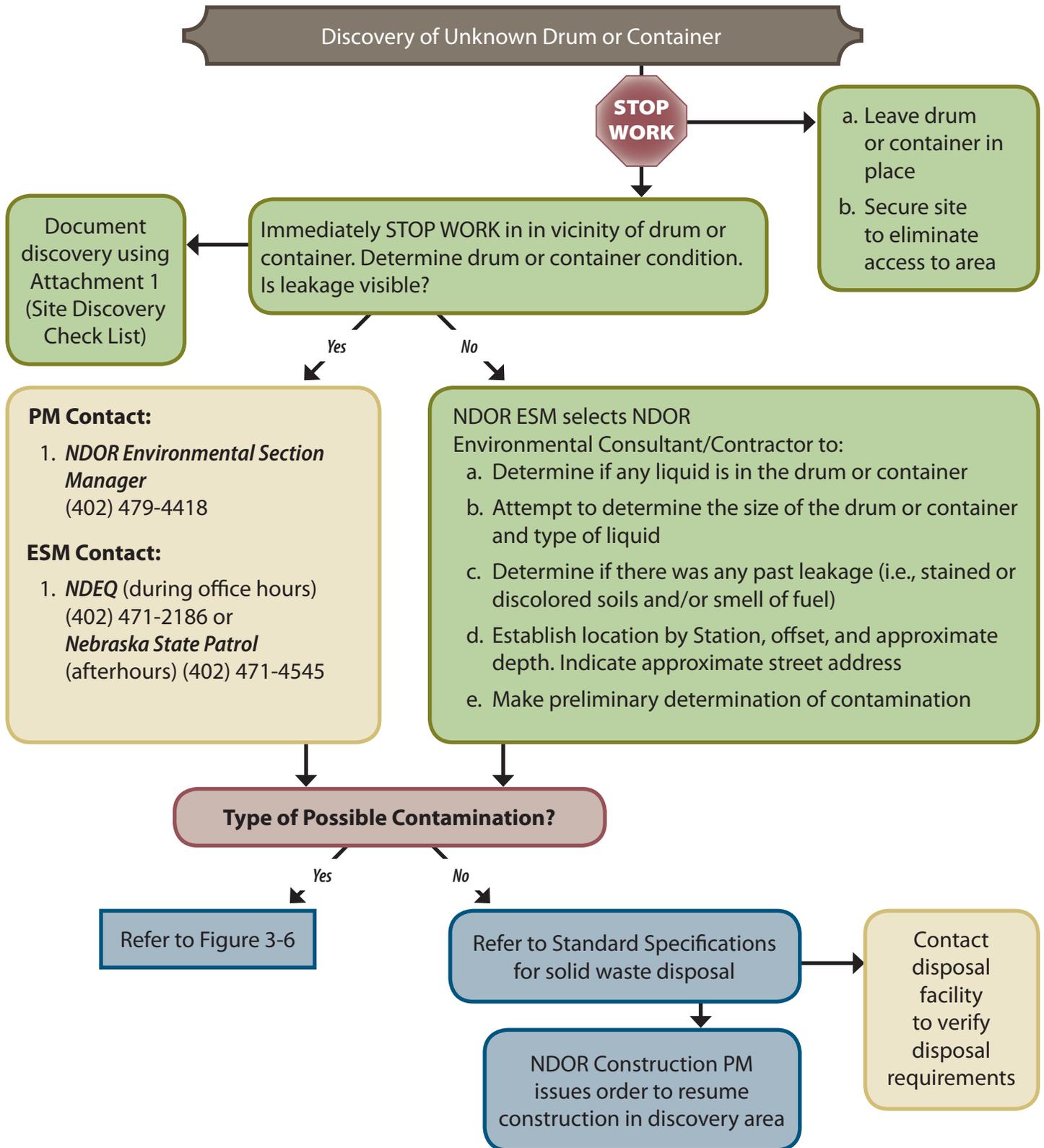


Figure 3-5
Procedure for Notification, Characterization, and Disposal of
“Other” Unexpected Waste Types

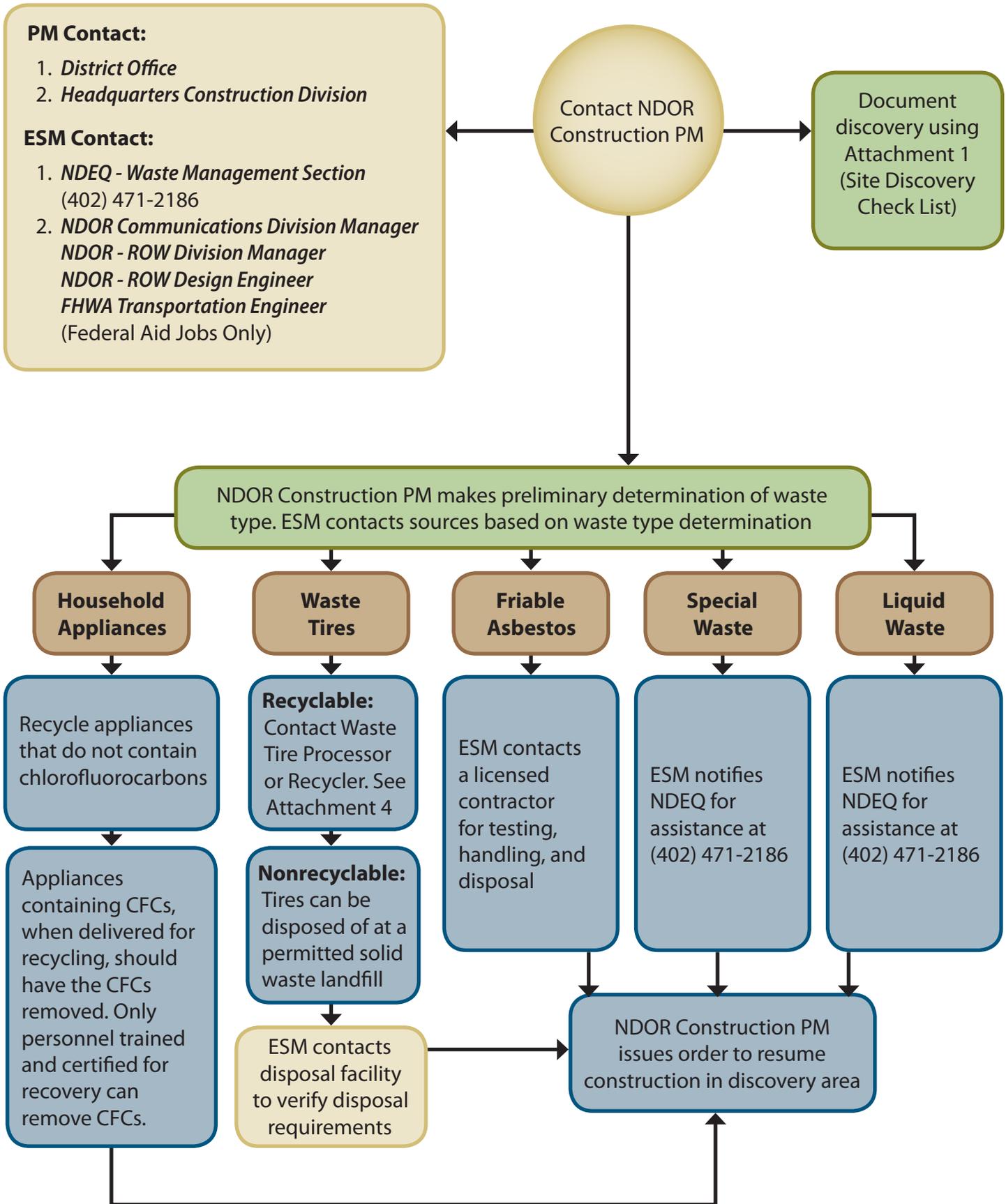


Figure 3-6

Procedure for Notification, Characterization, and Disposal of Contaminated Material

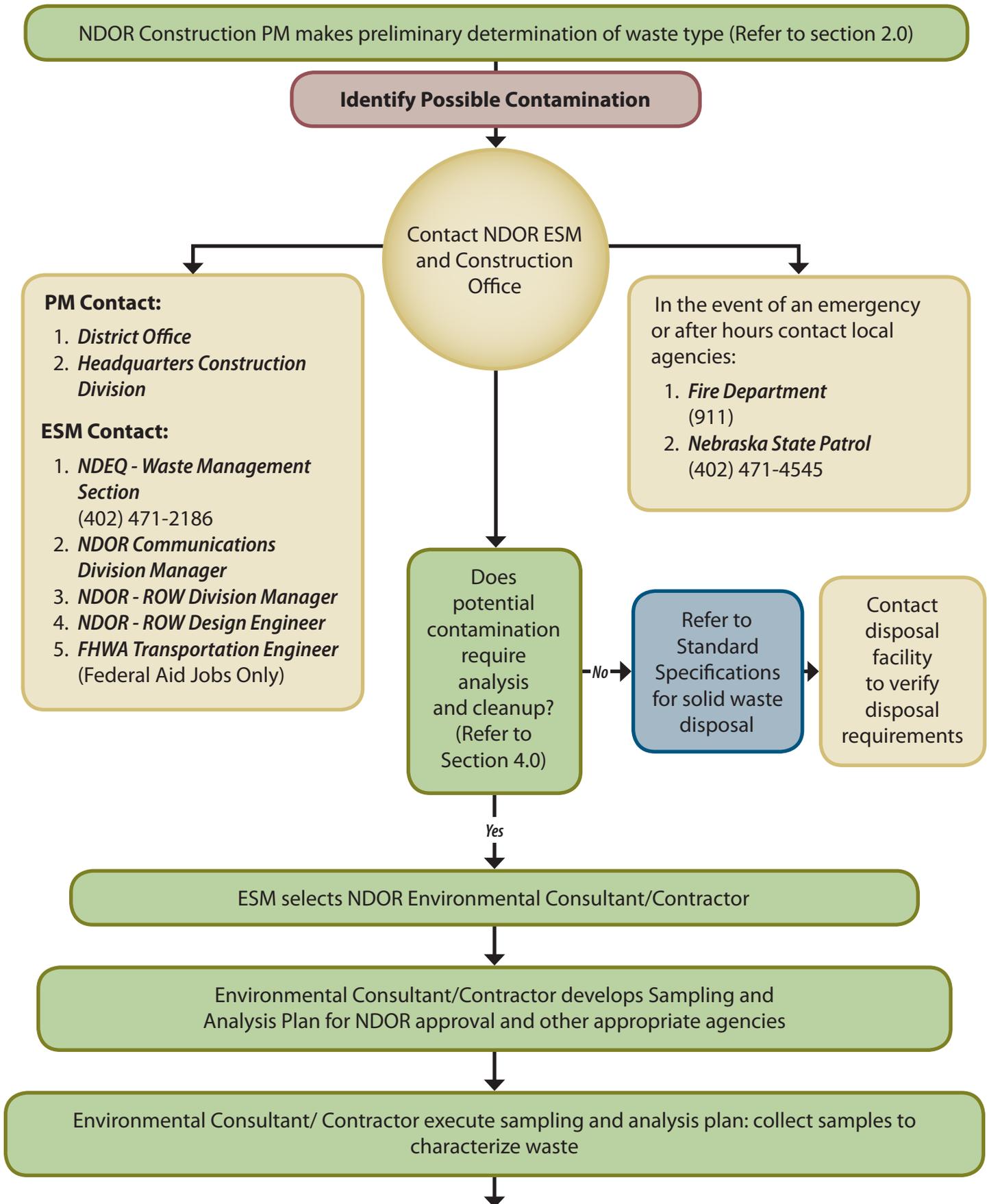
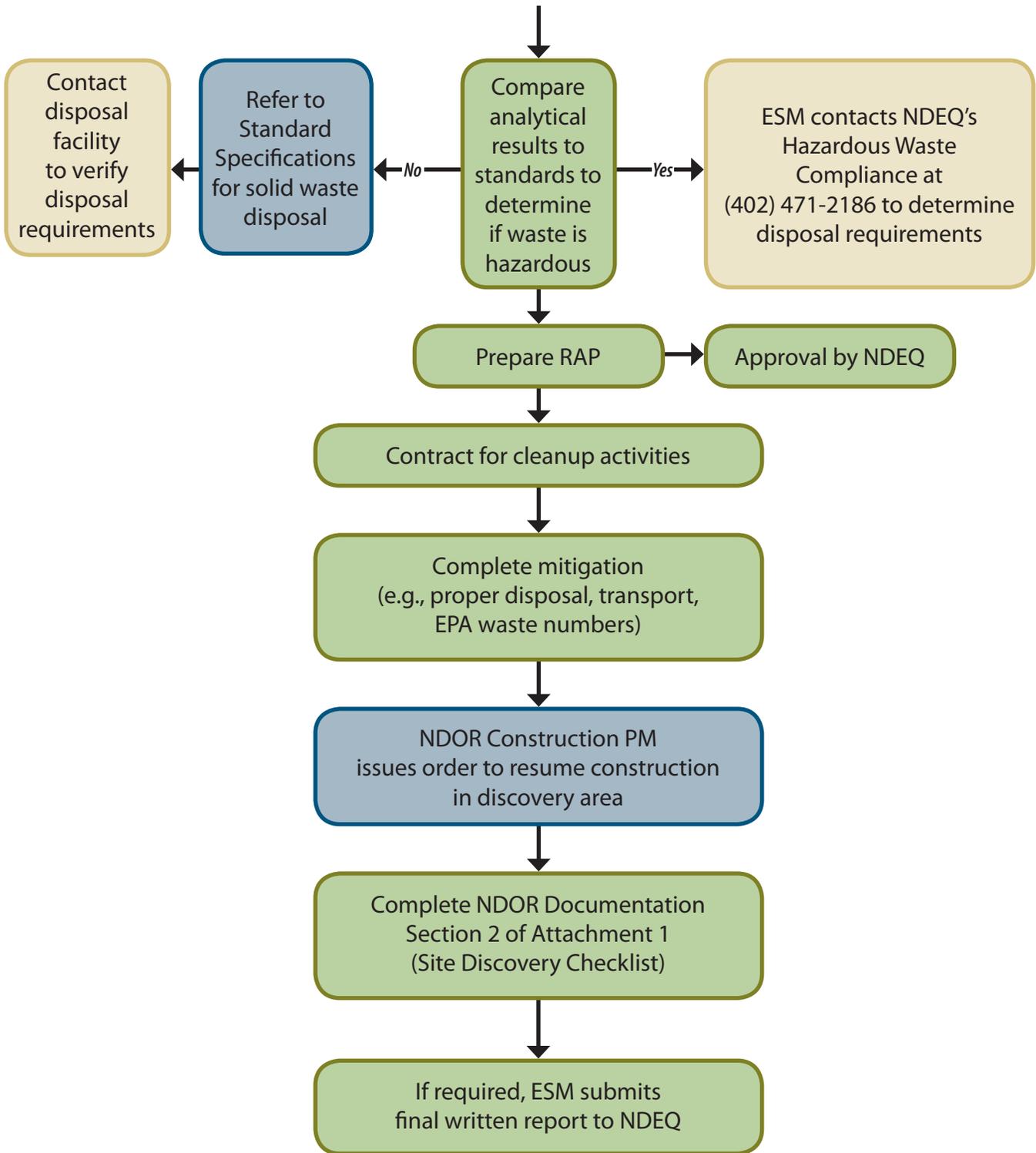


Figure 3-6
(continued)



Attachment 1
Site Discovery Checklist

ATTACHMENT 1
Site Discovery Check List

Section 1	PROJECT DISCOVERY LOCATION:			
	DATE AND TIME OF DISCOVERY:			
	UNEXPECTED WASTE DESCRIPTION:			
	Waste Type: <input type="checkbox"/> Construction and Demolition Debris <input type="checkbox"/> Municipal (Household) Waste <input type="checkbox"/> Contaminated (Petroleum-Stained Soil) <input type="checkbox"/> Other (circle) Appliances / Tires / Asbestos			
	Procedures: Were the following Procedures followed? 1. Stopped work 2. Secured site in area of discovery 3. Notified NDOR Site Engineer or Site Inspector of discovery 4. Filed Incident Report		<u>Yes</u>	<u>No</u>
Contamination Determination: Were any of the following characteristics identified? 1. Drums, barrels, or sealed containers of varying sizes 2. Unknown underground storage tank(s) 3. Stained or discolored soils 4. Gasoline odor 5. Other Odor. Description: 6. Oily Residue 7. Sheen on groundwater 8. Cinders, slag, or other combustion products like ash 9. Asbestos		<u>Yes</u>	<u>No</u>	
<i>If possible contamination was determined, which of the following regulatory agencies were contacted?</i>				
Section 2	Agency Notification for Drums, Barrels, or Sealed Containers, Petroleum-Contaminated Materials, Other Contaminated Materials		<u>Yes</u>	<u>No</u>
	1. NDOR – Construction Division (402) 479-4532 2a. NDEQ – (402) 471-2186 (during office hours) 2b. Nebraska State Patrol (402) 471-4545 (after hours) 3. NDOR-approved Environmental Contractor			
	Agency Notification for Unknown Underground Storage Tanks		<u>Yes</u>	<u>No</u>
	1. NDOR – Construction Division (402) 479-4532 2a. NDEQ – (402) 471-2186 (during office hours) 2b. Nebraska State Patrol (402) 471-4545 (after hours) 3. State Fire Marshals Office – Flammable Liquid Storage Tank Division (402) 471-9465			
	Documentation of Discovery		<u>Yes</u>	<u>No</u>
	1. Were photographs taken? Location: 2. Were any environmental samples collected? Description:			
	Documentation of Disposal			
1. Location of facility where waste was disposed: 2. Date(s) of disposal: 3. Disposal contractor:				

Note: Attach sampling and analysis plan, analytical data, remedial action plan, and waste disposal documentation or manifest.

Project Location: _____
Date: _____

Photo 1: *Add feature description and direction photo was taken from.*

Photo 2:

Photo 3:

Photo 4:

Project Location: _____
Date: _____

Attachment 2
Waste Type Photographs

NDOR Project

Unexpected waste material was encountered during construction activities for the I-80 and 24th Street to Missouri River Project . The unexpected waste appeared to be municipal waste and included fabric, tires, and trash.



Construction and Demolition Debris

C&D waste is defined as waste that results from land clearing; the demolition of buildings, roads, or other structures; or construction projects. C&D waste includes, but is not limited to:

- Fill materials
- Wood (including painted and treated wood)
- Land clearing debris other than yard waste
- Wall coverings (including wallpaper, paneling, and tile)
- Drywall, plaster, and non-asbestos insulation
- Roofing shingles and other roof coverings
- Pipe, metals, and plumbing fixtures
- Glass and plastic
- Carpeting
- Electrical wiring



Municipal Solid Waste

Municipal solid waste is any household waste and/or the combination of household waste with industrial or commercial solid waste. Solid waste, as defined in Nebraska regulations, means any garbage, refuse, or sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, and mining operations, and from community activities.



Contaminated Waste

Contamination refers to the presence of any material/chemical contained within the soil, surface water, or groundwater that may require assessment, remediation, or special handling or that has a potential for liability.

This category includes a wide variety of wastes whose characteristics may indicate possible contamination:

- Drums, barrels, or sealed containers of varying sizes
- Underground storage tanks
- Stained or discolored earth in contrast with adjoining soil
- Petroleum hydrocarbon odors or other chemical odors that emanate when the earth is disturbed
- Oily residue or sludge intermixed with earth
- Sheen on groundwater
- Unknown viscous or liquid substances
- Cinders, slag, and other combustion products like ash
- Asbestos (both friable and non friable)



Other Wastes

- **Household Appliances:** Vending machines, shall mean clothes washers and dryers, water heaters, heat pumps, air conditioners, dehumidifiers, refrigerators, freezers, trash compactors, dishwashers, conventional ovens, ranges, stoves, and wood stoves.
- **Friable Asbestos:** Asbestos in a form that can be crumbled, pulverized, or reduced to powder by hand pressure.
- **Waste Tires:** Tire that is no longer suitable for its general intended purpose because of wear, damage, or defect.



Other Wastes (cont'd)

- **Special Waste:** Solid waste, with the exception of waste that is regulated as a hazardous waste, that possesses physical, chemical, or biological characteristics that make it different from general household, or C&D waste, and that requires special handling, treatment, or disposal methodologies in order to protect public health, safety, and the environment.
- **Liquid Waste:** Any waste that contains free liquids that will readily separate from the solid portion of a waste under ambient temperature and pressure

Attachment 3
NDEQ Environmental Guidance Documents

Attachment 3.1
Construction and Demolition Waste in Nebraska

Construction and Demolition Waste in Nebraska

An Overview of
Managing Waste
Generated from
Construction and
Demolition
Projects



What is Construction and Demolition Waste?

It is important to know what construction and demolition waste is, how it can be properly handled and where it must be legally disposed. *Before beginning a C&D project, contact your local city or county authorities. They may have more stringent requirements.*

Construction and Demolition (C&D) waste is defined and regulated by the Nebraska Department of Environmental Quality in Title 132 – Integrated solid Waste Management Regulations.

C&D waste is defined as waste that results from land clearing; the demolition of buildings, roads, or other structures; or construction projects. C&D waste includes, but is not limited to:

- ▶ Fill materials
- ▶ Wood (including painted and treated wood)
- ▶ Land clearing debris other than yard waste
- ▶ Wall coverings (including wallpapers, paneling, and tile)
- ▶ Drywall, plaster, and non-asbestos insulation
- ▶ Roofing shingles and other roof coverings
- ▶ Pipe and metals, plumbing fixtures
- ▶ Glass, plastic
- ▶ Carpeting
- ▶ Electrical wiring

“Fill” shall mean solid waste that consists only of one or more of the following: sand, gravel, stone, soil, rock, brick, concrete rubble, asphalt rubble, or similar material. Specific types of fill can be used for the purpose of erosion control, erosion repair, bank stabilization, landscaping, roadbed preparation, and other land improvement.

C&D waste shall not include friable **asbestos waste**, special waste, liquid waste, putrescible waste, household waste, industrial solid waste, corrugated cardboard, appliances, **tires**, drums, fuel tanks, hazardous waste, and waste that contains polychlorinated biphenyl (PCB). These products require specific attention for their disposal.

C&D waste **MUST** be disposed of in a **permitted** C&D landfill or a municipal solid waste landfill. Improper disposal of C&D wastes can lead to enforcement actions being taken by the NDEQ and might include penalties in addition to requiring proper cleanup and disposal. NDEQ recommends that building materials be recycled or reused, provided that solid wastes are not mixed in the material to be used or recycled.

C&D Dos and Don'ts

The following options for C&D waste disposal **ARE** allowed:

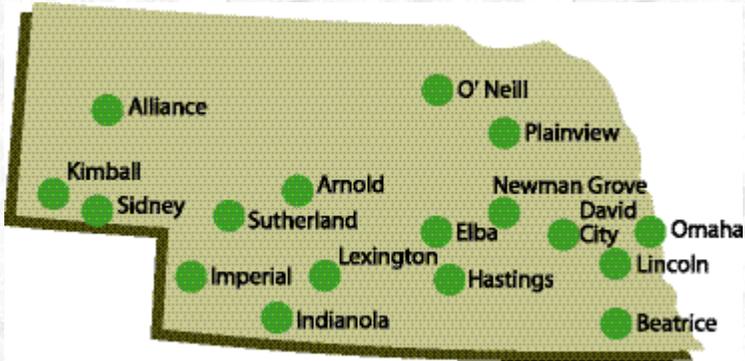
- ▶ Separate brick and concrete from demolition waste. Use the brick and concrete for land improvement and stabilization projects. Haul remaining waste to a permitted landfill. (Corps of Engineers does not allow brick to be used in fill projects in waters of the state.)
- ▶ In the case of a natural disaster, obtain permission from the NDEQ to open a temporary disposal area.
- ▶ Bury farm buildings such as bins, sheds, and barns on the farm property where they were standing. (Structure only, no contents.)

The following methods for C&D disposal **ARE NOT** allowed:

- ▶ Demolishing a building or house and burying it on site (dropping it into the basement). However, C&D materials that meet the definition of fill may be utilized to fill the basement as a means of land improvement or landscaping.
- ▶ Demolishing a building or house and hauling it to a farm to bury it.
- ▶ Using demolition waste other than soil, rock, brick, concrete rubble, and asphalt rubble as fill for land improvements. (Corps of Engineers does not allow brick or asphalt to be used in fill projects in waters of the United States.)
- ▶ Depositing demolition waste in a stream, creek, river or wetland.
- ▶ Depositing fill in a stream, creek or river in such a way that it impacts the flow of the stream or the capacity of the flood plain without first obtaining a permit from the Corps of Engineers.
- ▶ Disposing of the ash from a burned building in the same manner as any of the illegal methods stated above.
- ▶ Open burning of buildings or demolition waste. Before burning any materials from demolition or construction activities, you should contact the NDEQ at (402) 471-2189, and then local fire officials to see if it is allowable.
- ▶ Demolishing a commercial, industrial, institutional, or public building without a thorough inspection to identify asbestos-contaminated materials and properly notifying the NDEQ Air Quality division, (402) 471-2189 and/or the Nebraska Department of Health and Human Services at (402) 471-0386. If the demolition project is in Lincoln, NE or Omaha, NE you must contact their local programs directly.

Licensed C&D Facilities

The following permitted C&D waste facilities are licensed with the State of Nebraska. Contact your local municipal solid waste landfill to determine if it also accepts C&D waste.

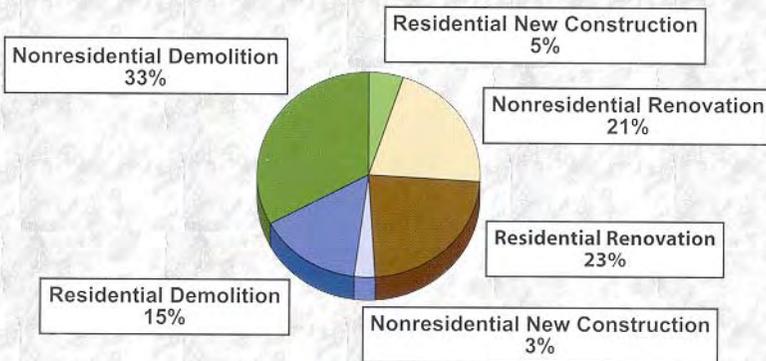


Abe's Trash Service, Inc.	Omaha	(402) 571-4926
Anderson Excavating & Wrecking Co., Calhoun Road	Omaha	(402) 345-8811
Bud's Sanitary Service	Newman Grove	(402) 447-6472
Butler County Landfill, Inc	David City	(402) 367-4662
City of Alliance C&D Landfill	Alliance	(402) 762-5400
City of Kimball	Kimball	(308) 235-3639
City of Lincoln, North 48 th Street	Lincoln	(402) 441-7867
City of O'Neil	O'Neil	(402) 336-3090
City of Plainview	Plainview	(402) 582-4928
Gage County C&D Waste Disposal Facility	Beatrice	(402) 223-4011
Hawkins Construction Co.	Omaha	(402) 342-1607
Lexington Area Solid Waste Agency (LASWA)	Lexington	(308) 324-3351
Loup Central Landfill Assoc.	Elba	(308) 863-2122
NPPD Gerald Gentleman Station	Sutherland	(308) 563-5355
PAD LLC	Hastings	(402) 463-4545
Porter Construction	Pierce	(402) 371-2900
Schmader	West Point	(402) 372-3833
Sidney Area Solid Waste Agency	Sidney	(308) 254-5300
Southwest Nebraska Solid Waste Agency	Imperial	(308) 882-4368
Stewart Construction	Indianola	(308) 345-7070
Village of Arnold	Arnold	(308) 848-2228

C&D - Did You Know?

- ▶ In the United States, an estimated 136 million tons of building-related C&D waste was generated in 1996* (compared to 208 million tons of municipal solid waste in 1996).
- ▶ An estimated 20 to 30 percent of building-related C&D waste was recovered for processing and recycling in 1996. The materials most frequently recovered and recycled were concrete, asphalt, metals and wood.
- ▶ An estimated 35 to 45 percent of building-related C&D waste was sent to C&D landfills in 1996. An estimated 30 to 40 percent of C&D waste is disposed of at municipal solid waste landfills (or unpermitted disposal sites). An estimated 15 to 35 percent is disposed of illegally.
- ▶ Building demolitions account for 48 percent of the waste stream, or 65 million tons per year; renovations account for 44 percent, or 60 million tons per year; and 8 percent, or 11 million tons per year, is generated at construction sites.

Generation of Construction and Demolition Waste from Buildings, 1996



- ▶ A 1994* survey by Franklin Associates identified about 1,900 active C&D landfills in the United States. *C&D Recycling*, a trade journal, estimates that about 3,500 operating facilities process C&D materials in the United States.

* most recent data available

Special C&D Disposal Requirements

Fill

While fill can be used for erosion control, erosion repair, and bank stabilization, special considerations are required for its use in waters of the U.S. as regulated by the Corps of Engineers. Waters of the U.S. include rivers, lakes, streams, and wetlands. Any fill within these waters requires coordination with the Corps of Engineers to determine whether a permit is needed for the activity.

In addition, the fill to be used in waters of the U.S. must meet the requirements for suitable materials as defined by the Corps of Engineers. Unsuitable materials include asphalt, brick, trash, debris, car bodies, and concrete with exposed rebar.



Scrap Tires

Scrap tires are not acceptable C&D waste.

Title 132, Chapter 14 provides criteria for accumulating waste tires for reuse, recycling, or shipping to another state.

A list of approved scrap tire haulers is available on the NDEQ website.

Asbestos

Friable asbestos is not acceptable C&D waste. Guidance on asbestos removal and disposal can be found in Title 178, Chapter 22. Title 178 is available on the Nebraska Department of Health and Human Services website (www.hhs.state.ne.us) or call (402) 471-0386. The Lincoln-Lancaster County Health Department is responsible for the National Emission Standards for Hazardous Air pollutants (NESHAPS) program in Lancaster County, and the Omaha Air Quality Control Agency is responsible for the NESHAPS program within the Omaha city limits.

Open Burning

At this time trees, brush, and vegetation may be burned at an agricultural operation provided the materials were generated onsite from those operations and does not cause a public nuisance or traffic hazard. However, a local permit from the fire chief is necessary. For further information on what can and cannot be burned, call (402) 471-2189.

Managing Solid Waste

The following provides guidance to communities in their management of solid waste:

Use of a Closed Landfill Site – The NDEQ allows closed landfill sites to be used for the collection of recyclable materials or for composting yard wastes, provided that materials are routinely removed for recycling.

Tree and Brush Piles – The NDEQ issues 5-year permits to municipalities for the purpose of burning piles of tree limbs and brush for volume reduction. The burn permit allows only the burning of tree branches and untreated wood. Burning such things as leaves and grass clippings, creosote wood, treated lumber products, painted wood, or building demolition materials is prohibited.

Yard Waste – Yard waste is defined as leaves and grass clippings. From April 1 to November 30, yard waste may not be disposed of in a landfill.

Household Appliances (White Goods) – Household appliances are banned from landfills. The ban applies to clothes washers and dryers, water heaters, heat pumps, air conditioners, dehumidifiers, refrigerators, freezers, trash compactors, dishwashers, conventional ovens, ranges, stoves, and wood stoves. Appliances not listed here should be recycled, or can be taken to a permitted municipal solid waste landfill.

Additional Landfill Bans – The following items are banned from landfills statewide. Contact your landfill or hauler for details.

- ▶ Waste Oil
- ▶ Lead acid batteries (car batteries)
- ▶ Waste Tires
- ▶ Unregulated hazardous waste (Household hazardous waste is allowed but local programs exist for its disposal, call (402) 471-4210).

Illegal Dump Site Cleanup Program

The Illegal Dumpsite Cleanup Program, established in 1997, provides funding assistance to political subdivisions for the cleanup of solid waste disposed of along public roadways or ditches. Through this program, items such as household waste, white goods, C&D waste, and furniture are removed from the illegal site and recycled or disposed of properly at a permitted facility. For a grant application, contact the NDEQ.

Key Contacts

Nebraska Department of Environmental Quality (NDEQ)



1200 "N" Street, Suite 400
PO Box 98922
Lincoln, Nebraska 68509
(402) 471-2186 or toll-free at (877) 253-2603
www.deq.state.ne.us

United States Army Corps of Engineers - Omaha District

Wehrspann Field Office



8901 South 154th Street
Omaha, NE 68138-3621
(402) 896-0896
www.nwo.usace.army.mil

Kearney Field Office

1430 Central Avenue
Kearney, NE 68847
(308) 234-1403
www.nwo.usace.army.mil

Other Contacts

Environmental Protection Agency - Region 7



US EPA Region 7
Office of External Programs
901 N. 5th Street
Kansas City, KS 66101
(913) 551-7003 or Toll-free: (800) 223-0425
www.epa.gov/region7

Nebraska Association of Resource Districts



601 S. 12th Street, Suite 201
Lincoln, NE 68508
(402) 471-7670
www.nrdnet.org

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Attachment 3.2
General Asbestos Information



Nebraska Department of Environmental Quality

ENVIRONMENTAL FACT SHEET

00-072

October 17, 2000

General Asbestos Information

What is asbestos?

Asbestos is a naturally occurring mineral mined throughout the world, primarily in Canada, China, and parts of the United States and South America. Asbestos was known as the “miracle mineral” due to its durability, strength and ability to withstand heat. Asbestos can be broken into small, unseen fibers that remain airborne indefinitely and travel long distances. Asbestos has been used in over 3,000 commercial products such as: pipe and boiler insulation, sprayed-on acoustical and decorative textures, vinyl floor tile and linoleum, and cementitious, transite or slate siding and roofing. Asbestos is being replaced in these products with other materials when possible. However, you can still purchase products that contain asbestos such as vinyl asbestos floor tile and brake pads. Many materials that contain asbestos are being removed from existing buildings and are being replaced with materials that do not contain asbestos.

Is asbestos dangerous to my health?

There is no known safe level of asbestos exposure. Inhalation of asbestos fibers causes the most significant health concern. Damaged asbestos-containing material is more likely to release fibers than asbestos material that is not damaged. If asbestos-containing material is dry and can be crumbled by hand pressure (friable) a fiber release is more likely than if the material is “nonfriable”. The more that the asbestos material is disturbed; the more likely a fiber release will occur. When a release occurs, the small fibers may be inhaled and become deposited into the airways and lungs. Due to the physical characteristics of asbestos, the fibers may remain in the respiratory system indefinitely. Each asbestos exposure increases your risk of developing an asbestos related disease.

Diseases from asbestos exposure may not appear for 10-20 years after exposure. Mesothelioma is a fatal form of cancer caused by asbestos exposure. It is a cancer of the membranes that line the chest and abdomen. Asbestosis is scarring of the lung tissue caused by asbestos fibers. This is a noncancerous, respiratory disease that is irreversible. Asbestos exposure may also cause lung cancer. Workers who smoke and are exposed to asbestos are 50 times more likely to develop lung cancer than the general public. The risks associated with low level, non-occupational exposure have not been established and are almost impossible to validate.

Who regulates asbestos?

The Environmental Protection Agency (EPA) developed the National Emission Standards for Hazardous Air Pollutants (NESHAPS) in 1973 for the purposes of protecting the general public from asbestos exposure. The NESHAP regulations apply to renovations and demolitions of commercial, public, industrial, and institutional facilities; asbestos manufacturing; milling; roadways; and disposal. Residential buildings with fewer than four dwelling units are exempt from most of the NESHAP regulations. The regulations specify notification requirements, work practices and disposal requirements. (See Asbestos Information Guidance Publication).

The Nebraska Department of Environmental Quality has been delegated the authority to oversee compliance with the NESHAP regulations. The Lincoln Lancaster County Health Department (LLCHD)

is responsible for the NESHAP program in Lancaster County and the Omaha Air Quality Control (OAQC) agency is responsible for the program within the Omaha city limits.

The EPA developed the Toxic Substances Control Act (TSCA), which first authorized EPA to develop the Asbestos Hazardous Emergency Response Act (AHERA) in 1986. The AHERA regulations set standards for inspections and management plans for asbestos in schools. The AHERA regulations necessitate training and accreditation for those who work with asbestos. Currently, the Nebraska Department of Health and Human Services (HHS) oversees the AHERA program.

The HHS has developed regulations for the State of Nebraska found in Title 178 – The Nebraska Asbestos Control Program. These regulations are in addition to the NESHAP and AHERA regulations that must be complied with by regulated parties in Nebraska. The regulations specify accreditation, licensure, work practices, notification, audits, inspections and fees for asbestos projects.

The Occupational Safety and Health Administration (OSHA) has developed regulations that protect asbestos workers. Employers must follow specific work practices and guidelines to insure minimal exposure for their employees in the asbestos industry. The federal government manages the OSHA asbestos regulations for Nebraska.

Who can I contact to learn more about the asbestos regulations in Nebraska?

NESHAP

- NDEQ (Lincoln office) - (402) 471-2189
- NDEQ (North Platte office) – (308) 535-8140
- LLCHD (Lancaster County) – (402) 441-8034
- OAQC (Omaha city limits) – (402) 444-6015

AHERA & Nebraska Asbestos Control Program (HHS)

- Regulation & Licensure – Doug Gillespie, Program Manager (402) 471-0548
- Stephen Schlife, inspection & notification (402) 471-6507
- Robert Donahue, training & accreditation (402) 471-0783
- Lenard Brown, AHERA (402) 471-0549
- Bobbi Mills, project and training notification (402) 471-0386

OSHA - Omaha Office, Main Number 1-800-356-4674

Attachment 3.3
CFCs and Household Appliances/Vending Machines



NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

ENVIRONMENTAL GUIDANCE DOCUMENT

06-229

April 2007

CFCs and Household Appliances/Vending Machines

Many household appliances are banned from landfill disposal in Nebraska. Appliances that cannot be disposed in landfills include clothes washers and dryers, water heaters, heat pumps, air conditioners, dehumidifiers, refrigerators, freezers, trash compactors, dishwashers, conventional ovens, ranges, stoves, and wood stoves.

When these appliances are discarded and become waste items, the Department of Environmental Quality recommends that they be recycled, with special consideration given to appliances that contain chlorofluorocarbons (CFCs). Typically, refrigeration-type appliances such as air conditioners, refrigerators, and freezers contain CFCs. These types of appliances, when delivered for recycling, should have the CFCs already removed, or arrangements must be made to have the CFCs removed. Only those persons who are trained and certified for recovery can remove CFCs.

Vending machines are not considered a household appliance, so they are not subject to the landfill disposal ban. If they are refrigerant units, however, and are delivered for recycling or disposal, the CFCs must be removed prior to recycling or disposal.

The Department recommends that appliances containing CFCs be segregated and stored to aid in the proper removal of CFCs. Contact the Environmental Protection Agency Stratospheric Ozone Protection Hotline (800-296-1996) for additional information regarding CFC removal requirements. Applicable Nebraska statutes and regulations are found in Neb. Rev. Stat.

For more information please refer to Neb. Rev. Stat. §13-2039 or Chapter 1 of Title 132 - Integrated Solid Waste Management Regulations.

Produced by: Waste Management Division, Nebraska Department of Environmental Quality, P.O. Box 98922, Lincoln, NE 68509-8922; phone (402) 471-4210. To view this, and other information related to our agency, visit our web site at www.deq.state.ne.us.

For more information, contact
MoreInfo@NDEQ.state.NE.US

Nebraska Department of Environmental Quality
1200 "N" Street, Suite 400
PO Box 98922
Lincoln, Nebraska 68509
(402) 471-2186 FAX (402) 471-2909

Attachment 3.4
Liquid Wastes Restricted from Landfills



NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

ENVIRONMENTAL GUIDANCE DOCUMENT

06-236

7-2007

Liquid Waste Restricted from Landfills

Q. What is a liquid waste?

A. Liquid waste is any waste that contains free liquids, which will readily separate from the solid waste under ambient temperature and pressure (Paint Filter Test Method 9095).

Q. What are the restrictions for disposing of liquid wastes at a landfill?

A. Bulk or non-containerized liquids cannot be disposed in a solid waste landfill. This means any waste or special waste that contains free liquids is banned from permitted landfills unless:

- The waste is household waste (not septic waste); or
- The waste is leachate or gas condensate derived from the solid waste disposal area, and the solid waste disposal area is designed with a composite liner and leachate collection system.

Q. How can liquid waste be managed for disposal?

A. Liquid waste may be disposed in a municipal solid waste landfill by the following methods:

- The liquid waste is in a small container (similar in size to that normally found in a household);
- The liquid waste is in a container designed to hold liquids for use or personal consumption rather than bulk storage; or
- The liquid waste is a household waste (not septic waste).

Liquids or wet wastes that fail the Paint Filter Test may be mixed with soil or other dry wastes prior to disposal at the solid waste landfill.

Note: Any liquid waste, containerized or bulk, that is also a **special waste**, must be pre-approved by the Department of Environmental Quality before disposal. The solid waste landfill manager may set regulations addressing liquid wastes that are more stringent than State or Federal regulations.

For more information please refer to Title 132 – Integrated Solid Waste Management Regulations, Chapter 1 and Chapter 3.

Produced by: Waste Management Division, Nebraska Department of Environmental Quality, P.O. Box 98922, Lincoln, NE 68509-8922; phone (402) 471-4210. To view this, and other information related to our agency, visit our web site at www.deq.state.ne.us.

For more information, contact
moreinfo@ndeq.state.ne.us

Nebraska Department of Environmental Quality
1200 "N" Street, Suite 400
PO Box 98922
Lincoln, Nebraska 68509-8922
(402) 471-2186 FAX (402) 471-2909

Attachment 3.5
Management of Petroleum-Contaminated Materials



NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

ENVIRONMENTAL GUIDANCE DOCUMENT

06-205

May 2007

Management of Petroleum-Contaminated Materials

Scope. The purpose of this guidance document is to explain the requirements for managing petroleum-contaminated materials. This will include options for landfilling or alternative treatment and disposal methods. The most common example of an alternative treatment and disposal method is a one-time land application. If there is an immediate response to an emergency such as a spill this guidance document will apply after the immediate response has ended. During an immediate response, alternative management procedures not addressed in this guidance document may be necessary.

Hazardous Waste Determinations. All solid wastes are required to have a hazardous waste determination. Petroleum-contaminated materials are solid wastes when actively managed as wastes (excavated for treatment and disposal).

Sampling and Analysis. The type of analysis conducted and the sampling procedures used are dependent upon the matrix (soil, water) and type of contaminant involved. For assistance on making a hazardous waste determination, please refer to Title 128 – Nebraska Hazardous Waste Regulations, Chapter 3 & 4 and the guidance document *Waste Determinations and Hazardous Waste Testing*.

Common materials that may routinely be contaminated with petroleum include media (water, soil, sand, gravel) and debris (trees, concrete). Media and debris from an underground storage tank (UST) subject to corrective action under 40 CFR Part 280 that fail the test for the toxicity characteristic (hazardous waste codes D018 through D043) are not a hazardous waste (Title 128, Chapter 2, 009.10). This exemption does not apply to the contents of a UST.

The Nebraska Department of Environmental Quality (NDEQ) will not routinely ask for gasoline-contaminated media and debris to be analyzed for lead. NDEQ has not seen any evidence that media and debris contaminated with gasoline will ever contain enough lead to become a hazardous waste.

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The following examples and Table 1 are based on media and debris contaminated with petroleum ONLY. Knowledge of past practices and procedures is critical in determining what additional contaminants would reasonably be expected to be present. In many cases past practices and procedures (industrial areas) would require additional sampling of potential contaminants that are not identified in the following examples or Table 1.

Examples:

1. Media and debris contaminated with gasoline or diesel only: If *from* a UST subject to corrective action, the media and debris could be taken to a Municipal Solid Waste Landfill permitted to dispose waste pursuant to Title 132 for disposal without sampling and analysis. Note: There may be landfill-specific requirements for sampling and analysis.
2. Media and debris contaminated with gasoline only: If *not from* a UST subject to corrective action media and debris must have a waste determination for benzene.
3. Media and debris contaminated with gasoline only: Whether *from* a UST subject to corrective action *or not*, media and debris must have a waste determination for benzene if it is to be land applied.
4. Media and debris contaminated with used oil only: Whether *from* a UST subject to corrective action *or not*, media and debris must have a waste determination for the RCRA-8 toxicity characteristic metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver) listed in Title 128, Chapter 3, Section 010, Table 3.

Table 1 provides a summary of the sampling actions required by the Department. The requirements are dependent on the petroleum contaminant, source of the contaminant, and ultimate disposal method.

TABLE 1. Minimum sampling requirements for landfill disposal and one-time land application

DISPOSAL SITE	CONTAMINANT	SOURCE	BENZENE ONLY	LEAD ONLY	RCRA METALS ¹
LANDFILL	Gasoline ²	UST	NA	NA	NA
		NON-UST	YES	NA	NA
	Other Petroleum ³	UST	NA	NA	NA
		NON-UST	NA	NA	NA
	Used Oil ⁴	UST	NA		YES
		NON-UST	NA		YES
LANDFARM	Gasoline ²	UST	YES	NA	NA
		NON-UST	YES	NA	NA
	Other Petroleum ³	UST	NA	NA	NA
		NON-UST	NA	NA	NA

NA = Not applicable

¹ RCRA metals include arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver

² Gasoline includes aviation fuel

³ Other petroleum includes diesel, kerosene, mineral oil (no PCBs), heating oils, fuel oils, and bunker oils

⁴ Used oil whether it is subject to UST corrective action or not.

The contents of a UST are subject to full RCRA regulation under Title 128. The D018 through D043 exemption does not apply to the contents.

For further hazardous waste determination assistance, please contact the Waste Management Section Compliance Assistance Specialist at (402) 471-4210.

Fill. Fill is solid waste that consists only of one or more of the following: sand, gravel, stone, soil, rock, brick, concrete rubble, asphalt rubble or similar material. Fill that is not a hazardous waste may be used for the purpose of erosion control, erosion repair, channel stabilization, landscaping, roadbed preparation, or other land improvement provided the wastes used in these activities are not mixed with other solid wastes and do not, as a result of handling or disposal, have the potential to cause contamination that may threaten human health or the environment.

Petroleum-contaminated materials. This section discusses treatment and disposal requirements for different types of petroleum contaminated materials. For the purpose of this guidance document the materials will be categorized as *Hazardous Waste Materials*, *Underground Storage Tank (UST) Contaminated Materials*, and *Petroleum-Contaminated Materials from Sources other than UST*.

Hazardous waste materials.

Treatment and disposal.

1. A hazardous waste generator must be a Conditionally Exempt Small Quantity Generator to dispose hazardous waste at a municipal solid waste landfill. If a generator is a Conditionally Exempt Small Quantity Generator then refer to “Requirements for Disposal in a Landfill” of this guidance document. If the generator status is unknown or the hazardous waste generator is a Small Quantity Generator or Large Quantity Generator, contact the Waste Management Section Compliance Assistance Specialist at (402) 471-4210 for proper disposal information.
2. The NDEQ will not allow hazardous waste to be land applied.

To inquire about alternative treatment and disposal methods of hazardous waste, contact the Waste Management Section Compliance Assistance Specialist at (402) 471-4210.

UST contaminated media and debris. This section discusses the requirements and options for treatment and disposal of petroleum-contaminated media and debris from a UST.

Treatment and disposal

1. For disposal at a municipal solid waste landfill, refer to “Requirement for disposal in a landfill” of this guidance document.
2. For land application, refer to “Requirements for alternative treatment and disposal by land application” of this guidance document.
3. For alternative treatment and disposal, refer to “Requirements for Alternative Treatment and Disposal by Other Methods” of this guidance document.

Stockpiling. If it is necessary to stockpile contaminated media and debris after determining it is not a hazardous waste, pending NDEQ approval of an alternative treatment or disposal request, the following procedures apply:

1. The stockpile is to be placed in a safe and secure location to minimize exposure to human health and the environment;
2. Media and debris must be placed on and covered with an impermeable membrane;
3. Procedures should be implemented to limit access to the stockpile; and
4. Storm water run-on and run-off controls must be implemented

Petroleum-Contaminated Materials from Sources Other than UST. For petroleum-contaminated material that is not from a UST and is not a hazardous waste, refer to the above items concerning Treatment and Disposal and Stockpiling respectively.

Requirements for Disposal in a Landfill.

Landfill Requirements. Each municipal solid waste landfill may have its own sampling, analysis and disposal requirements. These requirements may be in addition to NDEQ requirements discussed in the Hazardous Waste Determination section of this guidance document. Each landfill has the right to reject any disposal request. The NDEQ recommends that the generator contact a landfill prior to delivering contaminated material. A Conditionally Exempt Small Quantity generator can take only 43 pounds of hazardous waste per day to a landfill (Title 132, Chapter 1, 113).

Free Liquids. The contaminated material cannot contain free liquids. The NDEQ may require verification by a paint filter test.

Requirements for Alternative Treatment and Disposal by Land Application. This section discusses the requirements for treatment and disposal by land application of UST-contaminated media and debris and petroleum-contaminated materials from sources other than a UST. Land application areas are categorized as either one-time land application sites or permitted land application facilities.

One-Time Land Application Site. This section describes the site selection criteria, soil treatment procedures, and monitoring requirements for one-time land application sites. A one-time land application site is defined as a site that is used for the controlled application of material, from a single source, to the surface of the land for the purposes of treatment and disposal. Materials contaminated with “used” oil are not allowed to be land applied. All one-time land applications must have prior approval by the NDEQ.

Characteristics for the Selection of One-time Land Application Sites. All of the items listed below must be addressed in writing and submitted to NDEQ with a *Special Waste Characterization Request Form* found at www.deq.state.ne.us.

1. The site must be large enough to enable contaminated material to be spread in a lift no thicker than four inches. (One cubic yard of soil covers an area approximately 27 feet long by 3 feet wide to a depth of 4 inches.)
2. The site must be at least 1000 feet from inhabited residences, businesses, or facilities/lands frequented by the public.

3. The site should be at least 1000 feet from any man-made or natural structures that may collect vapors. Examples of this type of structure would be a pump house, sewer line or other utility corridor, or drain tile system.
4. The site must be at least 1000 feet from drinking water wells (municipal, domestic, etc.).
5. The site must be at least 1000 feet from any surface water features (ponds, lakes, streams, etc.).
6. The site must not be located within a designated wellhead protection area, or other Title 118 - Ground Water Quality Standards and Use Classification Class GA areas.
7. Sites with highly permeable (sand and/or gravel) soils should be avoided.
8. The site must not be located within a 100-year floodplain.
9. The site must not be located within areas designated as wetlands. Verification may be required by the NDEQ.
10. There should be a minimum separation of 25 feet between land surface and the water table. The NDEQ may require greater separation in some cases.
11. The site should not be located in a quarry, gravel pit, or mine, unless as part of an approved reclamation project.
12. The site should not be located on any land with slopes greater than six percent.

Treatment Procedures. The goal of the following treatment procedures is to provide conditions which are conducive to biodegradation as well as volatilization of the target contaminants. It is the site operator's responsibility to assure the treated materials meet the cleanup goal specified below. The following procedures are minimum requirements. It may be necessary to perform these procedures at a greater frequency or modify them in order to meet the cleanup goal.

1. All materials must be free of debris such as piping, tubing, concrete, electrical wiring and conduit, and plastic tarp, upon delivery to the site. All debris removed from the contaminated material must be properly disposed in a landfill permitted in accordance with Title 132.
2. For maximum effectiveness, land application of contaminated material should be limited to March 1st through November 30th. Treatment procedures should continue until all contaminated materials meet the cleanup goal or until site conditions, such as a frozen ground, prevent further treatment.

3. If materials are stockpiled, land application must begin within 48 hours after NDEQ approval is given. If the materials cannot be applied within 48 hours, an alternative plan must be submitted for review and approval by NDEQ.
4. Lifts of material must be no greater than four inches thick.
5. Material which is land applied must be incorporated (mixed) with the upper 4-6 inches of native soil within 48 hours after application. If soil amendments are used to enhance hydrocarbon breakdown, they must be added just before or just after material spreading, but prior to mixing with the soil.
6. Soil amendment application rates must not exceed standard rates for crop production. The local University of Nebraska - Extension Service, the local Natural Resources District, or the Natural Resource Conservation Service may be able to provide this information.
7. Material should be turned at least once per month, or as frequently as necessary, to the depth of original incorporation. This is to enhance hydrocarbon breakdown and to prevent materials from remaining saturated after precipitation events.
8. The boundaries of the area of contaminated material should be flagged or staked to differentiate it from uncontaminated, native soils. The stakes must remain in place until the treatment of the material is complete.
9. Petroleum contaminated materials must be treated until the benzene level is less than 3.63 mg/kg and total extractable hydrocarbons (as diesel) is less than 9520 mg/kg.

Saturated Soils. Soils that are saturated with petroleum may be land-applied provided the soil does not contain any free liquids (paint filter test). The soil should be turned once per week for a month and then the normal treatment procedures described above may be initiated (unless otherwise directed by the NDEQ).

Reuse of Soils. If soil is to be reused after treatment has been completed, prior approval must be obtained from the NDEQ.

Permitted Land Application Facilities: For the purposes of this guidance document a permitted land application facility is defined as a site where contaminated materials are repeatedly land applied onto the same plot(s) of land or incorporated into the soil surface for agricultural purposes or for treatment and disposal. Any land application facility which proposes to accept, treat and dispose of soils in a manner which does not meet the definition of a one-time land application site must apply for and receive a permit from NDEQ prior to accepting contaminated soils.

Sites such as this are considered to be disposal areas under Title 132 - Integrated Solid Waste Management Regulations and therefore must meet the siting, construction, operation, reporting, and monitoring requirements as outlined in Title 132.

Requirements for Alternative Treatment and Disposal by Other Methods.

Proposals for treatment and disposal methods other than land application or landfill disposal must be submitted to and approved by NDEQ (low temperature thermal desorption, incineration, asphalt batching, soil washing, etc.) Approval is granted on a case-by-case basis by the appropriate NDEQ section or program.

The *Alternative Petroleum-Contaminated Soil Treatment and Disposal Form* must be completed and submitted to the Waste Management Section of the NDEQ. Upon review of this form, the NDEQ may require additional information (work plans, design plans, etc.) to be submitted in order for the treatment and disposal proposal to be evaluated and approved.

Helpful Web Sites:

- Title 128 - <http://www.deq.state.ne.us/> and click on "Laws and Regulations"
- Title 132 - <http://www.deq.state.ne.us/> and click on "Laws and Regulations"
- Hazardous Waste Service Providers Directory - <http://www.deq.state.ne.us/> and click on "Publications"

Attachment:

Alternative Petroleum-Contaminated Soil Treatment and Disposal Form

For more information, contact
moreinfo@ndeq.state.ne.us

**Nebraska Department of Environmental Quality
1200 "N" Street, Suite 400
PO Box 98922
Lincoln, Nebraska 68509-8922
(402) 471-2186 FAX (402) 471-2909**



Nebraska Department of Environmental Quality

Return form to:
Nebraska Department of Environmental Quality
Waste Management Division
P.O. Box 98922
Lincoln, Nebraska 68509-8922
Phone: 1-877-253-2603, Fax: (402) 471-2909

Alternative Petroleum-Contaminated Soil Treatment and Disposal Form

Company responsible or treatment/disposal of soil: _____

Contact name/Title: _____

Address: _____

City/State/Zip: _____

Phone: _____

Methods of treatment/disposal: _____

Description of process: _____

Amount of soil to be treated/disposed: _____

Soil type (s): _____

Type of contaminants: _____

Assessment of the treatment/disposal by-products (e.g. air emissions, leachate, etc.); include type of by-product, amount, and rate of emission: _____

Treatment/disposal location: _____

Legal description: _____

City, County: _____

Owner's name, address, & phone number of the treatment/disposal location:

Topography description: _____

Description of proposed effectiveness of treatment: _____

Anticipated treatment rate (amount/time):

Anticipated length of treatment: _____

Certification. By signing below, the party (ies) certify that the above information is true and an accurate description of the treatment/disposal process and of the treatment/disposal area.

Signature – Responsible Party **Title** **Date**

Name (type or print)

Signature – Consultant/Contractor **Title** **Date**

Name – Consultant/Contractor (type or print)

Attachment 4
Permitted Facilities

Attachment 4 Permitted Facilities

Compost Facility		
City of Beatrice Board of Public Works	Beatrice	(402) 228-5248
City of Fremont	Fremont	402-727-2670
City of Grand Island	Grand Island	(308) 383-8846
City of Holdrege	Holdrege	(308) 995-8681
City of Omaha/Papillion Creek WWTP	Bellevue	(402) 444-3908
City of Scottsbluff WWTP	Scottsbluff	(308) 630-6292
Doernemann	Clarkson	(402) 892-3244
E3 BioFuels-Mead	Mead	402-443-9287
Construction and Demolition Waste Landfill		
Abe's Trash Service, Inc.	Omaha	(402) 571-4926
Anderson Excavating & Wrecking Co. Calhoun Road	Omaha	(402) 345-8811
Bud's Sanitary Service	Newman Grove	(402) 447-6472
Butler County Landfill, Inc.	David City	(402) 367-4662
City of Alliance C & D Landfill	Alliance	(308) 762-1907
City of Arnold	Arnold	308-848-2228
City of Benkelman	Benkelman	308-423-2540
City of Broken Bow	Broken Bow	308-872-5831
City of Holdrege	Holdrege	308-995-8681
City of Kimball	Kimball	(308) 235-3639
City of Lincoln North 48th Street	Lincoln	(402) 441-7867
City of O'Neill	O'Neill	(402) 336-3090
City of Plainview	Plainview	(402) 582-4928
Gage County C & D Waste Disposal Facility	Beatrice	(402) 223- 401
Hawkins Construction Co.	Omaha	(402) 342-1607
KGP Services	Norfolk	(402) 371-2900
Lexington Area Solid Waste Agency (LASWA)	Lexington	(308) 324-3351
Loup Central Landfill Assoc.	Elba	(308) 863-2122
L. P. Gill	Jackson	402-632-4461
NPPD Gerald Gentleman Station	Sutherland	(402) 563-5355
PAD LLC	Hastings	(402) 463-4545
Rainwood Hill Properties, LLC	Omaha	(402) 289-2528
Schmader	West Point	(402) 372-3833
Sidney Area Solid Waste Agency	Sidney	(308) 254-5300
Southwest NE Solid Waste Agency	Imperial	(308) 882-4368
Three Valleys, Inc.	Indianola	(308) 345-7070
YASWA	York	402-363-2600
Delisted Waste Disposal Area		
Clean Harbors Environmental Services, Inc.	Kimball	
Fossil Fuel Combustion Ash Disposal Area		
City of Fremont (Lon D. Wright Power Plant)	Fremont	(402) 727-2610
City of Grand Island Platte Generating Station	Grand Island	(308) 385-5444
City of Hastings Utilities/Whelan Energy Center	Hastings	(402) 463-1371
NPPD Gerald Gentleman Station	Sutherland	(402) 563-5355
NPPD Sheldon Station	Hallam	(402) 563-5355
OPPD NE City	Nebraska City	402-636-2309
OPPD Nebraska City Station	Nebraska City	(402) 636-2309
OPPD North Omaha Station	Omaha	(402) 636-2309

**Attachment 4
Permitted Facilities**

Industrial Waste Landfill		
Douglas County/Waste Management of NE, Inc.	Bennington	402-238-3440
Materials Recovery Facility		
Beatrice Area Solid Waste Agency (BASWA)	Beatrice	(402) 228-5248
Butler County Landfill, Inc.	David City	(402) 367-4662
City of O'Neill	O'Neill	(402) 336-3090
Lexington Area Solid Waste Agency (LASWA)	Lexington	(308) 324-3351
River City Recycling	Omaha	(402) 731-0414
Municipal Solid Waste Landfill		
Grand Island Solid Waste Agency	Grand Island	(308) 385-5433
Beatrice Area Solid Waste Agency (BASWA)	Beatrice	(402) 228-5248
Butler County Landfill, Inc.	David City	(402) 367-4662
City of Alliance	Alliance	(308) 762-1907
City of Gering	Gering	(308) 436-5096
City of Hastings Landfill/Wood Waste Facility	Hastings	(402) 461-2308
City of Holdrege Prairie Hill Landfill	Holdrege	(308) 995-8681
City of Kimball	Kimball	(308) 235-3639
City of Lincoln Bluff Road Landfill	Lincoln	(402) 441-7867
G&P Development, Inc. Landfill/ Waste Connections, Inc.	Milford	(402) 761-3451
J Bar J Land, Inc. Waste Connections of NE	Ogallala	(308) 287-2107
Kearney Area Solid Waste Agency	Kearney	(308) 233-3238
Lexington Area Solid Waste Agency (LASWA)	Lexington	(308) 324-3351
Loup Central Landfill Assoc.	Elba	(308) 863-2122
L.P. Gill Inc.,	Jackson	(402) 632-4461
Nebraska Ecology Systems, Inc. /Waste Connections, Inc.	Geneva	(402) 367-4662
Northeast Nebraska Solid Waste Coalition (NNSWC)	Clarkson	(402) 844-2230
Sarpy County	Springfield	(402) 253-2371
Sidney Area Solid Waste Agency	Sidney	(308) 254-5300
Solid Waste Agency of Northwest Nebraska (SWANN)	Chadron	(308) 432-4245
Valentine Area Solid Waste Agency (VASWA)	Valentine	(402) 376-2323
Waste Management of NE, Inc./Pheasant Point	Bennington	(402) 238-3440
York Area Solid Waste Agency (YASWA)	York	(402) 363-2600

Attachment 4 Permitted Facilities

Transfer Station		
Bud's Sanitary Service	Newman Grove	(402) 447-6472
City of Alliance	Alliance	(308) 762-1907
City of Columbus	Columbus	(402) 564-8585
City of Fairbury	Fairbury	(402) 729-2476
City of Gering Baling Facility	Gering	(308) 436-5096
City of Hartington	Hartington	(402) 254-6353
City of Kimball	Kimball	(308) 235-3639
City of McCook	McCook	(308) 345-2022
City of Nebraska City	Nebraska City	(402) 873-7795
City of Neligh	Neligh	(402) 887-4066
City of Norfolk	Norfolk	(402) 844-2230
City of North Platte	North Platte	(308) 535-6702
City of Oakland	Oakland	(402) 685-5822
City of Osceola	Osceola	(402) 747-3411
City of Pilger	Pilger	(402) 396-3563
City of Plainview	Plainview	(402) 582-4928
City of Tekamah	Tekamah	(402) 374-2521
City of Wayne	Wayne	(402) 375-1733
City of West Point	West Point	(402) 372-2466
Community Refuse Disposal, Inc./Waste Connections, Inc.	Fremont	(402) 721-7511
Custer Transfer Station Inc.	Broken Bow	(308) 872-2218
Grand Island Solid Waste Agency	Grand Island	(308) 385-5433
KBR Recycling	Ainsworth	(402) 387-2494
King Disposal	Walthill	(402) 846-5694
Loup Central Landfill Assoc./ Burwell	Burwell	(308) 863-2122
Loup Central Landfill Assoc/Elba	Elba	(308) 863-2122
Seneca Sanitation	DuBois	(402) 859-4515
Sidney Area Solid Waste Agency	Sidney	(308) 254-5300
Solid Waste Agency of the Northwest Nebraska (SWANN)	Chadron	(308) 432-4245
Southwest Nebraska Solid Waste Agency	Imperial	(308) 882-4368
Village of Beemer	Beemer	(402) 528-3253
Waste Connections of NE, Inc, dba Gering	Gering	(308) 635-6673
Waste Connections of NE, Inc. dba Bridgeport	Bridgeport	(308) 635-6673
Waste Connections of NE, Inc. dba Central Sanitation	Central City	(402) 367-4662
Waste Connections of NE, Inc. dba J & J Sanitation	Ord	(402) 336-1334
Waste Connections of NE, Inc. dba Saunders County Disposal	Wahoo	(402) 721-7511
Waste Connections of NE, Inc., dba Sanitation Systems, Inc.	Wilber	(402) 438-4777

Attachment 5
Waste Tire Haulers and Recyclers

**Attachment 5
Waste Tire Haulers**

Waste Tire Haulers List				
FACILITY NAME AND ADDRESS	PERMIT NUMBER	TYPE OF PERMIT	COUNTY	CONTACT PERSON
ABC Tire LLC 4401 Gardner Ave. Kansas City MO 64120	99-054-0004	Hauler	NA	Chris Smith 816-421-5557
Butler County Landfill 3588 'R' Road P.O. Box 126 David City NE 68632	02-016-H000	Hauler	Butler	Kelly Danielson 402-367-4662
Champlin Tire Recycling Inc. P.O. Box 445 Concordia KS 66901	01-008-H000	Hauler	NA	Gary Champlin 800-295-3345 785-243-3345
D & B Salvage 3104 N Hwy 75 Sioux City IA 51105	07-039-H000	Hauler	NA	Ardel Banta, Sr. 712-255-2881
David's Tire 935 N Osage Nevada, MO 64772	09-044-H000	Hauler	NA	David Bough 417-448-7197
Double A Transport - James Avis 2414 133rd Road Shelby, NE 68662	06-037-H000	Hauler	Polk	Jim Avis 402-527-5858
Don's New & Used Tires 2141 Cornhusker Hwy Lincoln NE 68521	03-027-H000	Hauler	Lancaster	Donald Childress 402-477-4332
EnTire Recycling, Inc. 13974 US Hwy 136 Rockport MO 64482	03-025-H000	Hauler	NA	Jim Gerking 660-744-2252 402-856-2215
Gill Hauling PO Box 128 Jackson, NE 68743	09-041-H000	Hauler	Dakota	Bernard Gill 402-632-9273
Kenny Frazier 19500 Yearling Way Edmond OK 73003	03-030-H000	Hauler	NA	Kenny Frazier 405-826-6985
J & M Steel P.O. Box 204 Hastings NE 68902-0204	98-048-0004	Hauler	Adams	Jeff McClellan 402-461-3815 cell - 402-469-1857
Lee Pester 8060 W Denton Road Denton NE 68339	96-011-0004	Hauler	Lancaster	Lee Pester 402-450-0971

**Attachment 5
Waste Tire Haulers**

Waste Tire Haulers List				
FACILITY NAME AND ADDRESS	PERMIT NUMBER	TYPE OF PERMIT	COUNTY	CONTACT PERSON
Leo Porter 17775 Hiway 28 Oshkosh NE 69154	98-055-0004	Hauler	Garden	Leo Porter 308-772-7374
Liberty Tire 12498 Wyoming Ave. S Savage MN 55378	09-042-H000	Hauler	NA	Rahni Bahr 952-694-5280 800-526-0860
Resource Management Co Inc. 25656 160 Rd. Brownell KS 67521-9739	99-058-0004	Hauler	NA	Twylia Sekavec 785-398-2240
Spectracom, Inc. DBA River City Recycling 6030 S 60th St. Omaha NE 68117-2219	99-059-H000	Hauler	Douglas	Scott Hughbanks 402-731-0414
Tire Cutters, Inc. 1721 State Hiway 187 Seneca KS 66538	03-031-H000	Hauler	NA	David Bonjour 716-336-3469
Tire Town, Inc. 1825 S 4th St. Leavenworth KS 66048	96-003-0004	Hauler	NA	Duane Becker 913-682-3201
Verdant Environmental Services 11205 Wright Circle, Ste 230 Omaha, NE 68144	09-043-H000	Hauler	Douglas	Paul Behrens/Jim Jones 402-932-0601

**Attachment 5
Waste Tire Recyclers**

Waste Tire Recyclers			
City	Organization Name	Address	Contact
Albion	City of Albion	420 West Market Street	Jolynn Weber 402 395-2428
Arnold	Village of Arnold	P.O. Box 70	Mike Lucas 308 848-2228
Beatrice	Beatrice Landfill	3426 W. Locust Road	Mark Hyberger 402 228-5248
Beatrice	Laser Recharge	P.O. Box 832	George Warnick 402 228-5959
Bellevue	Bellevue Tire and Auto Services Inc.	2111 Franklin Street	Larry Chandler 402 292-8533
David City	Butler County Landfill	3588 R Road	Kelly Danielson 402 367-4662
Elba	Loup Central Landfill	1552 Highway 11	308 863-2122
Elmwood	Eastern Nebraska Auto Recyclers	P.O. Box 266	Roger Pickering 402 994-4555
Franklin	City of Franklin	619 15th Avenue	Patricia Ayres 308 425-6295
Gering	Waste Connections Gering Transfer Station	P.O. Box 104	Sean Green 308 632-6060
Gering	City of Gering	1025 P Street, Box 687	Henry Buhr 308 436-7568
Grand Island	Grand Island Landfill	P.O. Box 1968	308 385-5433
Hartington	City of Hartington	P.O. Box 427, 124 E. Main Street	Crystal Lenzen 402 254-6353
Holdrege	Holdrege Prairie Hill Landfill	1305 13th Street	Jim Elliott 308 995-5575
Imperial	City of Imperial	P.O. Box 637	Jo Leyland 308 882-4368
Kimball	Kimball Landfill	223 S. Chestnut	Bill Gabeth 308 235-3639
Lincoln	City of Lincoln Solid Waste Operation	2710 Ryans Street	Gene Hanlon 402 441-7043
Lincoln	Lincoln Bluff Road Landfill	2400 Theresa Street	Steve Owen 402 441-7867
Lincoln	T.O. Haas Tire Co.	P.O. Box 81067	Randy Haas 402 474-2692
Lincoln	Waste Cap of Nebraska	285 S 68th St Place	Carrie Hakenkamp 402 436-2383
Milford	G and P Development Inc. Landfill	P.O. Box 63	Scott Ruether 402 761-3451
Minden	City of Minden	P.O. Box 239	Brent Lewis 308 832-1820
Mullen	Village of Mullen	P.O. Box 187	Deb Daly 308-546-2625
Norfolk	Norfolk Transfer Station	600 East Monroe	Gary Lund 402 644-8715
North Platte	City of North Platte Transfer Station	1402 N Jeffers	Wes Meyer 308 535-6702
Omaha	Automotive Solutions	4419 S. 140th	Jim Bishop 402 334-1000

**Attachment 5
Waste Tire Recyclers**

Waste Tire Recyclers			
City	Organization Name	Address	Contact
Omaha	J.J.'s Auto Repair	7009 Military Ave	Gary Taft 402 571-2631
Omaha	Metro Disposal and Recycling	6030 S. 60th Street	Scott Hughbanks 402 932-6387
Omaha	Walker Tire	7728 F Street	402 331-3636
Omaha	Walker Tire	8914 L Street	402 331-1981
Papillion	Papillion Tire, Inc.	1221 Royal Drive	Doug Speth 402 592-3434
Pilger	Pilger Transfer Station	P.O. Box 306	Judy Lewis 402 396-3563
Sidney	Sidney Landfill	P.O. Box 79	Rob Campbell 308 254-6071
Silver Creek	Village of Silver Creek	P.O. Box 6	Carol Alexander 308 773-2348
Springfield	Sarpy County Board Landfill	1210 Golden Gate Drive	Dwayne Brigman 402 253-2371
Wisner	Central States Tire Recycling	P.O. Box 630	Bill Miner 402 529-3589