

TIME CRITICAL REMOVAL ACTION WORKPLAN

FOR THE

**FORMER CARTER WHITE LEAD SITE
BETWEEN EAST LOCUST STREET AND AVENUE J
AND NORTH 22ND STREET EAST AND NORTH 21ST STREET EAST
OMAHA, NEBRASKA 68110**

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JUNE 20, 2012

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1.0 INTRODUCTION

This Time Critical Removal Action Workplan (TCRA Workplan) has been prepared on behalf of NL Industries, Inc. (NL) for the Former Carter White Lead Site located in Omaha, Douglas County, Nebraska, which is more particularly depicted on Figure 2 (the Site). This TCRA Workplan establishes requirements for implementation of the removal from and containment of lead-impacted soils at the Site. The performance standards associated with these activities will be addressed in this TCRA Workplan. All documents or deliverables required as part of this TCRA Workplan are being submitted to the U.S. EPA for review and approval.

1.1 Site Location and Description

The Site is located in the City of Omaha, Nebraska between North 21st Street East and North 22nd Street East, and East Locust Street and Avenue J, in the southwest ¼ of Section 12, Township 15 North, Range 13 East. The Site encompasses a total of approximately 4 acres and is composed of 3 separate parcels. The northern parcel is occupied by the Open Door Mission thrift shop, the southeast parcel is leased and occupied by the FleetPride truck service center and the southwest parcel is currently a vacant, gravel-covered lot. The boundaries of the Site are shown on Figure 2.

The Site is bordered to the north by East Locust Street and the Omaha Airport Authority; to the east by North 22nd Street East and Open Door Mission property; to the south by Avenue J and the Omaha Box Company, and generally to the west by North 21st Street East and Open Door Mission property. General land use within 0.25 miles of the Site is mixed commercial/industrial and limited residential. The closest residence is located within 500 feet of the Site. The site is zoned GI-General Industrial District.

The general location and layout of the Site are presented on Figures 1 and 2.

1.2 Site History

Information regarding the Site's history was obtained from documents gathered and created by U.S. EPA or its representatives, as summarized in the following subsection.

1.2.1 U.S. EPA Records

According to U.S. EPA records, the Former Carter White Lead facility at the East Locust Street location manufactured lead-based white paint pigments from 1891 to 1907, when the company ceased operations and closed the plant. The property was sold to a third party in 1926. Various owners and businesses have operated at the Site since that time.

The Open Door Mission, the current property owner for the northern portion of the Site, retained Jacobson Helgoth Consultants, Inc. (JHC) to provide environmental consulting services for one parcel of the Site. JHC conducted several soil investigations in 2004 to determine the extent of lead impact on this parcel. JHC collected 38 soil samples from a depth of 0 to 2 feet below ground surface under the asphalt parking lot. Lead was detected in all of the soil samples with concentration ranging from 65.7 to 9,796 mg/kg. Sixteen of the samples were also analyzed using the toxicity characteristic leaching procedure (TLCP) for lead. Concentrations of lead in the leachate ranged from 0.12 to 91.7 mg/l. In October 2005, U.S. EPA conducted a Preliminary Assessment at the Site focusing predominantly on the unpaved areas. Field activities included in-situ field screening of soils for metals using an x-ray fluorescence (XRF) analyzer and collection of soil

samples for laboratory analysis. The samples collected across the Site identified ubiquitous lead contamination in surficial soil.

In July 2009, U.S. EPA conducted a Removal Site Evaluation at the Site to delineate the extent of lead-contaminated soil. Field activities included in-situ XRF field screening on and off site, collection of surface and subsurface soil samples for field screening and laboratory analysis for metals and collection of soil samples for lead speciation. Surface soil concentrations of lead ranged from 18 mg/kg to 5,063 mg/kg. The highest concentrations of lead were detected between 2 to 4 feet bgs with maximum concentrations around 22,000 mg/kg. Lead concentrations decreased significantly at depths below 4 feet bgs. Soil borings indicated a transition from fill material and debris to predominantly native silty clays at depths of 4 to 5 feet bgs across the Site.

The Site is not part of the Omaha Lead Site (EPA Facility I.D. NESFN 0703481) (the “OLS”). U.S. EPA issued a General Notice letter identifying NL as a potentially responsible party (PRP) in October 2010. Since being contacted by EPA, NL has cooperated in good faith and has voluntarily engaged in negotiations to address environmental conditions at the Site. NL has met with EPA as well as the current property owners. This TCRA Workplan resulted from those discussions.

2.0 PROJECT ORGANIZATION AND MANAGEMENT

The TCRA management team will consist of the following components and personnel, as described below. ENTACT's assigned management team identified below may change during the implementation of the required removal action activities. If there is a change in personnel, the modification will be communicated to the U.S. EPA Project Manager and the team will be altered accordingly.

2.1 Project Management

2.1.1 U.S. EPA On-Scene Coordinator

The U.S. EPA's current On-Scene Coordinator (OSC) is Mr. Michael Davis. NL understands Mr. Davis will have oversight responsibility for all phases of the TCRA.

2.1.2 NL Project Manager

NL's Project Manager for the Site will be Mr. Kevin Lombardozzi. Mr. Lombardozzi will oversee the implementation of the TCRA by the Removal Action Contractor. He will also ensure that the TCRA is completed in accordance with the applicable requirements, including the TCRA Workplan as approved by U.S. EPA.

2.1.3 Project Coordinator

The Project Coordinator will be Mr. Greg Dambold. Mr. Dambold will report directly to the U.S. EPA OSC and NL and will ensure that all testing programs, TCRA plans and quality assurance procedures that are proposed for the project are in compliance with applicable federal and state regulations. The responsibilities of the Project Coordinator will also include resolving issues concerning compliance, providing the U.S. EPA with the required notifications, providing status reports of the progress of TCRA activities to the U.S. EPA and the property owners updating the project implementation schedule, resolving regulatory and technical issues with the U.S. EPA, and contract administration. To the extent possible, the Project Coordinator will be present on-site or readily available during the work to discuss issues raised by U.S. EPA and /or property owners, if the issues cannot be resolved through consultation with the Field Project Manager.

2.1.4 Removal Action Contractor

The Removal Action Contractor will be ENTACT LLC (ENTACT). The Removal Action Contractor will be responsible for the implementation of the TCRA in accordance with the U.S. EPA-approved TCRA Workplan. The following ENTACT personnel will be assigned to perform the key duties described below.

2.1.4.1 Field Project Manager

ENTACT's Field Project Manager will be determined at a later date. The Field Project Manager will be responsible for directing all Site personnel, equipment, subcontractors, and activities to ensure the successful implementation of the TCRA in accordance with the approved TCRA Workplan and federal, state and local regulations. Specific responsibilities of the Field Project Manager will include, but are not limited to, the following:

- Supervise field activities and ensuring that the construction activities are executed in accordance with the TCRA Workplan and in strict accordance with the Site-specific Health and Safety Plan;

- Ensure that adequate resources are available on-site to complete required tasks and meet the required Performance Standards, including personnel and equipment;
- Ensure ENTACT associates and qualified subcontractors are properly trained in the safe performance of the tasks which they are assigned;
- Ensure that required record-keeping and project record documents and other related documents are maintained on-site;
- Assist others in the planning, coordination of field activities and implementation of the remedial activities;
- In response to modified or unforeseen field conditions, redirecting the sequence of required Site work and specifics of work procedures and protocols to accomplish task objectives in the most efficient and safe manner possible;
- Ensure that required quality assurance/quality control procedures are properly implemented and documented;
- Ensure that the TCRA is completed with the approved schedule;
- Ensure effective communications between the Project Coordinator and U.S. EPA's OSC;
- Ensure that all documents and reports that ENTACT is required to generate meet the requirements of the approved TCRA Workplan;
- Communicate any request for modifications to the approved TCRA Workplan to the Project Coordinator and U.S. EPA;
- Promptly notifying the Project Coordinator and U.S. EPA's OSC in the event of unforeseen field conditions and/or problems are encountered; and
- Communicate with the property owners on an as-needed basis to discuss issues related to the implementation of the activities required in the TCRA Workplan.

2.1.4.2 Corporate Health and Safety Representative

The ENTACT Corporate Health and Safety Representative will be Mr. Don Self. The Corporate Health and Safety Representative will be responsible for writing and reviewing the *Site-specific Health and Safety Plan* and overseeing ENTACT's health and safety program. He will provide direction to the ENTACT Field Project Manager and/or On-site Health and Safety Officer, as necessary, on issues related to health and safety. The Corporate Health and Safety Representative will be responsible for conducting the health and safety orientation meeting prior to the start of construction activities, reviewing weekly health and safety updates and conducting health and safety inspections of the Site.

2.1.4.3 Regulatory/Technical Officer

The ENTACT Regulatory/Technical Officer will be Mrs. Jenny Self. The Regulatory/Technical Officer will provide regulatory and technical support to the Field Project Manager and On-site QA/QC Officer in the areas of air monitoring, solid and hazardous waste management, material sampling, and any other regulatory or

technical requirements for the TCRA. She will also ensure that the TCRA activities are implemented and completed in accordance with the approved TCRA Workplan and federal, state and local regulations. The Regulatory/Technical Officer and the QA/QC Officer will also be responsible for the validation of all data received from the analytical laboratory.

2.1.4.4 On-site Health and Safety Officer

ENTACT's On-site Health and Safety Officer will be determined at a later date. The On-site Health and Safety Officer will be responsible for the coordination of on-site health and safety issues with ENTACT's Corporate Health and Safety Representative, Mr. Don Self. Specific on-site health and safety duties will include, but are not limited to, the following:

- Monitor work at all times or designating a suitably qualified alternate;
- Ensure that Site workers and other authorized personnel have read and understand the *Site-specific Health and Safety Plan*;
- Ensure that Site workers and other authorized personnel possess the required documentation of their safety training and medical monitoring;
- Conduct daily safety meetings and more extensive safety meetings to be held at the start of new and/or potentially dangerous project activities;
- Ensure that required air monitoring is being conducted in accordance with the approved TCRA Workplan and the *Site-specific Health and Safety Plan*;
- Correct or discontinue any potentially unsafe work practices or Site conditions, and, if necessary, stop work if unsafe conditions or practices are encountered and not corrected or discontinued;
- Prepare safety reports and other health and safety documentation; and
- Communicate any concerns or health and safety issues with the Field Project Manager and ENTACT's Corporate Health and Safety Officer.

2.1.3.5 On-site Quality Assurance/Quality Control Officer

ENTACT's On-site Quality Assurance/Quality Control (QA/QC) Officer will be determined at a later date. The On-site QA/QC Officer will be responsible for performing required sampling and quality control testing at the Site and will operate independently of ENTACT's Field Project Manager. The QA/QC Officer will communicate any QA/QC issues related to the Site to the Field Project Manager and Regulatory/Technical Officer. The QA/QC Officer will have the authority to correct and implement additional measures to assure compliance with the approved TCRA Workplan. Specific responsibilities will include, but are not limited to, the following:

- Adhere to the approved TCRA Workplan;
- Ensure required quality assurance/quality control procedures are properly implemented and documented;
- Document any deviations to the plan with a justification for the deviations, and, if necessary, appropriate notification in accordance with the approved TCRA Workplan;

- Secure necessary sampling tools, bottles, packaging/shipping supplies, chain-of custody documents, etc. in accordance with the approved TCRA Workplan;
- Collect or direct the collection and ship samples at the frequencies and for laboratory analysis parameters specified in the TCRA Workplan, if required;
- Document the location, time and date of all samples that are collected and shipped to the laboratory;
- Interface with the Field Project Manager such that the sample collection is coordinated with the general the progression of the work;
- Notify the Field Project Manager, Project Coordinator and the U.S. EPA of any sampling activities associated with the implementation of the approved TCRA Workplan;
- Obtain and evaluate laboratory analytical results and field geotechnical results. Report the data to the Field Project Manager, Regulatory/Technical Officer, Project Coordinator, and U.S. EPA's OSC; and
- Approve or disapprove of materials supplied, and installation procedures.

2.2 Management Control Process

The ENTACT Project Coordinator has the overall responsibility for successfully completing the TCRA at the Site. This includes achieving compliance with the TCRA Workplan in a safe manner by fulfilling contractual obligations and meeting the established project schedule and budget. The Project Coordinator will accomplish these objectives by monitoring the progress of work activities, reviewing and planning each project task with experienced technical staff and the Field Project Manager, and ensuring that the appropriate and sufficient resources are available to the Field Project Manager and the On-site QA/QC Officer.

The Field Project Manager will receive daily progress reports from Site personnel apprising him of the status of planned, ongoing and completed work, including QA/QC performance, health and safety and Site-specific issues. In addition, the Field Project Manager will be apprised of any potential problems and recommendations for solutions and/or corrective actions.

3.0 REMOVAL ACTION

Even though the Site is zoned General Industrial District rather than Residential, this TCRA Work Plan proposes a removal action consistent with the protections for residential properties by conforming to the EPA's *Superfund Lead-Contaminated Residential Sites Handbook* (OSWER9285.7-50 August 2003). The Work Plan will remove exposed soils to a depth of one foot bgs in all areas that are not capped by intact asphalt or concrete or covered by a current or historic building foundation or pad, and will remove exposed soil to a depth of two feet bgs in an area not to exceed 14,000 square feet. The exact location of this two foot excavation area will be determined in consultation with the property owners and documented in an amended Figure 3 prior to the performance of the work as well as documented after completion of all TCRA Workplan activities in a surveyed as-built figure.

Unless U.S. EPA, NL and the property owners later agree to a single phase approach, the removal action will be implemented in phases in order to accommodate the businesses currently operating at the Site (see Figure 3). Phase 1 will consist of the southern two-thirds of the southwest parcel (Parcel B on Figure 2), the unpaved southern portion of the southeast parcel (Parcel C on Figure 2) and the southern portion along the west side of

the southeast parcel. Phase 2 will consist of the northern one-third of the southwest parcel (Parcel B), the northern portion along the west side of the southeast parcel (Parcel C), and a small section of the southern portion of the north parcel (Parcel A). Phase 3 will consist of the unpaved southern 1/3 of the north parcel (Parcel A). Removal action activities will be completed in each phase prior to the start of the next phase, e.g., setup, excavation, treatment, loadout and restoration activities will be completed in Phase 1 prior to initiating activities in Phase 2.

This TCRA Workplan requires removal of exposed soil from the Site, except for soils beneath intact asphalt, concrete, building pads, or foundations. This TCRA Workplan requires removal of exposed soil from around historical footings and foundations that remain at the Site, but it does not include removal of those historical footings and foundations from the Site. Impacted soils beneath the excavated areas or intact asphalt, concrete, building pads and foundations will be contained through a barrier of clean soil, maintenance of the current asphalt, concrete, pads and foundations and institutional controls.

3.1 Pre-construction Meeting

NL and ENTACT representatives will meet with U.S. EPA and the property owners and tenants for a pre-construction meeting at the Site immediately prior to the implementation of the TCRA. The purpose of the meeting will be to:

- Introduce key personnel and define the authority and responsibility of each party;
- Establish the administrative procedures to be implemented during the TCRA, including unforeseen job conditions, construction surveys and procedures for claims and disputes;
- Review work area security and safety protocols;
- Review methods for distributing and storing documents and reports;
- Review the methods for documenting and reporting inspection data;
- Discuss any appropriate modifications of the TCRA Workplan to ensure that Site-specific considerations are addressed;
- Conduct a Site walk to verify that the design criteria, plans and specifications are understood and to review material and equipment storage locations;
- Discuss coordination of the removal action work with the active operations of the current owners and tenants at the Site; and
- Discuss the procedure for addressing requests from media, local or state officials, property owners, neighbors or facility residents/patrons and referring requests to U.S. EPA.

An ENTACT representative will document the pre-construction meeting and will transmit the minutes to all parties involved.

3.2 Mobilization and Site Preparation

ENTACT will mobilize to the Site and prepare the Site for TCRA activities. Mobilization and site preparation activities will include, but are not limited to, the following:

- Preparing the necessary notifications and submittals;
- Mobilizing personnel, equipment and temporary facilities;
- Implementing the *Site-specific Health and Safety Plan* for removal work;
- Installing erosion, sedimentation and stormwater control measures;
- Constructing work zones, equipment decontamination areas, material staging areas, and Site haul roads;
- Identifying utility lines, including gas, electric, telephone fiber and wire, storm and sanitary sewers, water, and cable;
- Establishing support facilities and air monitoring systems; and
- Generating a photo and/or video log that provides a record of pre-existing Site conditions, including paved surfaces and other pre-existing structures and vegetation.

The following sub-sections further describe the mobilization and site preparation activities.

3.2.1 Notifications, Permits and Submittals

Prior to mobilization and site preparation activities, the necessary notifications will be filed with the appropriate agencies. Efforts will be coordinated with the following entities: City of Omaha Public Works Stormwater Division to inform them of the TCRA activities; utility companies to identify the locations of any existing above or underground utilities; property owners to coordinate TCRA activities with other ongoing construction activities currently being conducted at or near the Site; and other local officials if and when warranted. The substantive requirements of the General NPDES Permit Number NER110000 for Stormwater Discharges from Construction Sites to Waters of the State of Nebraska will be met. A Stormwater Pollution Prevention Plan, as described in the permit, has been prepared and is included in Section 4.0 of this TCRA Workplan. No formal permits will be obtained for the TCRA activities associated with the Site pursuant to the requirements of 40 CFR 300.400(e).

Local haul routes will be identified during mobilization and site preparation when the off-Site disposal facility and off-Site borrow source are identified. Once the routes are determined, flyers will be generated that identify the routes. These flyers will be distributed to all necessary personnel and local officials.

3.2.2 Health and Safety

A *Site-specific Health and Safety Plan* has been developed for the implementation of TCRA activities at the Site and will be provided under separate cover. All personnel involved in TCRA activities will thoroughly understand and acknowledge essential elements of the *Site-specific Health and Safety Plan* prior to the start of on-site activities. In accordance with the Plan, at the initiation of removal activities, an orientation session will be held at the Site for all ENTACT associates and subcontractors working at the Site. In addition, daily health and safety meetings will be held on specific topics, visitor protocols, and ongoing activities throughout the duration of the removal activities.

3.2.3 Support Facilities

Project mobilization and site preparation activities will include establishing administrative support facilities, supply storage areas, decontamination areas, and temporary staging areas for excavated materials. The location of the support facilities will be determined prior to mobilization to the Site.

Temporary office facilities will be utilized during the TCRA activities. Utility service will be connected to support administrative operations. The facility will be equipped with computer systems, facsimile capability, and telephone service. Necessary project plans, drawings and supporting documentation will be maintained in the temporary office facility. Portable sanitary facilities will be provided at the support facilities for field personnel.

Equipment and supply storage areas will be established adjacent to the appropriate work areas or support facilities. Personnel and equipment decontamination areas will be constructed and identified in accordance with the *Site-specific Health and Safety Plan* requirements. A parking area will be established at the support facilities for on-site personnel.

3.2.4 Work Zones

Work zones will be established and enforced during the TCRA activities. These zones will be visually marked using signs, barricade tape, fencing, and/or other physical barriers. The work zones will include the exclusion zone, contamination reduction zone and support zone. The location of the work zones and the loadout traffic pattern will be determined by the Field Project Manager following a logistical evaluation of the Site.

The Exclusion Zone will consist of the excavation, treatment and load-out portions of the Site, as applicable. Specific locations of the Exclusion Zone may be modified based on the progress of work activities to each portion of the Site.

The Contamination Reduction Zone will consist of personnel and equipment decontamination areas constructed in a central location adjacent to work areas. A boot wash and portable decontamination sink will be located adjacent to the exclusion zone for personnel and visitors to decontaminate prior to exiting the work area. A personnel break trailer will also be provided for personnel to don and doff their personal protective equipment. This break trailer will be equipped with water, clean changing rooms and personal protective equipment storage. Vehicle inspection and decontamination areas will also be constructed at the Site. These areas will be equipped with brooms, hand tools and/or high-pressure washers for the decontamination of vehicle tires and undercarriage members (see Section 3.2.5). The location of the Contamination Reduction Zone may be adjusted during certain phases of work to provide adequate protection of Site personnel and proper decontamination of equipment and vehicles. All decontamination procedures will adhere to methods outlined in the *Site-specific Health and Safety Plan*.

The Support Zone will be recognized as the support/administrative facilities, sanitary facilities and parking areas. These areas will be clearly marked with appropriate signs for identification purposes.

3.2.5 Vehicle/Equipment Decontamination Stations

Vehicle/equipment decontamination stations will be established at the Site. The decontamination stations will be constructed of gravel material underlain by a liner of sufficient thickness and will be large enough to accommodate a transport vehicle. A sump will be constructed at one end of the decontamination station to

collect rinse waters generated during decontamination procedures if wet decontamination methods are used. If generated, rinse waters will be pumped from the sump on an as needed basis and transferred to a storage tank for use in dust suppression on impacted areas of the Site. The appropriate decontamination tools will be staged at each decontamination station for the duration of the applicable work. Collected decontamination water that is not used for dust suppression will be sampled and disposed as appropriate following the results of laboratory analysis.

Wet decontamination procedures, consisting of the use of high-pressure washers, will be used for all vehicles/equipment exiting the Exclusion Zone that have come into contact with contaminated materials. Dry decontamination procedures, consisting of the use of brooms and other hand tools, will be used for all vehicles/equipment leaving the Site that do not enter an Exclusion Zone and/or remain on established haul roads. To further reduce the potential for truck contamination, ENTACT does not anticipate working during adverse weather conditions, such as storm events, which may create muddy soil conditions.

3.2.6 Site Security

Site security measures will be established during mobilization and site preparation activities to prevent unauthorized access to the work areas of the Site and to prevent the removal of materials, equipment or other items from the Site that are not authorized. Temporary fencing may be installed around active work areas and equipment/material storage areas. Entrance gates will be secured and locked during non-working hours. Site security may also be provided during non-working hours by a contracted security service. Additional security measures may be provided depending on work activities.

Access to the work areas of the Site will be controlled by ENTACT personnel during normal working hours. All personnel and visitors requiring access will be required to visit the administrative field office prior to entry. Visitors will be required to sign the Visitor Logbook prior to entry to the Site.

3.2.7 Utility Identification

The identification of Site utilities will be conducted by the appropriate utility location services to demarcate the following utilities:

- Sanitary sewer lines;
- Condensate lines;
- Stormwater drains and systems;
- Electric lines;
- Water lines;
- Natural gas lines;
- Fiber optic lines; and
- Overhead utilities.

Each utility will be identified with individual flags, signs or other devices. All identification devices will be visible and noted on a Site utility drawing for reference purposes. ENTACT will coordinate abandonment procedures for utility lines, if required, with the appropriate utility companies and the City of Omaha.

3.2.8 Erosion, Sedimentation and Stormwater Control Measures

Erosion, sedimentation and stormwater control measures will be installed at the Site prior to the start of each phase of TCRA activities. Control measures will consist of silt fencing, stabilized construction entrances, inlet protection measures, and/or earthen berms, if needed. Installation of these mechanisms will be completed in order to reduce sediment-laden stormwater run-off from leaving the Site and prevent stormwater run-on from off-site areas from entering the Site.

Silt fencing will be installed along the downgradient edges of the excavation areas and where necessary in other areas of the Site. The silt fencing will be installed to a depth of 6 inches below ground surface in accordance with good engineering practices. Stormwater inlets, manways or other exposed subsurface inlets will be protected from stormwater flow using silt fencing or earthen berms, as appropriate.

Stabilized construction entrance/exits will be constructed at the entrance/exit associated with each phase of work at the Site to prevent the transfer of soils during traffic flow to and from the Site. The stabilized construction entrance/exit will be constructed of a minimum of 6 inches of compacted road base material, such as gravel, in accordance with accepted practice. Silt fencing and/or earthen berms may be installed near the vehicle entrance/exit area along with compacted road base material.

Earthen berms may be constructed along the up-gradient portion of the Site, as necessary, to prevent stormwater run-on from entering the Site. If installed, the earthen berms will be constructed of clean import fill material and will be 12 to 18 inches in height. Polyethylene sheeting may be used to enclose the earthen berms and prevent the materials from washing away during rain or storm events.

A more detailed discussion of the erosion, sedimentation and stormwater control measures is provided in the *Stormwater Pollution Prevention Plan* included as Section 4.0 to this TCRA Workplan. The substantive requirements of the general authorization for stormwater discharges from construction sites are also included in the *Stormwater Pollution Prevention Plan*.

3.2.9 Surveying and Coordinate Grid System

Prior to the start of TCRA activities, the limits of the Site as shown on Figure 2 will be verified in the field by a licensed professional land surveyor based on the extent of impacted soil identified during previous Site investigations to the nearest intact capped area such as a street, curb, parking lot, asphalt, building foundation or similar condition.

A coordinate grid system will be established at the Site in order to provide a system for tracking excavation activities in the field. The Site will be staked with baselines in order to develop a 50-foot by 50-foot coordinate grid system. The elevation of the center of each grid requiring removal will be determined prior to the start of any soil excavation. A map which indicates the grid line locations and the elevation data will be produced and will serve as the basis for the depth of soil excavation and backfill work.

3.2.10 Air Monitoring

ENTACT will implement three types of air monitoring during the TCRA activities. These include:

- Time-integrated, perimeter air monitoring using high-volume PM₁₀ and TSP air samplers to monitor particulate matter less than 10 microns in size and total lead concentrations in the air at each of the Site perimeters;
- Real-time, direct reading air monitoring using direct-reading portable data RAMs (random air monitors) to monitor particulate concentrations in the air within the work zone and at the Site perimeters, as necessary; and
- Low-flow personal air monitoring using low-volume, personal air monitoring units and 37 mm cassettes to monitor lead concentrations in the air within the work zone.

3.2.10.1 Time-integrated Air Monitoring

Time-integrated air monitoring will be conducted prior to the start of TCRA activities to establish baseline conditions and on a daily basis during excavation, treatment and backfilling activities at the Site. Samples will be collected during the baseline sampling period and each working day during TCRA activities except during brief down time periods due to change out of filters or repositioning of the samplers. Samples will not be collected on rain days and weekends or holidays when no work is being conducted at the Site.

Total suspended particulate (TSP) air monitors which conform to the requirements prescribed in 40 CFR, PART 50, APPENDIX B - Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere (High-Volume Method) and 40 CFR, PART 50, APPENDIX G - Reference Method for the Determination of Lead in Suspended Particulate Matter Collected From Ambient Air and particulate matter (PM₁₀) air monitors which conform to the requirements prescribed in 40 CFR PART 50, APPENDIX J - Reference Method for the Determination of Particulate Matter as PM₁₀ in the Atmosphere will be used at the Site. These monitors will be located at or near each directional perimeter of the Site in order to evaluate the effect, if any, of the TCRA activities on the community surrounding the Site, as well as provide data for the health and safety monitoring for on-site workers. Every attempt will be made to maintain the following siting recommendations regarding the location of the high-volume samplers per 40 CFR Part 58 Appendix E:

- a. The sampler should be at least 60 feet from trees, buildings, or other large obstacles. A general placement rule is that the sampler should be located at least twice as far away from the obstacle as the height of the obstacle.
- b. The sampler inlet should be 6 to 21 feet above the ground surface.
- c. The sampler must have unrestricted air flow.
- d. The sampler inlet should be at least 6 feet from any other high-volume sampler inlet.
- e. The sampler cannot be placed directly upon the ground.
- f. The sampler cannot be placed near exhaust flues or vents.

The final TSP and PM₁₀ sampler locations will be determined during mobilization based upon Site logistics (electrical source, accessibility, etc.) and prevalent wind directions. One TSP sampling unit and one PM₁₀ sampling unit will be placed at each location. Weather data required for the time-integrated air monitoring, i.e. wind speed, wind direction, temperature, barometric pressure, relative humidity, and rainfall, will be obtained from a local airport.

Calibration of the high-volume samplers will be conducted prior to the start of TCRA activities, after every motor change-out or once a quarter, if the sampler unit is moved to another location on-site or if flow checks indicate that the sampler is not operating within the appropriate flow rate range. Manometer readings will be checked and documented each day to verify that the samplers are operating within the design parameters, i.e. flow rates between 1.1 and 1.7 m³/minute for TSP units and 1.02 to 1.24 m³/minute for PM₁₀ units. Calibration will be performed in accordance with the referenced method and the manufacturer's recommendations using a calibrated orifice. Daily action levels for the time-integrated air monitoring activities will be observed. These action levels are 0.15 ug/m³ lead on a rolling 3-month average and 150 ug/m³ PM₁₀ over a 24-hour period.

3.2.10.2 Real-Time Air Monitoring

Real-time, direct reading air monitoring will be conducted during TCRA activities to assess the effectiveness of engineering controls in reducing visible dust emissions. Real-time air monitoring readings will be collected using portable direct reading air monitors (PDR) from upwind and downwind locations on an hourly basis. The daily average action level for real-time air monitoring of particulate concentrations in the air within the work zone and at the Site perimeter, i.e. 150 ug/m³, will be observed. Each instrument will be calibrated on a daily basis prior to use. Additionally, batteries will be completely charged and units will be inspected for malfunction or misuse.

3.2.10.3 Personal Air Monitoring

Low-flow air monitoring will be conducted for the health and safety of on-site workers in accordance with the requirements of the *Site-specific Health and Safety Plan*. Action levels for personal air monitoring of constituent concentrations in the work zone will be observed as described in the *Site-specific Health and Safety Plan*.

3.2.10.4 Corrective Action

Corrective actions will be evaluated and implemented when time-integrated or real-time air monitoring trigger levels are exceeded, or when excessive visible dust emissions are observed by the Field Project Manager. In the case of exceedances indicated by time-integrated air monitoring, corrective actions will be evaluated upon ENTACT's receipt of the air monitoring data, and any measures deemed necessary will be taken for future remedial activities similar to those that may have been responsible for the exceedance. The source will be evaluated to determine the adequacy and effectiveness of work practices and dust control measures. If the evaluation determines that additional measures are required to reduce fugitive dust emissions, then corrective action, i.e. dust control measures, will be implemented as described in Section 3.2.11. If necessary, ENTACT will modify the identified dust control measures to incorporate more aggressive dust control activities. The occurrence of the exceedance and the corrective measure implemented to reduce or eliminate the source of the exceedance will be documented by the ENTACT Field Project Manager or QA/QC Officer.

3.2.11 Dust Suppression

During all phases of the TCRA, airborne dust emissions will be controlled. Dust suppression systems will be installed in areas disturbed during the TCRA to minimize or reduce the generation of visible dust emissions. Engineering controls for dust suppression will consist of the following methods: the use of water misting and spraying devices and water trucks; use of a decontamination station for equipment and vehicles; use of wind

dispersion controls, including covering soils piles being staged for off-site disposal and not being actively managed; and reducing or stopping work during high wind conditions.

Dust suppression via water misting and spraying will use a quantity of water that will be sufficient enough to control dust but not enough to leave residual water accumulations on the ground surface. Water misting and spraying devices will be installed in various portions of the exclusion zone and will assist in reducing visible dust emissions in work areas. A 2,000 to 3,000-gallon capacity water truck will be used to wet haul routes within the exclusion zone to prevent the generation of dust during material transfer operations.

To ensure that dust suppression systems are effective, real-time air monitoring will be utilized during work activities. Work procedures and/or dust controls will be adjusted as needed to ensure that visible dust is reduced or eliminated at the Site boundary and that the real-time particulate daily average action level of 150 ug/m³ is not exceeded. Corrective actions will be implemented when air monitoring action levels are exceeded for the monitored constituents.

3.2.12 Clearing and Grubbing

Minimal clearing of trees, brush and undergrowth will be performed at the Site prior to the initiation of each phase of the TCRA activities. Care will be taken to protect those trees, shrubbery or other landscaping materials present within or near the excavation areas that will not be removed, if and as requested by the property owner. Trees that will be removed will be cut at the base and mulched in place using conventional equipment, where necessary. Trees, shrubbery or other landscaping materials that are removed or damaged during the removal action will be restored to similar or like conditions.

Within a reasonable time prior to commencement of the work, ENTACT will notify the property owners to remove all personal property and debris from the Site and will coordinate with the U.S. EPA and the property owners and tenants to ensure that equipment, materials or articles currently stored or placed in the work areas will be moved to allow the removal action work to progress. Any such materials or debris left in the work area of the site will be collected and consolidated on the non-impacted portion of the property.

3.2.13 Project Meetings

Weekly meetings will be conducted with representatives of ENTACT, NL, U.S. EPA and property owners who attend at their discretion to discuss the TCRA activities performed during the previous week and any problems or resolutions associated with previous or future work activities. The weekly meetings will be conducted at the administrative field office or via a conference call. ENTACT will document the items discussed in the meetings and will forward a copy of the meeting minutes to each party in attendance after the weekly meeting.

3.3 Soil Excavation

The excavation of lead-impacted surface soils will take place within a designated area of contamination (AOC) (see Appendix D of this TCRA Workplan). Unless NL, U.S. EPA and the property owners later agree to a single phase, the work will be phased to accommodate the operations of the businesses that currently occupy the Site. Phase 1 will consist of the southern two-thirds of the southwest parcel, the unpaved southern portion of the southeast parcel and the southern portion along the west side of the southeast parcel. Phase 2 will consist of the northern one-third of the southwest parcel, the northern portion along the west side of the southeast parcel, and a small section of the southern portion of the north parcel. Phase 3 will consist of the

unpaved southern 1/3 of the north parcel. Exposed surface soils will be removed to a depth of one foot bgs in all areas that are not capped by intact asphalt or concrete or covered by a current or historic building foundation or pad, and will be removed to a depth of two feet bgs in an area not to exceed 14,000 square feet. The exact location of this two foot excavation area will be determined in consultation with the property owners and documented in an amended Figure 3 prior to the performance of the work as well as documented after completion of all TCRA Workplan activities in a surveyed as-built figure.

The current conditions of structures or roads in the vicinity of the identified excavation areas will be documented prior to excavation using photographs and/or video. Any property damaged during the removal action will be documented and NL, U.S. EPA and the property owner will be notified. The damaged property attributed to ENTACT's activities will be assessed and an appropriate corrective action will be implemented to repair the damage.

Excavation areas will be visibly marked, as described in Section 3.2.4, and secured at the end of each work day, as described in Section 3.2.6.

3.3.1 Identification of Removal Extent

The extent of the removal of impacted soils at the Site will be limited to the boundaries of the Site and will be consistent with the removal areas shown in the phased removal plan, Figure 3, but will not include soils capped or contained under existing building pads or foundations, concrete or asphalt.

3.3.2 Excavation to Maximum Depth

Exposed surface soils in unpaved areas of the Site will be excavated to a maximum depth of 1 foot bgs and will be removed to a maximum depth of two feet bgs in an area not to exceed 14,000 square feet. The configuration of this two foot area will be determined in consultation with the property owners and documented in an amended Figure 3 prior to the performance of the work as well as documented after completion of all TCRA Workplan activities in a surveyed as-built figure. Excavation activities will be conducted using hydraulic excavators and/or other conventional equipment. Dental excavation using shovels will be conducted around sensitive areas, such as pipelines or utilities, located in the work area. Impacted soils around concrete footings and/or foundations present in the vacant lot on the southwestern portion of the Site will be removed to the appropriate depth to the extent possible. The footings or foundations will then be decontaminated in place to remove any surface residuals prior to backfilling. Decontamination rinse waters will be allowed to infiltrate into the surrounding soils or will be collected for use in dust suppression on impacted portions of the Site. Decontamination sediment residuals will be managed with the excavated soils.

Impacted soils will be gathered into stockpiles within the excavation area located within the AOC for treatment, if necessary and as described in the following section, and loadout for off-site disposal. Open excavations will be backfilled as soon as possible based on the field implementation schedule.

Once the impacted soils are removed from the excavation, a post-excavation survey will be completed for each excavated grid to verify the extent and depth of excavation and the presence or absence of fill at the bottom of the excavation. The survey data will include the excavation boundary, the grid location, coordinates of the elevation point, the elevation data, the absence or presence of fill at the base of the excavation, and the date of survey. The boundary of excavation for each phase will be depicted on an as-built drawing.

3.4 Treatment

Impacted soils will be gathered into approximate 250 cubic yard stockpiles in each excavation area located within the designated AOC. ENTACT will sample each stockpile to determine if the materials exhibit a hazardous toxicity characteristic for lead. The sample will consist of a 4-part composite with one part collected from each side and end of the stockpile. Each composite characterization sample will be submitted for analysis of lead using the toxicity characteristic leaching procedure (TCLP) and any underlying hazardous constituents reasonably expected to be present in the waste and to exceed the alternative Land Disposal Restriction (LDR) treatment standards for soils when generated.

Prior to beginning full scale treatment activities in the field, ENTACT will conduct a treatability study on the impacted material to determine the appropriate stabilization reagent and dosage rate required to render the material non-hazardous and meet required LDR treatment standards. The list of potential underlying hazardous constituents will be based on the knowledge of the former operations conducted at the site and the levels of other metals reported for the Site in the Removal Assessment Report, Rev. 01, of March, 2010, by the U.S. EPA's contractor. At this time, ENTACT anticipates that only "lead" will be considered as an underlying hazardous waste constituent in the waste to be generated at the Site. Representative samples will be collected from the materials known to exhibit a toxicity characteristic for the treatability study. A bench-scale treatability study will be performed using these samples to demonstrate the effectiveness of various stabilization reagents and dosage rates. The results of the treatability study will be used to determine the most feasible and effective reagent with which to treat the material.

Based on the results of the treatability study, the appropriate ratio of stabilization reagent will be combined with each impacted material stockpile located within the AOC and mechanically mixed using a hydraulic excavator. Pending the completion of stabilization activities for each stockpile, ENTACT will perform post-treatment verification sampling to determine if the treated material exhibits the toxicity characteristic for lead. ENTACT will collect one four point composite sample from each stockpile. ENTACT may also collect one verification grab sample from each stabilized stockpile, if such sampling is required by the disposal facility. ENTACT's analytical confirmation sample will be used to confirm that the material was rendered non-hazardous and meets the applicable Land Disposal Restrictions listed in 40 CFR §268.49 and landfill requirements. (The frequency of the verification grab samples may be revised based on the requirements of the landfill which accepts the waste). The samples will be submitted to an analytical laboratory for TCLP analysis of lead and any underlying hazardous constituents expected to be present in the waste that are likely to exceed the alternative LDR treatment standards for soils. Upon the receipt of ENTACT's analytical data that demonstrate acceptable passing analytical results, the material will be prepared for transport and off-site disposal at an approved Subtitle D disposal facility. Stabilized material that does not meet the appropriate disposal criteria will be subject to re-treatment and re-sampling to verify that the stabilization criteria have been achieved.

U.S. EPA may collect split or independent samples before or after treatment. Results from the U.S. EPA's sampling activities can be compared with ENTACT's results in an effort to evaluate the characterization and post-treatment sampling strategies and/or the effectiveness of treatment. After the evaluation, changes in sampling strategies, in treatment methods and /or in frequency in collecting samples of the treated material may be recommended. Materials still located on site during the evaluation will either be re-sampled or re-treated, based on the evaluation of ENTACT's and the U.S. EPA's sampling results. If the U.S. EPA provides sampling results after the referenced treated and/or untreated fill materials have been sampled by ENTACT,

treated, if needed, received passing sampling results and have left the site, then compliance and disposal will be based on ENTACT's sampling results only. Any discrepancy in the results in this case will be used to evaluate any needs to change sampling strategy and or treatment processes, moving forward.

No materials staged for off-Site disposal will be kept on-Site for longer than 90 days.

3.5 Off-site Transportation and Disposal

Prior to the initiation of fieldwork at the site, ENTACT will provide a written request to the U.S. EPA OSC for approval of the selected disposal facility in accordance with the requirements of the U.S. EPA Off-site Policy detailed in 40 CFR §300.440.

Treated materials that meet the applicable disposal criteria will be loaded into tandem trucks for transport to the Subtitle D disposal facility for disposal. Conventional equipment, such as front-end loaders and hydraulic excavators, will be used to load waste materials into the transport vehicles. Transport vehicles will not be loaded in excess of the approved axle rating and care will be taken to prevent the spread of dust and/or contamination of vehicles during loadout.

Transport vehicles will be inspected by ENTACT personnel upon the completion of loadout activities. Tailgate locks and cover tarps will be inspected to ensure that they are secure and will prevent the release of waste materials during transport. Truck tires and undercarriage members will be inspected for visible accumulations of waste materials.

Transport vehicles that were exposed to visible accumulations of waste materials during loadout will undergo decontamination procedures. Dry decontamination procedures, consisting of the use of brooms and other hand tools, will be used for all vehicles/equipment leaving the Site that do not enter an Exclusion Zone and/or remain on established haul roads. Wet decontamination procedures, consisting of the use of high-pressure washers, will be used for all vehicles/equipment exiting the Exclusion Zone that have come into contact with contaminated materials. Any rinsate generated through the implementation of a wet decontamination process will be collected and used for dust suppression in impacted areas of the Site. Any rinsate that cannot be used for dust suppression will be disposed as appropriate pending the results of laboratory analysis.

The appropriate documentation, i.e. waste manifests and LDR notification forms, will accompany each load of waste material to the Subtitle D disposal facility. The waste manifest will provide space for identifying the nature of the material being transported, the sample identification number which represents the material that has been loaded, the date and time that the material leaves the Site, the truck identification number, and the weight/volume or estimated weight/volume transported will be provided with each loaded truck. The manifest form will be signed by an ENTACT representative, on behalf of NL, before the material leaves the Site; by the truck driver before the truck leaves the Site; and by a representative of the facility when the load is received at the disposal facility. Upon receipt of the material, the disposal facility will be required to send one copy of the manifest, completed with all appropriate signatures, to ENTACT/NL.

Transport vehicles will be required to adhere to the pre-determined haul routes established during mobilization and site preparation.

3.6 Site Restoration

At the completion of excavation in each area, a demarcation layer/fabric, e.g., geotextile fabric, will be placed at the base of the excavation to denote the presence of potential contamination at depths greater than that excavated. A brightly colored material that is easily identifiable will be used.

The excavation will then be backfilled, if needed, under dry conditions with non-contaminated common fill material imported from an off-site borrow source. The common fill material will consist of satisfactory soils meeting ASTM D2487 soil classification groups GW, GP, GM, GC, SW, SP, SM, and/or SC and will contain limited organic matter, insignificant amounts of debris, and no sticks, rocks larger than 2 inches in diameter, toxic substances, or other deleterious materials. Any common fill material brought on-site from an off-site source location will be sampled and analyzed for total RCRA 8 metals, total petroleum hydrocarbons, semi-volatile organic compounds, and volatile organic compounds to verify that the off-site fill material is acceptable for use on-site. Acceptability of the common fill will be consistent with U.S. EPA's backfill quality criteria applied at residential clean-up sites within the OLS that contain less than 150 mg/kg average lead, 25 mg/kg average cadmium and 22 mg/kg average arsenic, and contain no other contaminants at concentrations that pose a risk to human health and the environment. Samples of the common fill material will be obtained from every borrow source at a frequency of one sample per borrow source. A change in the borrow source location will require that the parameters listed above are repeated for the new borrow source. The sampling location, methodology and frequency of testing are further described in the Sampling and Analysis Plan included as Section 5.0 to this TCRA Workplan. Prior to transporting and placement of any fill from an off-site borrow source, ENTACT will provide the U.S. EPA the location of the borrow source and the analytical results related to the backfill along with a request for approval or disapproval, within 3 days of receiving analytical results from ENTACT, of the backfill source for use as backfill on the Site. Loess Hills Conservation Area will not be used as a borrow source.

The common fill material will be placed in the excavations in horizontal lifts under dry conditions. Each lift will be graded to properly control stormwater run-off, including positive drainage away from buildings, and prevent ponding. The lifts will then be compacted by three passes of heavy grading equipment prior to the placement of the next lift in order to minimize future settlement. Those areas that were not previously vegetated, i.e. paved and non-paved parking areas, will be covered with non-contaminated gravel, asphalt or concrete similar to pre-existing conditions. Those areas that were previously vegetated, if any, will be covered with non-contaminated topsoil that is of sufficient quality to produce heavy growths of grass. Topsoil will be sampled and analyzed as previously described for common fill material. Vegetation will be restored to similar or like conditions based on pre-existing conditions and may include seeding, sod, trees, and/or plants.

Trucks used to haul contaminated soils for off-site disposal and common fill material or topsoil to the Site will be inspected to ensure that the truck bed is free of contaminated material prior to the loading of common fill material or topsoil. If needed, dry decontamination measures will be employed to minimize the potential for cross-contamination.

Stormwater controls will remain in place to minimize sediment-laden run-off from the Site until permanent stabilization measures have been installed.

3.7 Demobilization

3.7.1 Pre-final Inspection

Upon the completion of TCRA activities, ENTACT will schedule a pre-final inspection of the Site. The pre-final inspection will be attended by the U.S. EPA OSC, NL, ENTACT, and property owner representatives. The purpose of the pre-final inspection will be to determine whether all aspects of the TCRA have been completed. A punchlist will be developed during the pre-final inspection to document the items to be reviewed or addressed prior to the final inspection. ENTACT will develop procedures to resolve deficient items listed on the punchlist upon completion of the pre-final inspection and will implement the procedures prior to the final inspection.

3.7.2 Final Inspection

A final inspection of the Site will be conducted upon the completion of punchlist item procedures. The final inspection will be attended by the U.S. EPA OSC, NL, ENTACT, and property owner representatives. The results of the final inspection will be documented in the TCRA Report.

3.7.3 Topographic Survey and Personnel/Equipment Removal

Upon the completion of the TCRA, a final topographic survey will be performed to produce as-built drawings of the Site. The topographic survey will be conducted on 1-foot intervals and will include the surface area of all portions of the Site affected by grading and removal activities.

Pending the completion of the topographic survey field activities, equipment and personnel will then be demobilized from the Site. All temporary construction facilities will be removed and all utilities will be disconnected. All trash and debris associated with the removal activities will also be removed.

4.0 STORMWATER POLLUTION PREVENTION PLAN

4.1 Nature of Construction Activity

The construction activities described in this SWPPP will be conducted within an approximate 3-acre portion of the Site. These activities are described in detail in Section 3.0 of this TCRA Workplan. A copy of the general stormwater permit for construction activities is included in Appendix A of this TCRA Workplan.

4.1.1 Sequence of Major Activities

The TCRA activities associated with the Site will address the lead-in-soil contamination present in the vegetated areas, parking areas and material storage areas of the Site. The sequence of major activities is expected to be as follows:

- Perform mobilization and site preparation activities, including mobilizing personnel, equipment and temporary facilities; identifying utility line locations; installing erosion, sedimentation and stormwater control measures; surveying excavation areas; and performing background air monitoring.
- Conduct removal activities beginning on the southern portion of the Site, including excavation of lead-impacted soils in the parking areas and vegetated areas and restoration of the excavated areas;
- Conduct removal activities on the northern portion of the Site, i.e., that occupied by the Open Door Mission, including excavation of lead-impacted soils in the parking areas and vegetated areas and restoration of the excavated areas;
- Demobilize from the Site.

The TCRA activities described above are expected to begin in the summer of 2012 and be completed in the fall of 2012. The exact sequence of events, i.e., the order in which the areas are addressed, may be dependent on several factors including subcontractor scheduling and weather. The proposed schedule of activities is presented as Figure 4.

4.1.2 Site Area

The elevation of the Site is approximately 980 feet above mean sea level. The topography of the Site is generally flat. There are several city drainage improvements along East Locust Street and North 22nd Street in the form of storm drain inlets.

4.1.3 Soil Types

According to the USDA NRCS Soil Survey for Douglas County, Nebraska, the following soil types are present at or near the Site: Urban land-Udorthents complex, 0 to 10% slopes, occasionally flooded. The Urban land-Udorthents complex consists of silty clay loam to silty loam generally found on floodplains. This soil type is currently covered at the Site by gravel, concrete, asphalt, and building structures.

4.1.4 Name of Receiving Water

The potential receiving waters located within 0.5 miles of the Site are Carter Lake located to the north of the Site and the Missouri River located to the south of the Site. However, surface water at the facility generally drains to the city storm drain inlets located along East Locust Street and North 22nd Street.

4.1.5 Endangered and Threatened Species

According to the *Range Maps for Nebraska's Threatened and Endangered Species* published by the Nebraska Game and Parks Commission, the following threatened and endangered species are present in Douglas County: American ginseng, Interior least tern, Lake sturgeon, Pallid sturgeon, Piping plover, River otter, Small white lady's slipper, Sturgeon chub, and the Western prairie fringed orchid. The ranges of the Piping plover, Interior least tern and River otter are not in the vicinity of the Site. The Lake sturgeon, Pallid sturgeon and Sturgeon chub are fish species and no waterbodies are present at the Site that would support such life. The American ginseng, Small white lady's slipper and Western prairie fringed orchid are plant species. Since the Site is located in an urban setting and is developed, disturbed or used for vehicle parking or the storage of materials related to facility operations, it is highly unlikely that these plant species are present at the Site. To assist in identifying potential locations of threatened and endangered species at the Site, the *Threatened and Endangered Species Guidance Checklist for NPDES Construction Storm Water General Permit # NER110000* developed by the NDEQ was completed. The results of the checklist indicate that potential habitat for these species is not present at the Site. A copy of the completed checklist is included in Appendix B.

4.2 Erosion and Sediment Controls

4.2.1 Practices and Measures

Best management practices will be implemented during the TCRA activities to prevent and/or minimize accelerated erosion and sedimentation and to control, minimize and/or prevent the release of impacted soils entrained in stormwater discharges. All erosion and sediment controls will be constructed according to the *Omaha Regional Stormwater Design Manual* published in April 2006 and the *Supplemental BMP Guide* published in June 2009. The following subsections describe the best management practices that will be implemented during the TCRA activities.

4.2.1.1 Good Housekeeping Practices

Good housekeeping practices will be implemented to minimize accidents and ensure a high quality of work. The following good housekeeping practices will be implemented at the Site:

- Erosion and sediment control measures will be adequately positioned, properly constructed and maintained throughout the duration of the project;
- Clearing operations will be confined to the limits of excavation or construction activity. Existing trees, other vegetation and paved surfaces will be protected to the extent possible;
- All materials stored on-site will be stored in a neat, orderly manner in their appropriate containers or stored pursuant to the requirements;
- Erosion and sediment control measures will be effective in retaining sediments on-site;

- Controls will be installed such that sediment transported from the Site onto city roads will be minimized.
- Stabilization practices will be effective in permanently stabilizing disturbed areas;
- Corrective measures will be implemented after a deficiency is noted;
- Good housekeeping practices will be incorporated into discussions during the daily safety meetings;
- Trash and other waste debris will be picked up on a daily basis and placed in the appropriate containers for off-site disposal; and
- Portable toilets provided for Site workers will be serviced by the subcontractor on a periodic basis. Sanitary sewage from the portable toilets will be properly disposed by the subcontractor.

4.2.1.2 Structural Practices

Structural practices, consisting of erosion and sediment control measures, are designed to retain sediment on-site to the extent practicable. Structural practices will be implemented in and around the areas to be disturbed to divert upgradient stormwater flows around disturbed areas, maintain all Site drainage within the excavation area and remove sediment entrained in the stormwater prior to discharge. The following structural practices may be used:

- Inlet Protection - Inlet protection barriers will be installed at the stormwater inlets located near the work areas at North 22nd Street and East Locust Street to minimize sediment from entering the stormwater system drains.
- Stabilized Construction Entrances - Stabilized construction entrances will be installed at entrances where concrete or asphalt are not present to facilitate the removal of sediment/soil from construction equipment and transport vehicles prior to exiting the work area.
- Silt Fencing - Silt fencing will be installed on the downgradient sides of the excavations to reduce stormwater velocities to the threshold of erosive velocities. Silt fencing will be installed per manufacturer's specifications to ensure proper operation.

These erosion and sediment control measures will be installed in accordance with manufacturer's specifications, where implemented. The *Omaha Regional Stormwater Design Manual* published in April 2006 and the *Supplemental BMP Guide* published in June 2009 will be used as a guide for the proper installation of the control measures. The construction details for the above-mentioned erosion and sediment control measures described in the *Omaha Regional Stormwater Design Manual* are incorporated by reference.

The location of the erosion and sediment control measures will be as indicated on Figure 5 (This figure will be developed at a later date). Once the initial controls are in place, additional controls may be installed based on visual observations of the surface water migration pathways at each area. In general, silt fencing will be installed on the downgradient edges of each area, as needed. Inlet protection barriers will be placed at all city stormwater inlets near the affected areas. Stabilized construction entrances will be constructed at the entrance/exit of the affected areas where asphalt or concrete is not currently present.

4.2.1.3 Timing of Structural Measures

The erosion and sedimentation control measures will be coordinated with the initiation of the construction phase in the areas where TCRA activities are scheduled and where material will be temporarily staged, if necessary. The erosion and sedimentation control measures may be adjusted as Site conditions permit during the TCRA. When the area is stabilized, if applicable, the erosion and sediment control measures will be removed. All erosion and sediment control devices located at city stormwater inlets will remain in place and will be maintained until final stabilization is established. ENTACT is responsible for implementation of these controls as long as ENTACT maintains day-to-day operational control of the activities necessary to ensure compliance with this Plan.

4.2.1.4 Sediment Management

Accumulations of sediment behind the silt fencing will be removed as necessary. If sediment escapes the affected areas, the sediment accumulations will be removed as necessary to minimize further negative effects. The collected sediments will be consolidated with the excavated soils for off-site disposal or returned to on-site source areas, if clean.

4.2.2 Stabilization Practices

Stabilization measures are designed to reduce the erosion potential of the soils by shielding the soil surface from direct erosive impacts, by slowing the rate of water run-off and by physically holding the soil in place using vegetation or gravel/asphalt/concrete covers. Stabilization practices will be implemented in disturbed areas as soon as practicable after the completion of final grading activities. Care will also be taken during the TCRA activities to minimize the areal extent of the disturbed areas and to protect existing vegetation to the extent possible. The following stabilization practices will be implemented:

- **Dust Control** - Dust control will be conducted in disturbed areas to prevent or reduce the movement of wind-borne dust particles. Dust control will be accomplished using a water truck with a 180-degree spray-bar or high-pressure washers.
- **Preservation of Existing Vegetation** - Existing vegetation that will not be disturbed by TCRA activities will be protected to the extent possible. The preservation of existing vegetation will help to control erosion on the Site.
- **Vegetation or Gravel/Asphalt/Concrete Covers** - Re-vegetation or cover of the disturbed areas will provide long-term erosion control and help prevent sediment from leaving the Site.

The location of the stabilization measures will be based on visual observation and the extent of disturbance within the affected areas. The following permanent stabilization practices for this project will be implemented. The schedule for when these practices will be implemented follows the description of the permanent stabilization practice.

Permanent Stabilization Practice	Location	Schedule
Grass seed	Previously vegetated areas of the Site	Upon the completion of removal activities
Concrete, asphalt or gravel	Parking areas and utility corridor	Upon the completion of

Permanent Stabilization Practice	Location	Schedule
	right-of-ways not previously vegetated	removal activities

4.2.2.1 Timing of Stabilization Measures

The stabilization practices will be coordinated with the initiation and completion of the TCRA activities at the affected areas. Temporary or permanent stabilization measures, if applicable, will be initiated as soon as practicable where construction activities have ceased, but in no case more than 14 days after the construction activity has temporary or permanently ceased, except for the following reasons:

- Where stabilization is precluded by snow cover, measures will be initiated as soon as practicable.
- Where construction activity is temporarily ceased and earth disturbing activities will be resumed within 14 days.

Final stabilization will be considered achieved when a uniform perennial vegetative cover with a minimum density of 70% of the native background vegetative cover has been established on all non-imperious surfaces and areas not covered by permanent structures unless equivalent stabilization measures have been employed.

4.2.3 Other Practices

4.2.3.1 Off-site Vehicle Tracking

Trucks used to transport excavated soils will be required to stay on established haul roads located outside of the exclusion zone. As described in Section 3.5, transport vehicles will be inspected by ENTACT personnel upon the completion of loadout activities. Tailgate locks and cover tarps will be inspected to ensure that they are secure and will prevent the release of waste materials during transport. Truck tires and undercarriage members will be inspected for visible accumulations of waste materials. Transport vehicles that were exposed to visible accumulations of waste materials during loadout will undergo decontamination procedures. Dry decontamination procedures, consisting of the use of brooms and other hand tools, will be used for all vehicles/equipment leaving the Site that do not enter an Exclusion Zone and/or remain on established haul roads. Wet decontamination procedures, consisting of the use of high-pressure washers, will be used for all vehicles/equipment exiting the Exclusion Zone that have come into contact with contaminated materials. An established wet decontamination station for vehicles exiting the Exclusion zone will be constructed, where necessary to collect lead impacted residues and waters from the wet decontamination activities. Any rinsate generated through the implementation of a wet decontamination process will be collected and used for dust suppression in impacted areas of the Site. Any rinsate that cannot be used for dust suppression will be disposed as appropriate pending the results of laboratory analysis.

An inspection of the vehicle will be conducted to ensure that no contaminated material or soils will be tracked off-site. If necessary, wet decontamination procedures will be implemented to further reduce or eliminate off-site tracking of mud or dirt from the Site if dry decontamination is determined to be ineffective. In addition, all vehicles hauling materials on city streets will be tarped and covered to prevent wind dispersion of materials during transport.

Stabilized construction entrances/exits will be constructed to help reduce vehicle tracking of soils. The entrance will be swept as needed to remove any excess mud, dirt or rock tracked from the Site. Any incidental soil tracked from the load-out area will be immediately cleaned up. Street sweepers or similar equipment may be used at the site to address track-out contamination, if needed.

4.2.3.2 Material Staging and Waste Disposal

All non-hazardous construction debris and general office trash will be disposed in a dumpster placed on-site. Trash receptacles will also be placed in the storage trailers for the collection of non-hazardous trash and debris. These waste materials will be disposed off-site at a Subtitle D disposal facility. Spent personal protective equipment (PPE) generated during the TCRA activities will be placed in designated Site containers and will be disposed with remediation waste. Portable restroom facilities will be located at the support facilities or decontamination zone for use by Site personnel and will be serviced by a third party on a regular basis. Remediation wastes excavated from the Site will be direct loaded for transport and off-site disposal or temporarily staged in a material staging area.

Hydraulic oils, motor oils and lubricants will be stored in the on-site equipment storage trailer. Quantities of these items should not exceed 20 gallons. If larger quantities of these items are required to be on-hand, ENTACT will review the storage and containment of those items at such time. All appropriate health and safety requirements for storing this material on-site will be followed.

If a staging area is required for excavated soils or imported fill material, silt fencing will be installed around the perimeter of the staging area, as necessary. Polyethylene sheeting may also be used to cover exposed stockpiles of excavated soil, if present, to prevent wind dispersion of the stockpiled materials when not in use.

4.2.3.3 Spill Prevention and Response

Pollution prevention measures will include implementation of BMPs. If a reportable quantity of oil or hazardous material release is discovered, ENTACT will notify the National Response Center at (800) 424-8802 immediately. The U.S. EPA will be notified verbally within 24 hours and in writing within 14 days. Complete emergency response and spill cleanup procedures are detailed in the *Site-specific Health and Safety Plan*. The SWPPP will also be modified to include the date of the release, the circumstances leading to the release and the steps taken to prevent reoccurrence of the release. Should greater than 1,320 gallons of oil or oil products, i.e. diesel fuel, be stored on-site during the TCRA activities, a *Spill Prevention, Control and Countermeasures Plan* will be developed to further describe the spill prevention and response procedures for the Site.

4.2.3.4 Other Pollutant Sources

No other pollutant sources associated with the TCRA activities are expected at the Site.

4.2.4 Stormwater Management

BMPs will be implemented as part of the TCRA activities to control pollutants in stormwater discharges. These controls will generally include those non-structural and structural measures presented in the previous subsections.

In general, stormwater run-off that has contacted impacted materials at the Site will be allowed to infiltrate into the subsurface within the work zones. If the stormwater cannot infiltrate into the subsurface, then the

stormwater will be allowed to evaporate or discharge through the structural control measures prior to leaving the work area or Site.

4.2.5 Non-stormwater Discharges

Non-stormwater discharges expected during the TCRA activities may include the following:

- Discharges from fire-fighting activities;
- Fire hydrant flushing;
- Water used to wash vehicles where detergents are not used;
- Water used to control dust;
- Potable water including uncontaminated water line flushings;
- Routine external building wash down that does not use detergents;
- Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used;
- Uncontaminated air conditioning or compressor condensate;
- Uncontaminated groundwater or spring water;
- Foundation or footing drains where flows are not contaminated with process materials such as solvents; and
- Landscape irrigation.

These non-stormwaters will be directed through structural control measures to remove the majority of sediments entrained in the water prior to discharge.

4.2.6 Contingencies for Planned and Unplanned Work Stoppages

If work is temporarily stopped on-site for an extended period of time, then temporary stabilization of the exposed soil surfaces will be completed prior to demobilization. Stockpiles of material, if present, will be covered with polyethylene sheeting and surrounded with silt fencing or other means, as appropriate, to control, minimize and/or prevent the release of soils entrained in stormwater discharges.

4.3 Inspection and Maintenance

Inspection and maintenance of the control measures have been identified as a major part of effective erosion and sediment control programs. Qualified personnel that are knowledgeable in the principles and practice of erosion and sediment controls and who possess the skills to assess conditions at the Site that could impact stormwater quality and the effectiveness of the BMPs selected to control the quality of the stormwater discharges, i.e. the ENTACT Project Manager or his designee, will conduct the Site inspections and ensure that the BMPs are maintained as appropriate during the construction period.

4.3.1 Inspection

Routine inspections will be conducted at the Site to ensure that the BMPs are functional and the SWPPP is being properly implemented. Inspections will be performed at least once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater. In addition to the formal written inspections, a visual inspection of the Site BMPs will be conducted each work day to ensure that the BMPs are operating, as designed. The inspection frequency will be reduced to once per month if the entire Site is temporarily stabilized or runoff is unlikely due to winter conditions.

The inspections will consist of a walk-through of all areas of the Site disturbed by construction activity and areas used for the storage of materials that are exposed to precipitation. Specifically, observations will be made of those disturbed areas that have not undergone final stabilization, areas used for the storage of materials that are exposed to precipitation that have not undergone final stabilization, and structural control measures for evidence of, or the potential for, pollutants to enter the run-off from the Site. Erosion and sediment control measures will be inspected to ensure they are functioning properly and that they are positioned adequately for the control of run-off and sediment. Locations where vehicles enter or exit the Site will be inspected for evidence of off-site sediment tracking. Discharge locations, where accessible, will be inspected for evidence of, or the potential for, pollutants entering the drainage system and the receiving water(s). Areas where petroleum products are stored, used or handled will be inspected for spills or leaks from vehicles and equipment. The inspections will be documented as described in Section 4.4.

Weather observations, including the total amount of rainfall per 24-hour period, will also be measured and recorded on a daily basis by the qualified personnel. This person will also be responsible for identifying when stormwater runoff occurs on-site. The following sources may be used to obtain weather forecasts and observations for the Omaha, Nebraska area:

- The National Weather Service at www.wrh.noaa.gov
- The Weather Channel at www.weather.com

4.3.2 Maintenance

Based on the results of the inspections and/or daily observations indicating repair of BMP(s) is needed, the BMPs will be maintained, repaired or replaced. If the Site inspections or observations reveal that the BMPs are not operating effectively, or if the effective capacity has been reduced by 50%, then maintenance will be performed as quickly as practicable, but not later than 7 days after the inspection or observation. If weather conditions make it impossible to the correct problem within 7 days, a detailed report, including pictures, will be filed with the regular inspection reports and the BMPs will be corrected as soon as weather conditions allow. The actions taken to correct the noted deficiencies will be documented as described in Section 4.4.

4.4 Reporting and Record-Keeping Requirements

4.4.1 Inspections and Maintenance

Inspection results will be documented on an inspection report form and will include the following information, at a minimum:

- Name, title and qualification of the person conducting the inspection;

- Date and time the inspection was conducted;
- Weather information for the period since the last inspection and at the time of the inspection;
- Findings of the inspection;
- Corrective actions taken to correct deficiencies; and
- Date the corrective action was implemented.

The inspection forms will be retained as part of the SWPPP for a period of at least three years from the date that permit coverage expires or is terminated. Example inspection forms are included in Appendix C to the TCRA Workplan.

4.4.2 Construction Activities Log

Records associated with the construction activities that will be maintained with the SWPPP include the following:

- Dates when major grading activities occur;
- Dates when construction activities temporarily or permanently cease on a portion of the Site; and
- Dates when stabilization measures are initiated.

This information will be recorded on the inspection forms included in Appendix C to the TCRA Workplan.

4.4.3 Changes to the SWPPP

This SWPPP has been prepared and will be maintained and updated to be consistent with all federal, state and local guidelines for all applicable stormwater, sediment and erosion Site plans or permits. Any updates or revisions required to the SWPPP will be made and fully implemented within 7 calendar days of the date a deficiency is identified during a Site inspection. Updates or revisions to the SWPPP will also be required whenever:

- The design, construction, operation, or maintenance of BMPs is changed;
- The design of the construction project is changed that could significantly affect the quality of the stormwater discharges;
- The inspections indicate deficiencies in the SWPPP or any BMP; and
- The SWPPP is determined to be ineffective in significantly minimizing or controlling erosion and sedimentation.

The updates or revisions to the SWPPP will be documented on the SWPPP update form included in Appendix C to the TCRA Workplan. These forms will be maintained with the SWPPP for the duration of the construction activities.

5.0 SAMPLING AND ANALYSIS PLAN

5.1 Statement of Objectives

This section presents the Sampling and Analysis Plan (SAP) which describes the procedures to be used for the collection of the following types of samples:

- Characterization samples;
- Post-treatment verification samples;
- Backfill samples; and
- Air samples.

5.2 Sampling Identification System

A sample identification system will be implemented in order to properly track sampling activities. The sampling activities and suggested identification coding system associated with each type are listed below.

- Stockpile Characterization Sample: SCS-Stockpile No.
- Post-Treatment Verification Samples: V-Stockpile No.-C (composite) and/or G (grab)-000
- Backfill Samples: BF-000
- Field Duplicate Samples: “X” added to end of sample ID
- Field Equipment Rinsate Blank: RB-000
- Perimeter Air Samples: PM or TSP-Unit No.-000
- Personal Air Samples: PAM-000

All numbering sequences shown above with “000” will begin with the number “001” and will continue upward by one unit (i.e., RB-001, RB-002, RB-003, etc.) until the final samples are collected. It should be noted that sampling nomenclature may be modified in the field if a more informative identification system becomes evident.

5.3 Sampling Procedures

Samples will be collected during the TCRA as described in the following sections. Sample test methods, preservatives, volume requirements, and sample container requirements are listed on Table 1.

5.3.1 Characterization Samples

Characterization samples will be collected from the excavated material stockpiles to determine if the excavated material exhibits the hazardous toxicity characteristic for lead and/or meets the appropriate criteria for off-site disposal in a permitted Subtitle D landfill, as appropriate. A 4-point composite sample will be collected from each stockpile and will be submitted for laboratory analysis of TCLP lead. The characterization sampling procedures are described below.

- a. The sampling team will adhere to the health and safety protocols defined in the *Site-specific Health and Safety Plan*.
- b. The stockpile will be selected for sampling.
- c. Staging areas for sample collection will be established. Polyethylene sheeting or clean, plastic holding containers or tubs will be placed adjacent to the areas to be sampled during sample collection. The following tools and supplies will be prepared for use:
 - Field Logbook;
 - Stainless steel or plastic disposable trowels;
 - Ziplock plastic bags;
 - Plastic or glass laboratory-supplied sample containers;
 - Distilled water, low-phosphate detergent and brushes;
 - Disposable gloves;
 - Trash bags; and
 - 5-gallon buckets or tubs to carry equipment and for decontamination liquids.
- d. A sufficient amount of soil will be collected with a sample trowel from 4 locations on the stockpile, i.e. from the 2 sides and 2 ends of the stockpile. The soil will be placed in a new, clean sample bag or stainless steel or plastic container for homogenization.
- e. The homogenized sample will be placed into the appropriate laboratory-supplied sample container. Sample containers will be labeled in accordance with the predetermined sample identification system.
- f. Field notes will be completed and will include the sample identification number, color and general soil description.
- g. Chain-of-custody documents will be prepared.
- h. The sample containers will be sealed in a plastic bag and placed in a sample ice chest for shipment to the laboratory for analysis.
- i. All reusable sampling equipment will be decontaminated utilizing a detergent wash and potable water rinse, followed by a distilled water rinse. Decontaminated equipment will be wrapped in aluminum foil if not immediately reused to prevent contamination during storage or transportation. All disposable sampling media will be placed into designated Site containers.

5.3.2 Post-Treatment Verification Samples

- a. Post-treatment verification samples will be collected from the treated material stockpiles to ensure that the treated material meets the appropriate criteria for off-site disposal in a permitted Subtitle D landfill, as appropriate. One representative 4-part composite sample will be collected from each stockpile of treated material and analyzed for TCLP lead and any underlying hazardous constituents. ENTACT may also collect one verification grab sample from each stabilized stockpile, if such sampling is required by the disposal facility. The post-treatment verification sampling procedures are described below. The sampling team will adhere to the health and safety protocols defined in the *Site-specific Health and Safety Plan*.

- b. The stockpile will be selected for sampling.
- c. Staging areas for sample collection will be established. Polyethylene sheeting or clean, plastic holding containers or tubs will be placed adjacent to the areas to be sampled during sample collection. The following tools and supplies will be prepared for use:
 - Field Logbook;
 - Stainless steel or plastic disposable trowels;
 - Ziplock plastic bags;
 - Plastic or glass laboratory-supplied sample containers;
 - Distilled water, low-phosphate detergent and brushes;
 - Disposable gloves;
 - Trash bags; and
- 5-gallon buckets or tubs to carry equipment and for decontamination liquids.
- d. A representative 4-part composite sample will be taken from the stockpile. A sufficient amount of soil will be collected with a sample trowel from 4 locations on the stockpile, with one aliquot from centrally within the stockpile and 3 from the surface of the stockpile. The soil will be placed in a new, clean sample bag or stainless steel or plastic container for homogenization. The homogenized sample will be placed into the appropriate laboratory-supplied sample container. Sample containers will be labeled in accordance with the predetermined sample identification system.
- e. A representative grab sample of at least 100 grams will be collected from the stockpile with a sample trowel and placed in the appropriate laboratory supplied sample jar. Sample containers will be labeled in accordance with the predetermined sample identification system.
- f. Field notes will be completed and will include the identification of the stockpile being sampled, sample identification number, date, and other pertinent information.
- g. Chain-of-custody documents will be prepared.
- h. The sample containers will be sealed in a plastic bag and placed in a sample ice chest for shipment to the laboratory for analysis.
- i. All reusable sampling equipment will be decontaminated utilizing a detergent wash and potable water rinse, followed by a distilled water rinse and drying with disposable towels between each sampling event. Decontaminated equipment will be wrapped in aluminum foil if not immediately reused to prevent contamination during storage or transportation. All disposable sampling media will be placed into designated Site containers.

5.3.3 Backfill Sampling

The backfill source selected for use will be sampled and approved before the date of anticipated use of the material. The frequency of sampling will be a minimum of one sample per source with the collection of additional samples when there is a significant change in the color or appearance of the source material. A representative composite sample consisting of at least 4 parts obtained directly from the source area, stockpiled material from the source area, or from a clean container of at least 10 pounds of material will be collected for each source. The sample will be submitted to an analytical laboratory for analysis of the RCRA 8 metals by

U.S. EPA Method 6020 and 7471A, VOCs by EPA Method 8260B, SVOCs by U.S. EPA Method 8270C, and TPH by U.S. EPA Method 8015. The source location of the backfill material will be documented by source location and address. The backfill samples will be collected as follows:

- a. The sampling team will adhere to the health and safety protocols defined in the *Site-specific Health and Safety Plan*.
- b. Staging areas for sample collection will be established. Polyethylene sheeting or clean, plastic containers or tubs will be placed adjacent to the areas to be sampled during sample collection. The following tools and supplies will be prepared for use:
 - Field logbook;
 - Digital or film camera;
 - Disposable gloves;
 - Stainless steel or plastic disposable trowels;
 - Zip-lock plastic bags;
 - Plastic or glass laboratory-supplied sample containers;
 - Alconox detergent or similar;
 - Brushes;
 - Distilled water;
 - Trash bags; and
 - 5-gallon buckets or tubs to carry equipment and for Decontamination liquids.
- c. A sufficient amount of material will be retrieved from 4 locations using a clean or decontaminated sample trowel. The material will be placed in a new, clean sample bag for homogenization.
- d. The homogenized sample will be placed into the appropriate laboratory-supplied sample container. Sample containers will be labeled in accordance with the predetermined sample identification system.
- e. Field notes will be completed and will include the identification and storage location of the source being sampled, sample number, date, and any other pertinent information.
- f. Chain-of-custody documents will be prepared.
- g. The sample containers will be sealed in a plastic bag and placed on ice in a sample ice chest for shipment to the laboratory for analysis.
- h. All reusable, non-disposable sampling equipment will be decontaminated utilizing an Alconox detergent wash, a potable water rinse and a distilled water rinse. The equipment will be allowed to air dry or will be dried with clean, new disposable towels and will be wrapped to prevent exposure to potential contamination between sampling events. All disposable sampling media will be placed in designated Site containers.

5.3.4 Air Samples

5.3.4.1 TSP and PM₁₀ Air Samples

The methodology for sampling and analysis of total lead by the high-volume TSP sampler will be conducted in accordance with the methods described in 40 CFR, PART 50, APPENDIX B - Reference Method for the

Determination of Suspended Particulate Matter in the Atmosphere (High-Volume Method) and 40 CFR, PART 50, APPENDIX G - Reference Method for the Determination of Lead in Suspended Particulate Matter Collected from Ambient Air. The methodology for sampling and analysis of PM₁₀ will be conducted in accordance with 40 CFR, PART 50, APPENDIX J - Reference Method for the Determination of Particulate Matter as PM₁₀ in the Atmosphere.

Proper sample containers and filter media will be used to minimize the alteration of sample chemistry between the field and the laboratory. Conditioned, pre-tared and numbered high-volume air filter media will be provided by the laboratory in individual 10x13 inch envelopes. The filter media will remain in the envelope until its required use. The filter media will be handled by the edges during placement and collection procedures. Used filters will be folded vertically and placed back into the envelope to reduce the loss of particulate matter from the filter. Each envelope will be labeled, sealed and signed to prevent tampering and maintain custody control.

5.3.4.2 PAM and PDR Samples

PAM samples will be collected with low volume-sampling pumps and 37 mm sample cassettes. The sampling pump will be positioned upon personnel in such a way as to obtain a sample from the breathing zone of the associate. Personal samples will be collected from personnel representative of a full shift including at least one sample for each job classification in each work area either for each shift or for the shift with the highest exposure level. Full shift personal samples shall be representative of the monitored associate's regular daily exposure to lead in accordance with 29 CFR 926.62 (d)(1)(iii) and (iv).

A PDR real-time monitoring unit is a direct read field-portable instrument that displays the airborne dust concentrations immediately and continuously on a digital LCD screen in units of mg/m³.

5.3.5 Quality Control Samples

5.3.5.1 Rinsate Blanks

Rinsate blanks are water samples obtained by rinsing decontaminated, non-disposable sampling equipment with contaminant-free distilled water, and capturing that water in sample containers for laboratory analysis. These blanks verify the effectiveness of equipment cleaning procedures and are integral to the QA/QC program. Rinsate blanks will be collected at a frequency of 1 rinsate blank per day of sampling using non-dedicated, non-disposable equipment. The rinsate blanks will be analyzed for total lead by U.S. EPA Method SW-846 6020. The rinsate blank sampling procedures are described below:

- a. The sampling team will adhere to the health and safety protocols defined in the *Site-specific Health and Safety Plan*.
- b. Staging areas for sample collection will be established. Polyethylene sheeting or clean, plastic containers or tubs will be placed adjacent to the area for obtaining the blank. This area should preferably be away from known contaminated areas to avoid cross-contamination of the sampling tools. The following tools and supplies will be prepared for use:
 - Field logbook;
 - Digital or film camera;
 - Disposable gloves;
 - Accumulation of sampling tools and devices used;

- Plastic or glass laboratory-supplied sample containers;
 - Sample beakers;
 - Alconox detergent or similar;
 - Brushes;
 - Distilled water;
 - Trash bags; and
 - 5-gallon buckets or tubs to carry equipment and for decontamination liquids.
- c. Decontaminated sampling devices will be gathered. Distilled water will be poured over the just decontaminated sampling device and the run-off water will be collected directly in the sample container. The sample container will be labeled in accordance with the predetermined sample identification system.
- d. Field notes will be completed and will include the sample identification number, description, date and time of sample collection, and any other pertinent information.
- e. Chain of custody documents will be prepared.
- f. The samples will be sealed in a plastic bag and placed on ice in a sample ice chest for shipment to the laboratory for analysis.
- g. All reusable, non-disposable sampling equipment will be decontaminated utilizing an Alconox detergent wash, a distilled water rinse and a final distilled water rinse. The equipment will be allowed to air dry or will be dried with clean, new disposable towels and will be wrapped to prevent exposure to potential contamination between sampling events. All disposable sampling media will be placed into designated Site containers.

5.3.5.2 Duplicates

Duplicate samples are collected as 2 sets of sample bottles filled from a single sample location. The sample is split in the field in a manner to ensure that the chemistry is as close to identical as possible. One sample, the “parent” sample, is labeled as usual. The duplicate sample is labeled with an “X”, in addition to the usual sample identification. The purpose of the duplicate is to test the ability to generate reproducible samples. One duplicate will be collected for every 10 samples generated during the project, sample-type specific, excluding TCLP samples. The duplicate sample will be analyzed for the same parameter suite as the parent sample. The field procedure simply involves filling a second set of containers and placing a notation in the field log about the duplicate sample.

5.3.5.3 Matrix Spike/Matrix Spike Duplicates

Matrix spikes provide information about the effect of the sample matrix on the digestion and measurement methodology. All matrix spikes are performed in duplicate and are referred to as MS/MSD samples. One MS/MSD sample will be analyzed for every 20 or fewer samples per sample matrix.

5.3.6 Analytical Parameters and Testing Laboratory

The post-treatment verification soil samples will be submitted for analysis of TCLP lead and any underlying hazardous constituents by U.S. EPA Method 1311/6020. The backfill samples will be submitted for analysis of RCRA 8 metals by U.S. EPA Method SW-846 6020/7471A, VOCs by U.S. EPA Method SW-846 8260B,

SVOCs by U.S. EPA Method SW-846 8270C, and TPH by U.S. EPA Method 8015. The excavated soil characterization samples will be submitted for analysis of TCLP lead by U.S. EPA Method SW-846 1311/6020B. Personal air samples will be submitted for analysis of total lead by NIOSH Method 7300. Perimeter air samples will be submitted for analysis of PM₁₀ by 40 CFR Appendix G or total lead by U.S. EPA SW-846 6020. All written laboratory turnaround times will be no more than 72 hours (three business days). Verbal turnaround times on soil samples should not be more than 48 hours (two business days). It is expected that samples collected on Fridays, Saturdays or before holidays may take one to two additional days.

The analytical laboratories that may be used for this project include:

TestAmerica Laboratories
1733 N. Padre Island Drive
Corpus Christi, Texas 78408
(361) 289-2673
Contact: Julie Darrow

Pace Analytical Services
9608 Loiret Boulevard
Lenexa, Kansas 66219
(913) 599-5665
Contact: Mary Jane Walls

Midwest Laboratories
13611 B Street
Omaha, Nebraska 68144
(402) 334-7770
Contact: Heather Ramig

Pace Analytical
7726 Moller Road
Indianapolis, Indiana 46268
(317) 875-5894
Contact: Mark Davis

These laboratories are accredited under the National Environmental Laboratory Accreditation Program (NELAP) and participate in a quality assurance/quality control (QA/QC) program that complies with the appropriate U.S. EPA guidance.

5.3.7 Sample Documentation

Sample identification documents will be carefully prepared to maintain identification and control sample disposition. Components of the field documentation procedures will include the use of field logbooks, sample labels, custody seals, chain-of-custody (COC) forms, and photo-documentation.

5.3.7.1 Sample Labels and Custody Seals

Sample labels are necessary to prevent misidentification of samples. A self-adhesive sample label will be affixed to each sample container before collection. A permanent, waterproof pen will be used to record the following information on the sample label:

- Name of Site and project number;
- Sample identification number;
- Date and time of sample collection;
- Sample depth;
- Analysis to be performed;
- Preservatives used; and
- Sample collection type.

After the samples are placed in the shipping container, a custody seal will be placed on the container. The custody seal will be signed and dated by the field sampler.

5.3.7.2 Chain-of-Custody Forms

A COC form will be completed by the field sampler to record the custody of every sample collected. A COC form will accompany every shipment of samples to the analytical laboratory in order to establish the documentation necessary to trace sample possession from the time of sample collection through sample analysis. Information recorded on the COC form will include, but is not limited to, the following:

- Project name, number and location;
- Name of Project Manager, Sampler and Recorder;
- Sample identification number;
- Sampling information (sampling area description, depth, media type, type of sample, date and time of sample collection, etc.);
- Analysis to be performed;
- Preservatives used, if any; and
- Signatures of persons involved in COC possession, including dates and times.

When a COC form is filled out, 1 page of the 3-part form is retained and placed in a file. The other 2 parts of the form accompany the sample to the laboratory. One of those pages is retained by the laboratory and the other is returned with the laboratory analytical report. When the analytical report is received, it is cross-checked with the COC file record.

5.3.7.3 Field Logbook Records

A field log of daily activities will be used to record sampling activities performed by field personnel on a daily basis. These books will be bound and will have consecutively numbered pages. Each logbook page will be dated and signed by all personnel making entries on that page. Entries in the field logbook will be made in waterproof ink and will contain accurate and complete descriptions of sampling activities, which include only facts and observations. Under no circumstances will pages be removed from the logbook. Information that will be documented in the field logbook will include, but is not limited to, the following:

- Name of author and sampling technician;
- Date and time of entry;
- Daily weather conditions;
- Objectives of sampling activities;
- Sample identification numbers;
- Sample location and description;
- Sample collection or measurement methods and/or procedures;
- Number of samples collected;
- Sampling depth increments;
- Field observations and comments;
- Field measurements;
- Locations of photographs; and
- Signatures of individuals making entries.

All field logbooks will be maintained by the field sampler. Any edits made to the field logbook will include one line strike through the area to be corrected and the line or area to be modified will be initialed and dated by the editor. All strike-outs will remain clearly legible. Upon project completion, all logbooks will become part of the file records.

5.3.7.4 Photo Documentation

Photographs will be taken to document Site conditions and sampling activities. All photographs will be taken using a film camera or digital camera capable of recording the date on the image. Each photograph will be recorded in the field logbook with the location of the photographer, the direction the photograph was taken and the subject of the photograph. The photograph location and direction will also be shown on a Site sketch.

5.3.8 Sample Shipping

For shipping, all samples will be packaged in such a manner as to prevent damage or breakage during shipment or transport. Although most samples collected during the removal action will be for metals, and thus will not require cooling, backfill samples to be analyzed for organics will be required to be packed in ice. Samples will

be placed into suitable containers, labeled and sealed in such a manner that tampering with the seal would be obvious. All sample holding times will be tracked and a copy of the COC form will accompany the samples in a sealed plastic bag. Samples will be shipped through an overnight parcel service by sampling personnel.

5.3.9 Quality Assurance/Quality Control

5.3.9.1 Quality Assurance

Duplicate samples will be collected periodically to verify the validity of the analytical data. The use of QA samples should provide sufficient evidence to conclude that media samples are representative of the in-situ state of the media, and that constituents found within them are not overtly affected by chemicals from outside sources or cross-contamination.

Duplicate samples are collected as 2 sets of sample bottles filled from a single sample location. The sample is split in the field in a manner to ensure that the chemistry of the samples is as close to identical as possible. The sample identification number for the duplicate sample will be designated with an "X" at the end of the number. One duplicate sample will be collected for every 10 samples generated, except air samples, and will be analyzed for the same parameters as the parent sample.

Rinsate blanks (if non-disposal sampling equipment is used) will be collected at a 10 percent frequency interval for field quality assurance (QA) and quality control (QC). The laboratory QA/QC will include one matrix and one matrix spike duplicate (MS/MSD) for every 20 samples.

Filter blanks for time-integrated air samples will be submitted at a 20% frequency interval or 1 per week. The blank results will be reported as described in each specific method.

The QA targets for reporting limits, precision, accuracy, and completeness of the laboratory testing programs for each measurement parameter are presented in Table 2.

5.3.9.2 Detection Limit Requirements

The level of concern for each parameter directly affects the data quality requirements. Therefore, the sampling and analysis methods must be accurate at the level of concern. Furthermore, it is necessary that the analytical technique chosen has a detection limit well below the level of concern. Analytical methods that can accurately quantify constituents below their levels of concern will be used for the sample analyses. The detection limits will generally be an order of magnitude less than the levels of concern. It is necessary that data quality objectives be consistent with clean-up levels or other levels. The reporting limits for the parameters to be analyzed for this work are listed in Table 2.

5.3.9.3 Data Reduction and Interpretation

All data will be reviewed when the analytical report is received from the laboratory. The evaluation will consist of a review of the stated detection limits versus the target detection limits. The report will also be reviewed for any narratives or comments indicating data flags or qualifiers. Any suspect data will be presented to the laboratory for review and reconciliation. All available materials will be reviewed by the sampler to assess the overall quality of the data. The data will then be deemed validated as appropriate.

6.0 WORK PRODUCTS

6.1 *Daily, Weekly and Monthly Reports*

ENTACT will prepare and maintain daily fieldwork reports and other records to summarize all Site activities performed during the completion of the TCRA. At a minimum, the daily work reports will include a listing of personnel on-site, equipment utilized, work performed, problems encountered, if any, and resolutions and related information.

ENTACT will prepare status reports on a weekly basis to summarize activities performed at the Site during the previous week.

ENTACT will prepare progress reports for use by NL to update U.S. EPA which include the following:

- Describe actions which have taken place during the month and include photographs of the progress of work;
- Summarize all sample analytical results and all other data received or generated during the month;
- Identify and describe any property damage caused by ENTACT's performance of the TCRA Workplan and subsequent corrective action that occurred during the progress of work;
- Identify all documents completed and submitted during the month;
- Describe all actions which are scheduled for the next six weeks and information regarding the progress of construction activities; and
- Summarize any TCRA Workplan modifications proposed or approved.

6.2 *Photographic Documentation*

Photographs will be taken during the project to document pre-existing conditions and to serve as a pictorial record of work progress, problems encountered and mitigation activities. ENTACT's file at the Site will contain color prints, labeled with the date and subject of the photograph. Negatives will also be stored in a separate file in chronological order. Digital photographs will be saved to the computer file and labeled as appropriate. Photographic reporting data sheets, where used, will be cross-referenced with observation and testing data sheets and/or construction problem and solution data sheets. Photographic documentation will also be included in the TCRA Report.

6.3 *TCRA Report*

Within 45 days following the last inspection, ENTACT will prepare a written report for use by NL to provide to the U.S. EPA, which documents and certifies the completion of the TCRA activities. The TCRA Report will include, at a minimum, the following:

- An introduction and a brief discussion of the Site location, description and history;
- A summary of the remediation objectives and goals;

- A summary of the TCRA activities conducted at the Site, including mobilization and site preparation activities, excavation, treatment, off-site disposal, and demobilization;
- A summary of the analytical results for air, water, soil, and/or waste generated during the TCRA using Site maps and tables, including copies of laboratory analytical reports;
- A summary of the waste shipments, including copies of manifests or bills of lading for off-site shipments of waste or recyclable materials;
- If necessary, a summary of the approved modifications to the TCRA Workplan;
- Summary and proof of the institutional controls implemented for the Site, if necessary; and
- References.

6.4 Conceptual Project Schedule

The TCRA activities described in Section 3.0 will require approximately three months to complete. The work schedule will be based on a 5-6 day, 50-60 hour workweek. The expected sequencing of work activities will be as follows:

- Conduct mobilization and site preparation activities;
- Conduct removal action activities, i.e. excavation, treatment, off-site disposal, backfilling, and restoration, in Phase 1;
- Conduct removal action activities, i.e. excavation, treatment, off-site disposal, backfilling, and restoration, in Phase 2;
- Conduct removal action activities, i.e. excavation, treatment, off-site disposal, backfilling, and restoration, in Phase 3; and
- Demobilize personnel and equipment.

The sequencing of work activities may be modified in the field depending on Site conditions, work procedures, health and safety protocols, weather, and similar factors. The proposed project schedule is included as Figure 4 to this TCRA Workplan.

6.5 Environmental Covenant

Restrictive environmental covenants will be placed on the properties of the Site where residual contamination remains in place to notify current and future property owners or tenants of the known extent of contamination. The covenants will specify the location and extent of all residual contamination with concentrations above unrestricted use levels. These areas will require U.S. EPA approval prior to the start of any construction activities that disturb contaminated soil and will require notification for anyone engaged in subsurface activities, such as utility or construction workers, to the presence of residual contamination. The notifications will be consistent with U.S. EPA guidance and the Nebraska Uniform Environmental Covenants Act and will be recorded with the consent of the current property owners.

7.0 REFERENCES

Environmental Data Resources, 2011. The EDR City Directory Abstract, Former Carter White Lead Site.

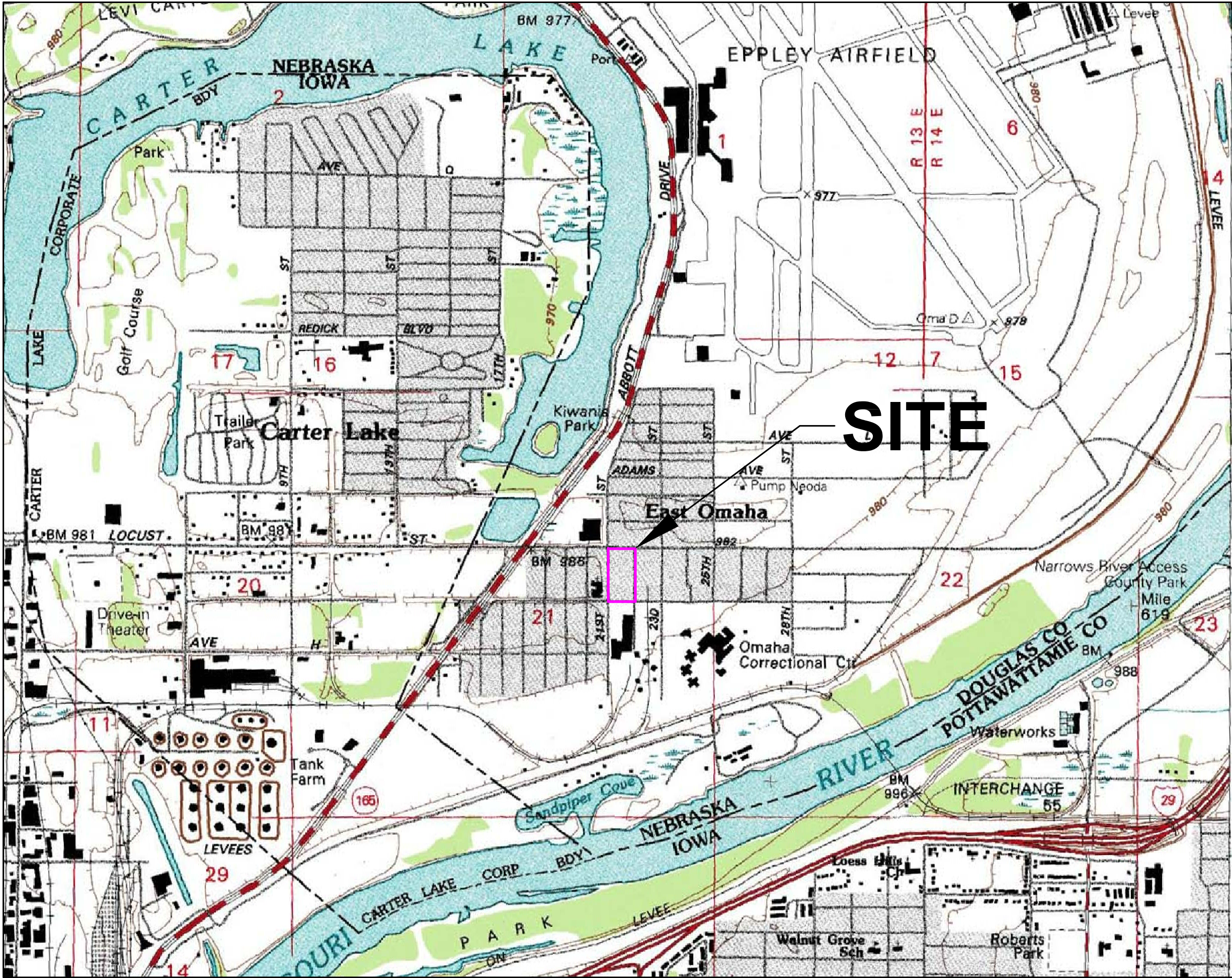
Environmental Data Resources, 2011. Certified Sanborn Map Report, Former Carter White Lead Site.

Environmental Data Resources, 2011. EDR Historical Topographic Map Report, Former Carter White Lead Site.

Environmental Data Resources, 2011. The EDR Chain of Title Report, Former Carter White Lead Site.

Tetra Tech EM Inc., 2010. Removal Assessment Report, Rev. 01, Former Carter White Lead Site, Omaha Nebraska. Prepared for U.S. EPA under Contract No. EP-S7-06-01 Task Order No. 0137.

FIGURES



SOURCE: USGS 7.5
MINUTE TOPOGRAPHIC
QUADRANGLE, OMAHA
NORTH, 1994
CONTOUR INTERVAL
10 FEET

LEGEND

SITE BOUNDARY

N

0 250 500 1000
SCALE IN FEET

ENTACT
environmental services

3120 Bass Pro Drive • Grapevine, TX 76051
(972) 580-1233 • Fax (972) 580-7464

NO.	DATE	REVISION	APP.

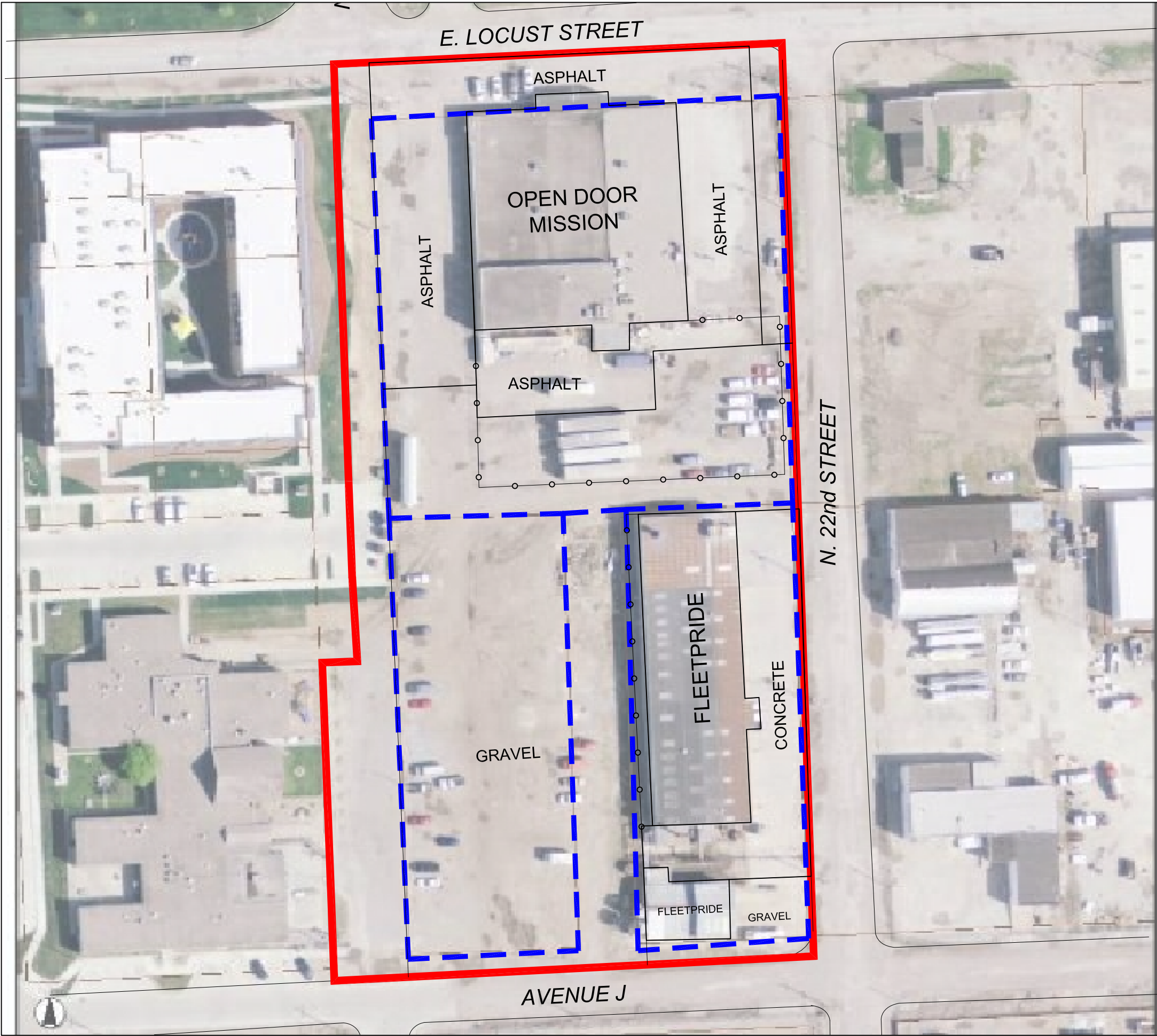
FORMER CARTER WHITE
LEAD SITE
OMAHA, NEBRASKA

FIGURE 1




Scale: SEE DWG

Drawn By: **MA** Checked By: **JS** Date: **12/17/10**

SITE LOCATION MAP



LEGEND

-  SITE BOUNDARY
-  PROPERTY BOUNDARY
-  FENCE



FORMER CARTER WHITE
LEAD SITE
OMAHA, NEBRASKA

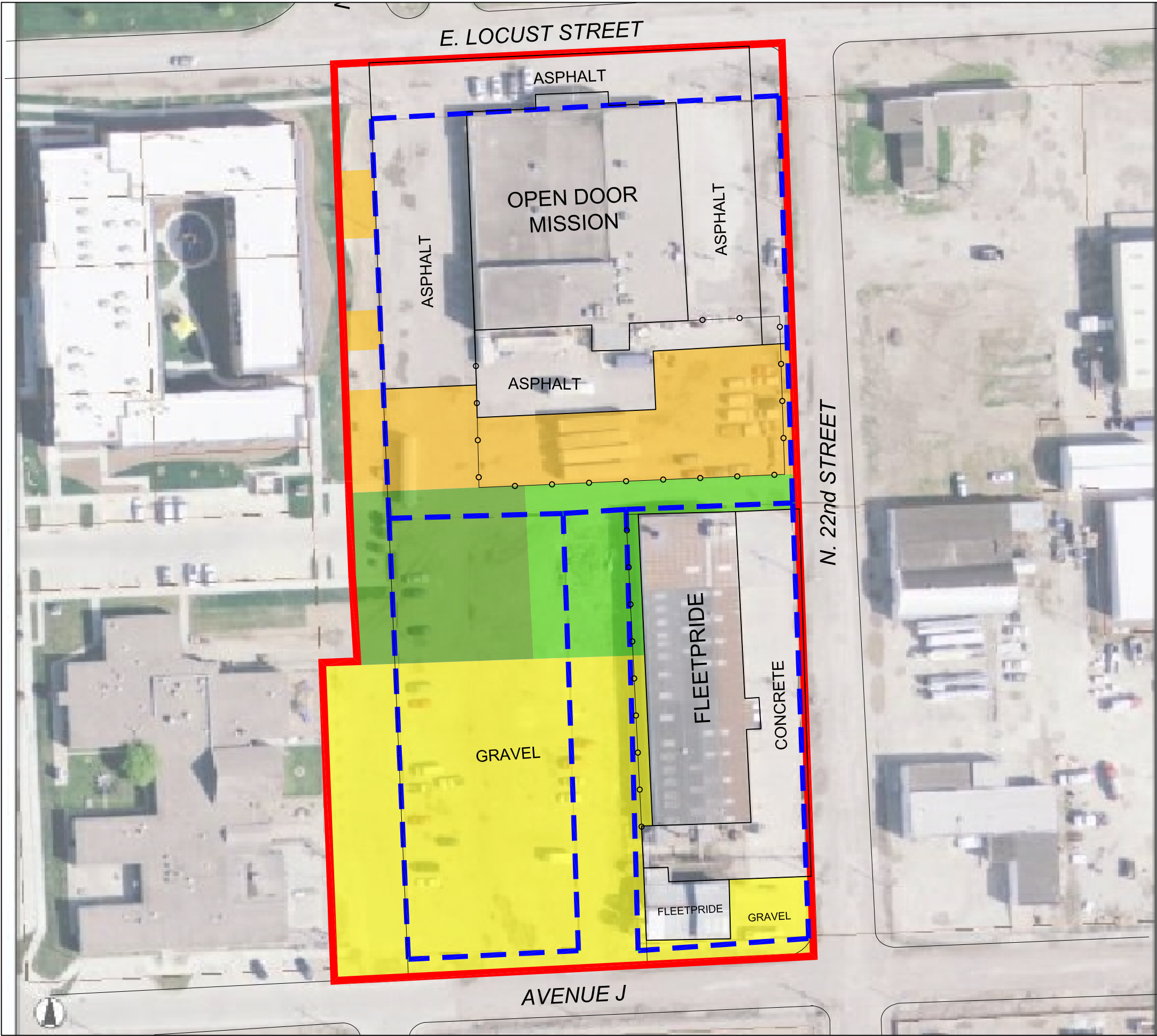
FIGURE 2

SITE LAYOUT MAP

NO.	DATE	REVISION	APP.	Scale: <i>SFE_DWG</i>	Drawn By: <i>MA</i>	Checked By: <i>JS</i>	Date: <i>1/2012</i>



3129 Bass Pro Drive • Grapevine, TX 76051
(972) 580-1323 • Fax (972) 580-7464



LEGEND

- SITE BOUNDARY
- - - PROPERTY BOUNDARY
- FENCE
- PHASE 1 - EXCAVATION DEPTH 1'
- PHASE 2 - EXCAVATION DEPTH 2'
- PHASE 2 - EXCAVATION DEPTH 1'
- PHASE 3 - EXCAVATION DEPTH 1'



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environmental services

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NO.	DATE	REVISION	APP.

Scale: SFE_DWG Drawn By: MA Checked By: JS Date: 1/2012

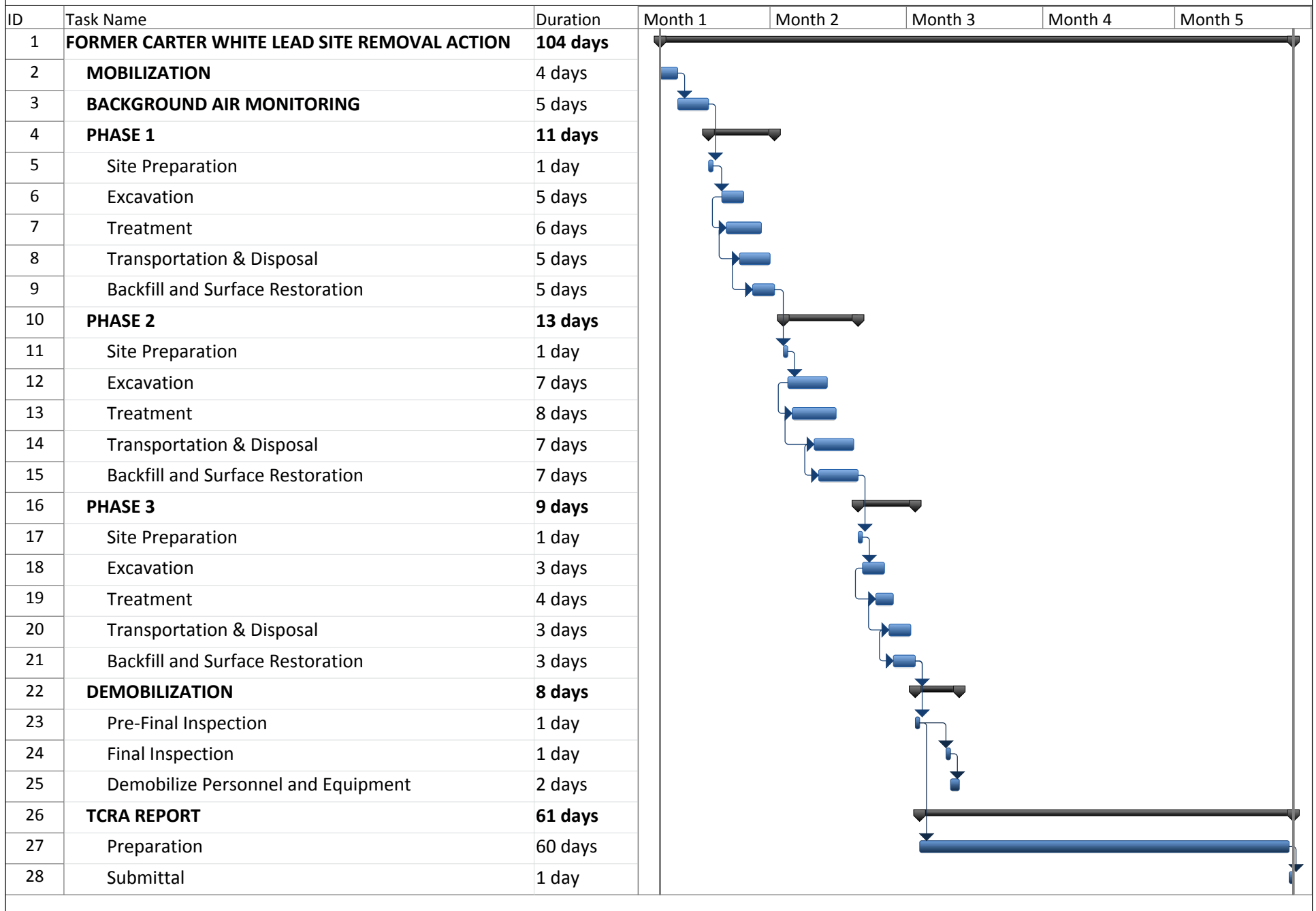
FORMER CARTER WHITE
LEAD SITE
OMAHA, NEBRASKA

FIGURE 3

REMOVAL ACTION PHASE MAP

**FORMER CARTER WHITE LEAD SITE
OMAHA, NE**

FIGURE 4 - PROJECT SCHEDULE



APPENDIX A

**NEBRASKA NPDES GENERAL PERMIT FOR
STORMWATER DISCHARGES FROM CONSTRUCTION
SITES #NER110000**

**Authorization to Discharge Under the
National Pollutant Discharge Elimination System (NPDES)
General NPDES Permit Number NER110000
for Storm Water Discharges from
Construction Sites to Waters of the State of Nebraska**

This **NPDES** general permit is issued in compliance with the provisions of the Federal Water Pollution Control Act (33 U.S.C. Secs. 1251 *et. seq.* as amended to date), the Nebraska Environmental Protection Act (Neb. Rev. Stat. Secs. 81-1501 *et. seq.* as amended to date), and the Rules and Regulations promulgated pursuant to these Acts. Application may be made under this general permit for authorization to discharge **Storm Water** from construction sites. **Owners** or **Operators** issued a discharge authorization under this general permit are required to comply with the limits, requirements, prohibitions, and conditions set forth herein. The issuance of a discharge authorization under this general permit does not relieve **Permittees** of other duties and responsibilities under the Nebraska Environmental Protection Act, as amended, or established by regulations promulgated pursuant thereto.

NPDES Permit Number: NER110000

This permit shall become effective on **January 1, 2008**.

This permit and the authorization to discharge shall expire at midnight, **December 31, 2012**

Pursuant to a Delegation Memorandum dated January 12, 1999 and signed by the **Director**, the undersigned hereby executes this document on behalf of the **Director**.

Signed this _____ day of _____, _____

Patrick W. Rice
Assistant Director

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ATTACHMENTS

Attachment # 1 Construction **Storm Water** Notice of Intent Form (CSW-NOI)

Attachment # 2 Construction **Storm Water** Transfer Form (CSW-TRANSFER)

Attachment # 3 Construction **Storm Water** Notice of Termination Form (CSW-NOT)

*Terms written in **BOLDFACE** in this permit are defined in the Definitions section of Part VII.*

PART I. COVERAGE UNDER THIS PERMIT

A. Introduction

This permit is required and shall apply to **storm water** discharges associated with **construction activity** that causes land disturbance of equal to or greater than one acre and less than one acre if part of a larger **common plan of development or sale**. All references in this permit to **construction activity** shall be read to include both **large construction activity** and **small construction activity**. This permit authorizes the discharge of storm water from **construction activity** entering **waters of the state**, a **municipal separate storm sewer system (MS4)** or a **combined sewer** within the State of Nebraska. Discharges are subject to the specific terms and conditions in this permit.

This permit also authorizes **storm water** discharges from any other **construction activity**, as designated by the **Director**, where the designation is made based on the potential for an excursion of a water quality standard or for significant contribution of pollutants to **waters of the state**. The goal of this permit is to reduce or eliminate **storm water** pollution from **construction activity** by requiring implementation of appropriate pollution control practices to protect water quality.

B. Permit Area

This permit provides **coverage** for **construction** and **support activity** throughout the State of Nebraska excluding tribal land within the State of Nebraska and as per limitations in Part I.C.3 of this permit.

C. Eligibility

Permit eligibility is limited to discharges from **construction activity** as defined in Part VII or as otherwise designated by the Director. This general permit contains eligibility restrictions, as well as permit conditions and requirements. In such cases, you must continue to satisfy those eligibility provisions to maintain permit authorization. If you do not meet the requirements that are a pre-condition to eligibility, then resulting discharges constitute unpermitted discharges. By contrast, if you do not comply with the requirements of the general permit, you may be in violation of the general permit for your otherwise eligible discharges.

1. Allowable Storm Water Discharges

Subject to compliance with the terms and conditions of this permit, you are authorized to discharge pollutants in:

- a. **Storm water** associated with **large and small construction activity** as defined in Part VII;
- b. **Storm water** discharges designated by the Director requiring a **storm water** permit under NDEQ Title 119, *Rules and Regulations Pertaining to the Issuance of Permits Under the **National Pollutant Discharge Elimination System (NPDES)** Chapter 2 002*;
- c. Discharges composed of allowable discharges listed in Part I.C.1.a and Part I.C.1.b commingled with a discharge authorized by a different **NPDES** permit and/or a discharge that does not require **NPDES** permit authorization; and
- d. **Storm water** discharges from **support activities** (e.g., concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) provided:

- 1) The **support activity** is directly related to the construction site required to have **NPDES** permit **coverage** for discharges of **storm water** associated with **construction activity**;
- 2) The **support activity** is not a commercial operation serving multiple unrelated construction projects by different **operators**, and does not operate beyond the completion of the **construction activity** at the last construction project it supports; and
- 3) Appropriate controls and measures are identified in a **Storm Water Pollution Prevention Plan (SWPPP)** covering the discharges from the **support activity** areas;

2. Allowable Non-Storm Water Discharges

You are authorized for the following non-**storm water** discharges, provided the non-storm water component of the discharge is in compliance with Part III.D:

- a. Discharges from fire-fighting activities;
- b. Fire hydrant flushings;
- c. Waters used to wash vehicles where detergents are not used;
- d. Water used to control dust;
- e. Potable water including uncontaminated water line flushings;
- f. Routine external building wash down that does not use detergents;
- g. Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used;
- h. Uncontaminated air conditioning or compressor condensate;
- i. Uncontaminated ground water or spring water;
- j. Foundation or footing drains where flows are not contaminated with process materials such as solvents; and
- k. Landscape irrigation.

3. Limitations on Coverage

This permit does not authorize the following **storm water** runoff conditions and may be the basis for denial or termination of authorization under this general permit. The **Department** shall be consulted prior to your submission of the **CSW-NOI** if any of the following conditions apply:

- a. This permit does not authorize post-construction discharges that originate from the site after construction activities have been completed and the site has achieved **final stabilization**, including any temporary **support activity**. Post-construction **storm water** discharges from industrial sites may need to be covered by a separate **NPDES** permit.
- b. This permit does not authorize discharges mixed with non-**storm water**. This exclusion does not apply to discharges identified in Part I.C.2 provided the discharges are in compliance with Part III.D.
- c. This permit does not authorize **storm water** discharges associated with **construction activity** that have been covered under an individual NPDES permit or required to obtain **coverage** under an alternative general permit in accordance with Part IV.A.
- d. This permit does not authorize discharges that the Director, prior to authorization under this permit, determines will cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality or groundwater quality standards. Where such a determination is made prior to authorization, NDEQ may notify you that an individual permit application is necessary in accordance with Part IV.A. However, NDEQ may authorize your **coverage** under this permit after you have included appropriate controls and implementation procedures in your **SWPPP** designed to bring your discharge into compliance with water quality standards.
- e. Storm water runoff from construction activity within the limits of any tribal lands under the jurisdiction of the United States Government, dependent tribal communities within the borders of the United States, or other tribal allotments;
- f. Non-point source agricultural and silvicultural discharges;

- g. Those storm water discharges for which storm water effluent guideline limitations apply;
- h. Those from an operating landfill;
- i. Storm water runoff from field activities or operations, including construction, associated with oil and gas exploration, production, processing or treatment operations or transmission facilities as dictated by NDEQ Title 119, Chapter 10.
- j. Storm water runoff that may adversely impact critical habitat of aquatic related, threatened or endangered species as designated by Nebraska Game and Parks Commission (www.ngpc.state.ne.us) or the U.S. Fish and Wildlife Service (www.fws.gov).
- k. Storm water runoff that may adversely affect properties listed or eligible for listing in the National Register of Historic Places (www.nebraskahistory.org) or affecting known or discovered archeological sites; or
- l. Those that the Director determines would be more effectively regulated with a site specific, area specific, or a basin specific permit.

4. Period of Coverage

- a. This permit is effective as of the issued date and is effective for five years.
- b. Coverage shall commence at the time discharge authorization is granted and shall continue for a period lasting at least 180 days after final stabilization and **Notice of Termination** is received for the site.
- c. The Director can extend coverage under the permit beyond the time period specified in this section if excessive erosion problems remain at the site.

PART II. AUTHORIZATION FOR DISCHARGES OF STORM WATER FROM CONSTRUCTION ACTIVITY

To obtain **coverage** under this general permit, you must prepare and submit a complete and accurate construction **storm water Notice of Intent (CSW-NOI)**, as described in this Part. Discharges are not authorized if your **CSW-NOI** is incomplete or inaccurate or if you were never eligible for permit **coverage**.

A. Authorization to discharge date

- 1. If you submit a **CSW-NOI** after the issuance date of this permit you are authorized to discharge **storm water** from construction activities under the terms and conditions of this permit seven (7) calendar days after submittal to NDEQ of a complete and accurate **CSW-NOI** (i.e., 7 days from date of postmark), except as noted in Part II.A.2. The Department will notify you of the permit authorization in writing.
- 2. The **Director** may delay your authorization based on eligibility considerations of Part I.C. In these instances, you are not authorized for **coverage** under this permit until you receive notice from NDEQ of your eligibility.

B. CSW Notice of Intent Contents

You must use the **CSW-NOI** form provided in *Attachment 1* (or a photocopy thereof or electronic **CSW-NOI** form that may become available during the term of this permit provided by NDEQ), You must provide the following information on the **CSW-NOI** form:

- 1. Project/Site name, address, county or similar governmental subdivision, and latitude/longitude of your construction project or site;
- 2. The **certifying official's** legal name, address and phone number;
- 3. The **SWPPP** designer name, company, address and phone number;
- 4. The location where the applicable **SWPPP** may be viewed;
- 5. A site map as described in Part III.B.1.d of this permit;
- 6. Name of the **water(s) of the state** into which your site discharges;

7. Estimated dates of commencement of **construction activity** and **final stabilization** (i.e., project start and completion dates);
8. Total acreage (to the nearest quarter acre) to be disturbed for which you are requesting permit **coverage**;
9. Any state or federally-listed threatened or endangered species, or state or federally-designated critical habitat are in your project area to be covered by this permit.
10. A certification statement, signed and dated by an **certifying official** as defined in Part VI.D.

C. Submission Deadlines

1. New Projects: To obtain **coverage** under this permit, you must submit a complete and accurate **CSW-NOI** and be authorized consistent with Part II.A.1 prior to commencement of construction activities.
2. Permitted Ongoing Projects (only applicable for first 90 days after this permit is issued): If you previously received authorization to discharge for your project under the 1997 Construction Storm Water General Permit (CSW-1997) and you wish to continue **coverage** under this permit:
 - a. Submit an **CSW-NOI** within 90 days of the issuance date of this permit, and
 - b. Until you are authorized under this permit consistent with Part II.A, comply with the terms and conditions of the CSW-1997 general permit under which you were previously authorized.
 - c. If you meet the termination of **coverage** requirements in accordance with Part V.A within 90 days of the issuance date of this permit (e.g., construction will be finished and **final stabilization** achieved) you must:
 - 1) Submit an CSW-NOT using the form provided in Attachment #3, and
 - 2) Until coverage is no longer required, comply with the terms and conditions of the CSW-1997 general permit under which you were previously authorized.

3. Late Notifications:

You are not prohibited from submitting a **CSW-NOI** after initiating clearing, grading, excavation activities, or other construction activities. When a late **CSW-NOI** is submitted, authorization for discharges occurs consistent with Part II.A. The **Department** reserves the right to take enforcement action for any unpermitted discharges that occur between the commencement of construction and discharge authorization.

D. Where to Submit

Original applications and forms (no photocopies or faxes) for **NPDES** General Permit NER110000 shall be submitted to the following address:

Water Quality Division
Storm Water
Suite 400, The Atrium
1200 'N' Street
PO Box 98922
Lincoln Nebraska 68509-8922

E. Additional Requirements

1. The Department may request additional information from the source:
 - a. To facilitate the review of the **CSW-NOI**;
 - b. To finalize a determination related to the granting of a discharge authorization; or
 - c. To determine whether a site specific, area specific, or basin specific permit application may be required.
2. When **storm water** is discharged through **municipal separate storm sewer systems**, applicants shall concurrently submit a copy of **NPDES** form **CSW-NOI** to the **operator** of the **municipal separate storm sewer system** through which they discharge. Appendix B has a listing of those municipalities that are permitted under the **Municipal Separate Storm Sewer program**.

3. Other government agencies (e.g. US Army Corps of Engineers, Local City/County Government, or the local Natural Resource District) may have additional notification requirements. Submittal of the **NPDES** form **CSW-NOI** does not relieve the applicant of responsibility to comply with the requirements of other government agencies.

PART III. STORM WATER POLLUTION PREVENTION PLANS (SWPPP)

A. Storm Water Pollution Prevention Plan Framework

1. A **SWPPP** must be prepared prior to submission of a **CSW-NOI** as required in Part II.B. The **SWPPP** must be prepared by a qualified individual such as a Professional Engineer, Certified Landscape Architect, and /or Certified Professional in **Erosion** and **Sediment Control**.
2. The **SWPPP** must:
 - a. Identify all potential sources of pollution which may reasonably be expected to affect the quality of **storm water** discharges from the construction site;
 - b. Minimize erosion on disturbed areas and minimize the discharge of sediment and other pollutants in storm water runoff;
 - c. Describe practices to be used to reduce pollutants in **storm water** discharges from the construction site; and
 - d. Assure compliance with the terms and conditions of this permit.
3. Once a definable area has achieved **final stabilization**, you may mark this on your **SWPPP** and no further **SWPPP** or inspection requirements apply to that portion of the site (e.g., earth-disturbing activities around one of three buildings in a complex are done and the area is finally **stabilized**, one mile of a roadway or pipeline project is done and finally **stabilized**, etc).
4. You must implement the **SWPPP** as written from commencement of **construction activity** until **final stabilization** is complete.

B. Pollution Prevention Plan Contents: Site and Activity Description

1. The **SWPPP** must describe the nature of the **Construction Activity**, including:
 - a. The function of the project (e.g., low density residential, shopping mall, highway, etc.);
 - b. The intended sequence and timing of activities that disturb soils at the site;
 - c. Estimates of the total area expected to be disturbed by excavation, grading, or other construction activities, including dedicated off-site borrow and fill areas; and
 - d. A general location map (e.g., USGS quadrangle map, a portion of a city or county map, or other map) with enough detail to identify the location of the construction site and **waters of the state** within one mile of the site.
2. The **SWPPP** must contain legible site map(s) showing the entire site during grading, construction, and post-construction phases, identifying:
 - a. Direction(s) of **storm water** flow and approximate slopes anticipated after major grading activities;
 - b. Areas of soil disturbance and areas that will not be disturbed;
 - c. Locations of major structural and nonstructural **Best Management Practices (BMPs)** identified in the **SWPPP**;
 - d. Locations where stabilization practices are expected to occur;
 - e. Locations of off-site material, waste, borrow or equipment storage areas;
 - f. Locations of all **Waters of the State** (including wetlands);
 - g. Locations where **storm water** discharges to a surface water; and
 - h. Areas where **final stabilization** has been accomplished and no further construction-phase permit requirements apply.

3. The **SWPPP** must describe and identify the location and description of any **storm water** discharge associated with industrial activity other than construction at the site. This includes **storm water** discharges from dedicated asphalt plants and dedicated concrete plants, which are covered by this permit.

C. Pollution Prevention Plan Contents: Controls to Reduce Pollutants

1. The **SWPPP** must include a description of all pollution control measures (i.e., **BMPs**) that will be implemented as part of the **Construction Activity** to control pollutants in **storm water** discharges. For each major activity identified in the project description the **SWPPP** must clearly describe appropriate control measures and the general sequence during the construction process in which the measures will be implemented.
2. The **SWPPP** must include a description of interim and permanent stabilization practices for the site including a schedule of when the practices will be implemented.
3. The following records must be maintained as part of the **SWPPP**:
 - a. Dates when major grading activities occur;
 - b. Dates when construction activities temporarily or permanently cease on a portion of the site; and
 - c. Dates when stabilization measures are initiated.
4. The **SWPPP** must include a description of structural practices to divert flows from exposed soils, retain/detain flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site.
5. The **SWPPP** must include a description of all post-construction **storm water** management measures that will be installed during the construction process to control pollutants in **storm water** discharges after construction operations have been completed. Such measures must be designed and installed in compliance with applicable federal, state, and local requirements. Maintenance plans of permanent management measures must be included in the **SWPPP**.
6. The **SWPPP** must describe measures to prevent the discharge of solid materials, including building materials and cement truck washout to **waters of the state**, except as authorized by a permit issued under section 404 of the CWA.
7. The **SWPPP** must describe measures to minimize, to the extent practicable, off-site vehicle tracking of sediments onto paved surfaces and the generation of dust.
8. The **SWPPP** must include a description of construction and waste materials expected to be stored on-site with updates as appropriate. The **SWPPP** must also include a description of controls, including storage practices, to minimize exposure of the materials to **storm water**, and **spill prevention control and countermeasure** practices.
9. The **SWPPP** must include a description of pollutant sources from areas other than construction (including **storm water** discharges from dedicated asphalt plants and dedicated concrete plants), and a description of controls and measures that will be implemented at those sites to minimize pollutant discharges.

D. Non-Storm Water Discharge Management

The **SWPPP** must identify all allowable sources of non-**storm water** discharges listed in Part I.C.2 of this permit, except for flows from fire fighting activities that are combined with **storm water** discharges associated with **Construction Activity** at the site. Non-**storm water** discharges should be eliminated or reduced to the extent feasible. The **SWPPP** must identify and ensure the implementation of appropriate pollution prevention measures for the non-**storm water** component(s) of the discharge.

E. Maintenance of Controls

1. All erosion and **sediment control** measures and other protective measures identified in the **SWPPP** must be maintained in effective operating condition. If site inspections required by Part III.I identify **BMPs** that are not operating effectively, maintenance must be performed within seven days and before the next storm event whenever practicable to maintain the continued effectiveness of **storm water** controls.

2. If existing **BMPs** need to be modified or if additional **BMPs** are necessary for any reason, implementation must be completed before the next storm event whenever practicable. If implementation before the next storm event is impracticable, the situation must be documented in the **SWPPP** and alternative **BMPs** must be implemented as soon as possible.
3. Sediment from sediment traps or sedimentation ponds must be removed when design capacity has been reduced by 50 percent.

F. Permit Eligibility Related to Endangered Species

The **SWPPP** must include documentation supporting a determination of permit eligibility with regard to Endangered Species, including:

1. Information on whether state or federally-listed endangered or threatened species, or designated critical habitat may be in the project area;
2. Whether such species or critical habitat may be adversely affected by **storm water** discharges or **storm water** discharge-related activities from the project;
3. Any correspondence for any stage of project planning between the U.S. Fish and Wildlife Service (FWS), Nebraska Game and Parks Commission (NGPC), EPA, NDEQ or others and you regarding listed species and critical habitat, including any notification that delays your authorization to discharge under this permit;
4. A description of measures necessary to protect state- and federally-listed endangered or threatened species, or state and federally-designated critical habitat. The **permittee** must describe and implement such measures to maintain eligibility for **coverage** under this permit.

G. Copy of Permit Requirements

Copies of this permit and of the signed and certified **CSW-NOI** form that was submitted to NDEQ must be included in the **SWPPP**. Also, upon receipt, a copy of the letter from the NDEQ notifying you of their receipt of your administratively complete **CSW-NOI** must also be included as a component of the **SWPPP**.

H. Applicable State, or Local Requirements

The **SWPPP** must be consistent with all applicable federal, state, or local requirements for soil and erosion control and **storm water** management, including updates to the **SWPPP** as necessary to reflect any revisions to applicable federal, state, or local requirements for soil and erosion control.

I. Inspections

1. Inspections must be conducted at least once every fourteen (14) calendar days, and within 24 hours of the end of a storm event of 0.5 inches or greater. Any delay in the replacement or maintenance of non-functional **BMPs** beyond seven (7) calendar days shall be documented in the **SWPPP** with sufficient detail as to explain the reason for the delay.
2. Inspection frequency may be reduced to at least once every month if:
 - a. The entire site is temporarily **stabilized**;
 - b. Runoff is unlikely due to winter conditions (e.g., site is covered with snow, ice, or the ground is frozen);
 - c. Reduced inspection frequency does not relieve the permittee of the maintenance responsibilities during interim periods.
3. Inspections must be conducted by qualified personnel (provided by the **operator** or cooperatively by multiple **operators**). “Qualified personnel” means a person knowledgeable in the principles and practice of erosion and **sediment controls** who possesses the skills to assess conditions at the construction site that could impact **storm water** quality and to assess the effectiveness of any erosion and **sediment control** measures selected to control the quality of **storm water** discharges from the **construction activity**.

4. Inspections must include all areas of the site disturbed by **construction activity** and areas used for storage of materials that are exposed to precipitation. Inspectors must look for evidence of, or the potential for, pollutants entering the **storm water** conveyance system. Erosion and **sediment control** measures identified in the **SWPPP** must be observed to ensure proper operation. Discharge locations must be inspected to ascertain whether control measures are effective in preventing significant impacts to **waters of the state**, where accessible. Where discharge locations are inaccessible, nearby downstream locations must be inspected to the extent that such inspections are practicable. Locations where vehicles enter or exit the site must be inspected for evidence of off-site sediment tracking.
5. Utility line installation, pipeline construction, and other examples of long, narrow, linear construction activities may limit the access of inspection personnel to the areas described above. Inspection of these areas could require that vehicles compromise temporarily or even permanently **stabilized** areas, cause additional disturbance of soils, and increase the potential for erosion. In these circumstances, controls must be inspected on the same frequencies as other construction projects, but representative inspections may be performed. For representative inspections, personnel must inspect controls along the construction site for 0.25 mile above and below each access point where a roadway, undisturbed right-of-way, or other similar feature intersects the construction site and allows access to the areas described above. The conditions of the controls along each inspected 0.25 mile segment may be considered as representative of the condition of controls along that reach extending from the end of the 0.25 mile segment to either the end of the next 0.25 mile inspected segment, or to the end of the project, whichever occurs first.
6. For each inspection required above, you must complete an inspection report. At a minimum, the inspection report must include:
 - a. The inspection time and date;
 - b. Names, titles, and qualifications of personnel making the inspection;
 - c. Weather information for the period since the last inspection (or since commencement of **construction activity** if the first inspection) including a best estimate of the beginning of each storm event, duration of each storm event, approximate amount of rainfall for each storm event (in inches), and whether any discharges occurred;
 - d. Weather information and a description of any discharges occurring at the time of the inspection;
 - e. Location(s) of discharges of sediment or other pollutants from the site;
 - f. Location(s) of **BMPs** that need to be maintained;
 - g. Location(s) of **BMPs** that failed to operate as designed or proved inadequate for a particular location;
 - h. Monitoring results if requested;
 - i. Records of the last grading activity;
 - j. Location(s) where additional **BMPs** are needed that did not exist at the time of inspection; and
 - k. Corrective action required including any changes to the **SWPPP** necessary and implementation dates.

A record of each inspection and of any actions taken must be retained as part of the **SWPPP** for at least three years from the date that permit **coverage** expires or is terminated. The inspection reports must identify any incidents of non-compliance with the permit conditions. Where a report does not identify any incidents of non-compliance, the report must contain a certification that the construction project or site is in compliance with the **SWPPP** and this permit. The report must be signed in accordance with Part VI.D.6 of this permit.

J. Maintaining an Updated Plan

1. The **SWPPP**, including the site map, must be amended whenever there is a change in design, construction, operation, or maintenance at the construction site that has or could have a significant effect on the discharge of pollutants to **waters of the state** that has not been previously addressed in the **SWPPP**.
2. The **SWPPP** must be amended if during inspections or investigations by site staff, or by local, state, or federal officials, it is determined that the **SWPPP** is ineffective in eliminating or significantly minimizing pollutants in **storm water** discharges from the construction site.

3. Based on the results of an inspection, the **SWPPP** must be modified as necessary to include additional or modified **BMPs** designed to correct problems identified. Revisions to the **SWPPP** must be completed within seven (7) calendar days following the inspection. Implementation of these additional or modified **BMPs** must be accomplished as described in Part III.E.

K. Signature, Plan Review and Making Plans Available

1. A copy of the **SWPPP** (including a copy of the permit), **CSW-NOI**, and the letter from **NDEQ** notifying you of the receipt of the complete and accurate **CSW-NOI** must be retained at the construction site or other location easily accessible during normal business hours. The **SWPPP** must be made available upon request to Federal, State, and local agencies, from the date of commencement of construction activities to the date of **final stabilization**.
2. A sign or other notice must be posted conspicuously near the main entrance of the construction site. If displaying near the main entrance is infeasible, the notice can be posted in a local public building such as the town hall or public library. The sign or other notice must contain the following information:
 - a. A copy of the completed **CSW-NOI** as submitted to the NDEQ; and
 - b. If the location of the **SWPPP** or the name and telephone number of the contact person for scheduling **SWPPP** viewing times has changed (i.e., is different than that submitted to NDEQ in the **CSW-NOI**), the current location of the **SWPPP** and name and telephone number of a contact person for scheduling viewing times. For linear projects, the sign or other notice must be posted at a publicly accessible location near the active part of the construction project (e.g., where a pipeline project crosses a public road).

L. Management Practices

1. All control measures must be properly selected, installed, and maintained in accordance with any relevant manufacturer specifications and good engineering practices. If periodic inspections or other information indicates a control has been used inappropriately, or incorrectly, the **operator** must replace or modify the control for site situations as soon as practicable.
2. If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts. Sediment escaping the construction site indicates there may be insufficient **BMPs** to control runoff.
3. Litter, construction debris, and construction chemicals that could be exposed to **storm water** must be prevented from becoming a pollutant source in **storm water** discharges.
4. Except as provided below, stabilization measures must be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the **construction activity** in that portion of the site has temporarily or permanently ceased.
 - a. Where stabilization by the 14th day is precluded by snow cover or frozen ground conditions, stabilization measures must be initiated as soon as practicable.
 - b. Where **construction activity** on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 14 days, temporary stabilization measures do not have to be initiated on that portion of the site.
 - c. In semiarid and drought-stricken areas where initiating perennial vegetative stabilization measures is not possible within 14 days after **construction activity** has temporarily or permanently ceased, final vegetative stabilization measures must be initiated as soon as practicable.
5. Velocity dissipation devices must be placed at discharge locations and along the length of any **outfall** channel to provide a non-erosive flow velocity from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g., no significant changes in the hydrological regime of the receiving water).

M. Final Stabilization

The **Permittee** shall be responsible for ensuring that **final stabilization** is accomplished on all non-**impervious surfaces** of the authorized construction site prior to submitting form CSW-NOT.

1. **Coverage** under this permit is normally terminated 180 calendar days after:
 - a. All soil disturbing **construction activity** has been completed;
 - b. A uniform perennial vegetative cover with a minimum density of 70 percent of the native background vegetative cover, has been established on all non-**impervious surfaces** and areas not covered by permanent structures unless equivalent permanent stabilization (such as riprap, gabions, and geotextiles) measures have been employed;
 - c. All permanent drainages, constructed to drain water from the site, has been **stabilized** to prevent erosion;
 - d. All **temporary erosion protection** and **sediment control BMPs** have been removed without compromising the permanent erosion protection and **sediment control BMPs**;
 - e. All sediment build-up has been removed from conveyances and basins that are to be used as permanent water quality management **BMPs**. The cleanout of permanent basins used as temporary **BMPs** during construction shall be sufficient to return the basin to design capacity.
 - f. Responsibility for long-term maintenance of permanent BMPs must be assigned.
 - g. **Construction activity** conducted on or through agricultural or silvicultural land shall be considered finally **stabilized** upon return to the preexisting agriculture or silviculture use;
 - h. **Construction activity** conducted at new industrial facilities that will operate the site in an exposed manner (such as limestone mining and solid waste landfills) shall be considered finally **stabilized** upon commencement of industrial activity consistent with the industrial use and **coverage** under the appropriate **NPDES** permit for industrial **storm water**.

PART IV. SPECIAL CONDITIONS, MANAGEMENT PRACTICES, OTHER NON-NUMERIC LIMITATIONS

A. Requiring an Individual Permit or an Alternative General Permit

1. NDEQ may require you to apply for and/or obtain either an individual **NPDES** permit or an alternative **NPDES** general permit. Any interested person may petition NDEQ to take action under this paragraph. If NDEQ requires you to apply for an individual **NPDES** permit, NDEQ will notify you in writing that a permit application is required. This notification will include a brief statement of the reasons for this decision and an application form. In addition, if you are an existing **permittee** covered under this permit, the notice will set a deadline to file the application, and will include a statement that on the effective date of issuance or denial of the individual **NPDES** permit or the alternative general permit as it applies to you, **coverage** under this general permit will automatically terminate. Applications must be submitted to NDEQ. NDEQ may grant additional time to submit the application upon your request. If you are covered under this permit and you fail to submit in a timely manner an individual **NPDES** permit application as required by NDEQ, then the applicability of this permit to you is automatically terminated at the end of the day specified by NDEQ as the deadline for application submittal.
2. You may request to be excluded from the **coverage** of this general permit by applying for an individual permit. In such a case, you must submit an individual application in accordance with the requirements of NDEQ Title 119, with reasons supporting the request to NDEQ. The request may be granted by issuance of an individual permit or an alternative general permit if your reasons are adequate to support the request.
3. When an individual **NPDES** permit is issued to you, who are otherwise subject to this permit, or you are authorized to discharge under an alternative **NPDES** general permit, the applicability of this permit to you is automatically terminated on the effective date of the individual permit or the date of authorization of **coverage** under the alternative general permit, whichever the case may be. If you, who are otherwise subject to this permit, are denied an individual **NPDES** permit or an alternative **NPDES** general permit,

the applicability of this permit to you is automatically terminated on the date of such denial, unless otherwise specified by NDEQ.

B. Oil and Hazardous Substances/Spill Notification

The discharge of hazardous substances or oil in **storm water** discharges from the construction site must be prevented or minimized in accordance with the **SWPPP**. This permit does not authorize the discharge of hazardous substances or oil resulting from an on-site spill. The **Permittee** shall conform to the provisions set forth in NDEQ Title 126, *Rules and Regulations Pertaining to the Management of Wastes* and federal reporting requirements of 40 CFR Part 110, 40 CFR Part 117 and 40 CFR Part 302 relating to spills or other releases of oil or hazardous substances.

If the **permittee** knows, or has reason to believe, that a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under NDEQ Title 126, 40 CFR Part 110, 40 CFR Part 117 and 40 CFR Part 302, occurs during a 24-hour period:

1. **Permittee** shall immediately notify the **Department** of a release of oil or hazardous substances. During office hours (i.e., 8:00 a.m. to 5:00 p.m., Monday through Friday, except holidays), notification shall be made to the **Department** at telephone numbers (402) 471-2186 or (877) 253-2603 (toll free).
2. When NDEQ cannot be contacted, the **Permittee** shall report to the Nebraska State Patrol for referral to the NDEQ Emergency Response Team at telephone number (402) 471-4545. It shall be the **Permittee's** responsibility to maintain current telephone numbers necessary to carry out the notification requirements set forth in this paragraph.
3. **Permittee** must modify the **SWPPP** as required under Part III.J within 7 calendar days of knowledge of the release to: provide a description of the release, the circumstances leading to the release, and the date of the release. Plans must identify measures to prevent the reoccurrence of such releases and to respond to such releases.

C. Attainment of Water Quality Standards After Authorization

1. You must select, install, implement and maintain **BMPs** at your construction site that minimize pollutants in the discharge as necessary to meet applicable water quality standards. In general, except in situations explained in this section, your **SWPPP** developed, implemented, and updated consistent with Part III is considered as stringent as necessary to ensure that your discharges do not cause or contribute to an excursion above any applicable water quality standard.
2. At any time after authorization NDEQ may determine that your **storm water** discharges may cause, have reasonable potential to cause, or contribute to an excursion above any applicable water quality standard. If such a determination is made, NDEQ will require you to:
 - a. Develop a supplemental BMP action plan describing **SWPPP** modifications in accordance with Part III to address adequately the identified water quality concerns;
 - b. Submit valid and verifiable data and information that are representative of ambient conditions and indicate that the receiving water is attaining water quality standards; or
 - c. Cease discharges of pollutants from **Construction Activity** and submit an individual permit application according to Part IV.A.

All written responses required under this part must include a signed certification from the **certifying official**.

D. Discharges Affecting Endangered or Threatened Species

This permit does not replace or satisfy any review requirements for Endangered or Threatened species from new or expanded discharges that adversely impact or contribute to adverse impacts on a listed endangered or threatened species or adversely modify a designated critical habitat. The **owner** must conduct any required review and coordinate with appropriate agencies for any project with the potential of affecting threatened or endangered species, or their critical habitat.

E. Discharges Affecting Historical Places or Archeological Sites

This permit does not replace or satisfy any review requirements for Historic Places or Archeological Sites, from new or expanded discharges which adversely affect properties listed or eligible for listing in the National Register of Historic Places or affecting known or discovered Archeological Sites. The **owner** must be in compliance with National Historic Preservation Act and conduct all required review and coordination related to historic preservation, including significant anthropological sites and any burial sites, with the Nebraska Historic Preservation Officer. You must comply with all applicable state, and local laws concerning the protection of historic properties and places, your discharge authorization under this permit is contingent upon this compliance.

F. Activities/Discharges subject to other Applicable Regulations

This permit does not replace or satisfy any other applicable regulatory requirements that the applicant/**permittee** is subject to. The initiator of any controlled/regulating activity is the sole responsible party for obtaining authorization or permit **coverage** and for maintaining compliance with any applicable laws, regulations or rules that may apply to their activities.

G. Continuation of the Expired General Permit

If this permit is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with the Administrative Procedure Act and remain in force and effect. If you were granted permit coverage prior to the expiration date, you will automatically remain covered by the continued permit until reissuance or replacement of this permit, at which time you must comply with the conditions of Part II C.2; or

1. Submit of a Notice of Termination form; or
2. Apply for coverage under an individual permit for the project's discharges; or
3. If NDEQ determines a general permit will not be reissued, you must seek coverage under an alternative general permit or an individual permit.

PART V. TERMINATION, TRANSFER OR REASSIGNMENT OF PERMIT COVERAGE

A. Notice of Termination Requirements

You may only submit a **Notice of Termination (NOT)** after one or more of the following conditions have been met:

1. **Final stabilization** has been achieved on all portions of the site for which you are responsible;
2. Another **operator** has assumed control according to Part VI.D.6 over all areas of the site that have not been finally **stabilized**;
3. **Coverage** under an individual or alternative general **NPDES** permit has been obtained; or
4. For residential construction only, **temporary erosion protection** has been completed and the residence has been reassigned to the homeowner.

The **CSW-NOT** must be submitted within 30 days of one of the above conditions being met. Authorization to discharge terminates at midnight of the day the **CSW-NOT** is signed.

B. Submitting a Notice of Termination

It is your responsibility to submit a complete and accurate **Notice of Termination (CSW-NOT)** form *Attachment #3*. If NDEQ notifies dischargers (either directly, by public notice, or by making information available on the Internet) of other **CSW-NOT** form options (e.g., electronic submission), you may take advantage of those options to satisfy the requirements of Part V.

1. After one or more of the **Notice of Termination** Requirements in Part V.A has been met, submit the following information to the NDEQ:
 - a. The **NPDES** permit authorization number for the **storm water** discharge;

- b. The basis for submission of the **CSW-NOT**, including: **final stabilization** has been achieved on all portions of the site for which the **permittee** is responsible; another **operators/permittee** has assumed control over all areas of the site that have not been finally **stabilized**; **coverage** under an alternative **NPDES** permit has been obtained; or, for residential construction only, **temporary erosion protection** has been completed and the residence has been transferred to the homeowner;
- c. The **Certifying Official's** legal name, address and phone number;
- d. The name of the project, address (or a description of location if no street address is available), and county of the construction site for which the notification is submitted; and
- e. A certification statement signed and dated by a **certifying official**.

C. Transfer of Permit

When responsibility for **storm water** discharges at a construction site changes from one entity to another, the **permittee** shall submit a completed Notice of Transfer, *Attachment #2*, that is signed in accordance with Part VI.D.6 of this permit.

1. The Notice of Transfer (CSW-Transfer), *Attachment # 2*, includes:
 - a. Permit certification number;
 - b. Name, location, and county for the construction site for which the CSW-Transfer is being submitted;
 - c. Identifying information for the new **permittee**;
 - d. Identifying information for the current **permittee**; and
 - e. Effective date of transfer;
2. Other Requirements of a Permit Transfer:
 - a. If the **storm water** discharge, associated with **construction activity**, is covered by this permit then the new **owner(s)** shall comply with all terms and conditions of this permit.
 - b. A copy of the CSW-Transfer shall be included in the **SWPPP**.
 - c. A **CSW-NOI** shall be submitted to NDEQ by the new owner(s).
 - d. For **construction activity** which is part of a larger **common plan of development**, if the **permittee** transfers ownership of all or any part of property subject to this permit, both the **permittee** and transferee shall be responsible for compliance with this permit for that portion of the project which has been transferred including when the transferred property is less than one acre in area.
 - e. If the new **owner(s)** agree in writing to be solely responsible for compliance with this permit for the property that has been transferred, then the existing **permittee(s)** authorization shall be terminated.

D. Where to Submit

All paperwork must be submitted to the following address:

Water Quality Division
Storm Water
 Suite 400, The Atrium
 1200 'N' Street
 PO Box 98922
 Lincoln, Nebraska 68509-8922

PART VI. STANDARD CONDITIONS AND REQUIREMENTS

These general conditions shall not preempt any more stringent requirements found elsewhere in this permit.

A. Other Conditions

1. Narrative Limits

Discharges authorized under this permit;

 - a. Shall not be toxic to aquatic life in surface **waters of the state**;

- b. Shall not contain pollutants at concentrations or levels that produce objectionable films, colors, turbidity, deposits, or noxious odors in the receiving stream or waterway; and
 - c. Shall not contain pollutants at concentrations or levels that cause the occurrence of undesirable or nuisance aquatic life in the receiving stream.
2. Inspection and Entry
- The **permittee** shall allow the **Director** or his appointed representative, upon the presentation of his identification and at a reasonable time:
- a. To enter upon the **permittee's** premises where a regulated **construction activity** is located or conducted, or records are required to be kept under the terms and conditions of this permit;
 - b. To have access to and copy any records required to be kept under the terms and conditions of this permit;
 - c. To inspect any facilities, equipment (including monitoring and control), practices or operations regulated or required in this permit; and
 - d. To sample or monitor any substances or parameters at any location.
3. Changes in Discharge

Any revision in the size of **construction activity** (such as the addition of disturbed acres not previously identified under the original **CSW-NOI** form), which will result in new or substantially increased discharges of pollutants or a change in the nature of the discharge of pollutants must be reported by the **permittee** seven (7) calendar days prior to the expansion, increases or modifications by submitting a modification of the original form **CSW-NOI** or by submitting a new form **CSW-NOI**. Permit authorization may be modified or revoked and reissued as a result of this notification to maintain compliance with applicable state or federal regulations.

B. Procedures for Modification or Revocation

Permit modification or revocation will be conducted according to Title 119, Chapter 24.

If there is evidence indicating that the **storm water** discharges authorized by this permit cause, have the reasonable potential to cause or contribute to an excursion above any applicable water quality standard, you may be required to obtain an individual permit in accordance with Part IV.A of this permit, or the permit may be modified to include different limitations and/or requirements.

C. Timing of Permit Modification

1. NDEQ may elect to modify the permit prior to its expiration (rather than waiting for the new permit cycle) to comply with any new statutory or regulatory requirements, such as for effluent limitation guidelines, that may be promulgated in the course of the current permit cycle.

D. Management Requirements

1. Duty to Comply

All authorized discharges shall be consistent with the terms and conditions of this permit. The **Permittee** shall comply with all conditions of this permit. Failure to comply with these conditions may be grounds for administrative action or enforcement proceedings including injunctive relief and civil or criminal penalties. The filing of a request by the **Permittee** for a permit modification, revocation and re-issuance, termination or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

2. Duty to Mitigate

The **Permittee** shall take all reasonable steps to minimize, prevent or correct any adverse impact to the environment resulting from noncompliance with this permit, including such accelerated or additional monitoring as required by the NDEQ to determine the nature and impact of the noncompliant discharge.

3. Duty to Provide Information

The **Permittee** shall furnish to the **Department** within seven (7) calendar days, any information which the **Department** may request to determine whether cause exists for modifying, revoking and reissuing, or terminating permit **Coverage**; or to determine compliance with this permit. The **Permittee** shall also furnish to the **Department** upon request, copies of records retained as a requirement of this permit.

4. Reporting Requirements

The **Permittee** shall be responsible for reporting any instance of non-compliance with the terms and conditions of this permit in accordance with NDEQ Title 119, Chapter 14. In most instances, initial notification shall be made as soon as the **Permittee** becomes aware of the non-compliance. A written follow-up shall be submitted within five (5) days of reporting the non-compliance. The submittal of a written noncompliance report does not relieve the **Permittee** of any liability from enforcement proceedings that may result from the violation of permit or regulatory requirements. The written notice shall include, at a minimum:

- a. A description of the discharge and cause of noncompliance;
- b. The period of noncompliance, including exact dates and times, or if not corrected, the anticipated time the noncompliance is expected to continue; and
- c. The steps taken to reduce, eliminate, and prevent the reoccurrence of the noncompliance.

5. Proper Operation and Maintenance

The **Permittee** shall, at all times, maintain in good working order and operate as efficiently as possible, any facilities or systems of control installed by the **Permittee** in order to achieve compliance with the terms and conditions of this permit. This would include, but not be limited to, effective performance based on designed facility removals, effective management, adequate **Operator** staffing and training, adequate laboratory and process controls, and adequate funding that reflects proper user fee schedules.

6. Signatory Requirements

All reports and applications required by this permit or submitted to maintain compliance with this permit shall be signed and certified as set forth in this section.

- a. Permit applications shall be signed by a **certifying official** who meets the following criteria:
 - 1) For a corporation: a **responsible corporate officer**;
 - 2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - 3) For a municipality, state, federal or other public facility: by either a principal executive officer or ranking elected official, chief executive officer of the agency, or a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
- b. The discharge monitoring reports and other information may be signed by the **certifying official**.
- c. The **certifying official** designates an **authorized representative**. The **authorized representative** is responsible for the overall implementation of the **SWPPP** (i.e., the general contractor).
- d. Any change in the signatories shall be submitted to the **Department**, in writing, within seven (7) days after the change, but no later than with the submission of information required by the **Department** to be submitted while the new signatory has taken responsibility.
- e. All applications, reports and information submitted as a requirement of this permit, shall contain the following certification statement:

"I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."

E. Monitoring and Records Requirements

1. Routine periodic monitoring of storm water discharges is not required unless requested by the Department. Monitoring may be required by the Department for any of the following reasons:
 - a. The identification of potential ground and / or surface water quality impacts to which the permittee may be contributing;
 - b. The failure by the permittee to implement pollution prevention or pollution control procedures set forth in the SWPPP;
 - c. The recognition of potential pollutant sources during site inspections or investigations; and/or
 - d. To obtain information for watershed basin or industry group studies.
2. Retention of Records
The **Permittee** shall retain records of all monitoring activities for a period of at least three years as set forth in NDEQ Titles 119, Chapter 14 001.02. The types of records that must be retained include, but are not limited to:
 - a. Calibration and maintenance records;
 - b. Original strip chart recordings;
 - c. Copies of all reports required by this permit;
 - d. Monitoring records and information; and
 - e. Electronically readable data.
3. Record Contents
As set forth in NDEQ Title 119, Chapter 14, records of sampling or monitoring information shall include:
 - a. The date(s), exact place, time and methods of sampling or measurements;
 - b. The name(s) of the individual(s) who performed the sampling or measurements;
 - c. The date(s) the analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or methods used;
 - f. The results of such analyses; and
 - g. Laboratory data, bench sheets and other required information.

F. General Requirements

1. Permit Attachments
The attachments to this permit (e.g., forms and guidance) may be modified without a formal modification of the permit.
2. Information Available
All permit applications, fact sheets, permits, discharge data, monitoring reports, and any public comments concerning such shall be available to the public for inspection and copying, unless such information about methods or processes is entitled to protection as trade secrets of the **Owner** or **Operator** under Neb. Rev. Stat. §81-1527, (Cum. Supp. 1992) and NDEQ Title 115, Chapter 4.
3. Permit Actions
This permit may be modified, suspended, revoked or reissued, in part or in whole, in accordance with the regulations set forth in NDEQ Titles 119, Chapter 24. In addition, this permit may be modified, revoked and reissued to incorporate standards or limitations issued pursuant to Sections 301(b)(b)(c), 301(b)(b)(d), 304(b)(b), 307(a)(b), or 405(d) of the Clean Water Act and Public Law 100-4.

4. Property Rights

Coverage under this permit does not convey any property rights of any sort or any exclusive privileges nor does it authorize any damage to private property or any invasion of personal rights nor any infringement of federal, state or local laws or regulations.

5. Severability

If any provision of this permit is held invalid, the remainder of this permit shall not be affected.

6. Other Rules and Regulations Liability

The issuance of this permit in no way relieves the obligation of the **Permittee** to comply with other rules and regulations of the **Department**.

7. Penalties

Nothing in this permit shall preclude the initiation of any legal action or relieve the **Permittee** from any responsibilities, liabilities or penalties under Section 311 of the Clean Water Act. Violations of the terms and conditions of this permit may result in the initiation of criminal and/or civil actions. Civil penalties can result in fines of up to \$10,000.00 per day (Neb. Rev. Stat. §81-1508, as amended to date). Criminal penalties for willful or negligent violations of this permit may result in penalties of \$10,000.00 per day or by imprisonment. Violations may also result in federal prosecution.

PART VII. DEFINITIONS

Authorized Representative: Individual or position designated the authorization to submit reports, notifications, or other information requested by the **Director** on behalf of the **Owner** under the circumstances that the authorization is made in writing by the **Owner**, the authorization specifies the individual or position who is duly authorized, and the authorization is submitted to the **Director**.

Best Management Practices (BMPs): Erosion and **Sediment Control** and water quality management practices that are the most effective and practicable means of controlling, preventing, and minimizing degradation of surface water, including avoidance of impacts, construction-phasing, minimizing the length of time soil areas are exposed, prohibitions, and other management practices published by state or designated area-wide planning agencies.

Certifying Official

- For a corporation. By a **Responsible Corporate Officer**, which means:
 - A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or
 - The manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- For a partnership or sole proprietorship: By a general partner or proprietor, respectively.
- For a municipality, State, Federal, or other public agency.
 - By either a principal executive officer of the agency, or
 - A senior executive officer having responsibility for the operations of a principal geographic unit of the agency.

Combined Sewer System (CSO): Is defined as a collection system that collects both **Storm Water** and sanitary wastewater with **outfalls** discharging directly into the **Waters of the State**.

Common Plan of Development or Sale: A contiguous area where multiple separate and distinct land disturbing activities may be taking place at different times, on different schedules, but under one proposed plan. One plan is broadly defined to include design, permit application, advertisement or physical demarcation indicating that land-disturbing activities may occur.

Construction Activity: Includes **Large Construction Activity** and **Small Construction Activity**. This includes a disturbance to the land that results in a change in the topography, existing soil cover (both vegetative and non-vegetative), or the existing soil topography that may result in accelerated **Storm Water** runoff, leading to soil erosion and movement of sediment into **Waters of the State** or urban drainage systems. **Construction Activity** includes the disturbance of less than one acre of total land area that is a part of a larger **Common Plan of Development or Sale** if the larger common plan will ultimately disturb one (1) acre or more and includes all areas of **Support Activity**.

Coverage: A **Permittee** status of compliant operation under the terms and conditions of this general permit once a **Discharge Authorization Number** has been obtained until that authorization is terminated.

Department: Nebraska Department of Environmental Quality.

Director: The **Director** of the Nebraska Department of Environmental Quality.

Discharge Authorization Number: A specific authorization number (NER 1xx xxx) issued to a specific **Permittee** that meets the application requirements for **Coverage** under this general permit.

Erosion Prevention: Measures employed to prevent sediment from moving from its existing location including but not limited to: soil stabilization practices, limited grading, mulch, temporary or permanent cover, and construction phasing.

Final Stabilization: Condition where all soil disturbing activities at the site have been completed and a uniform perennial vegetative cover with a minimum density of 70 percent of the native background vegetative cover has been established on all non-**Impervious Surfaces** and areas not covered by permanent structures unless equivalent permanent stabilization (such as riprap, gabions, or geotextiles) measures have been employed.

Impervious Surface: A constructed hard surface that either prevents or retards the entry of water into the soil and causes water to flow off the surface in greater quantities and at an increased rate of flow than prior to development (such as streets, sidewalks, parking lots, roofs, and in some cases highly compacted soil).

Large Construction Activity: Is the clearing, grading and excavating resulting in a land disturbance that will disturb equal to or greater than five acres of land or will disturb less than five acres of total land area but is part of a Larger **Common Plan of Development or Sale** that will ultimately disturb equal to or greater than five acres. Large Construction Activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site.

Municipal Separate Storm Sewer System (MS4) is a separate **storm water** sewer system in urbanized cities and counties as having populations of 10,000 or greater as determined by the Bureau of Censes 1990 Decennial Censes.

National Pollutant Discharge Elimination System (NPDES): Program for issuing, modifying, revoking, reissuing, terminating, monitoring, and enforcing permits under the Clean Water Act (Sections 301, 318, 402, and 405) and C.F.R. Title 33, Sections 1317, 1328, 1342, and 1345.

Notice of Termination (CSW-NOT): Notice to terminate **Coverage** under this permit after construction is completed, the site has undergone **Final Stabilization**, and maintenance agreements for all permanent facilities have been established, in accordance with all applicable conditions of this permit.

Operator: Person (often the general contractor) designated by the **Owner**, who has day-to-day operational control and/or the ability to modify project plans and specifications related to the **SWPPP**. The person shall be knowledgeable in those areas of the permit for which the **Operator** is responsible.

Outfall: A discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, or container from which pollutants from **Construction Activity** are or may be discharged into **Waters of the State**.

Owner: Person or party possessing the title of the land on which the construction activities will occur; or if the **Construction Activity** is for a lease holder, the party or individual identified as the lease holder; or the contracting government agency responsible for the **Construction Activity**.

Permittee: Person(s), firm, or governmental agency or other institution that signs the application submitted to the **Department** and is responsible for compliance with the terms and conditions of this permit.

Receiving Waters: A general term used to describe all **Waters of the State**. **Responsible Corporate Officer:** means the **Owner** or **Operator** meeting either of the following conditions: A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental law as and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

Sediment Control: Methods employed to prevent sediment from leaving the construction site after it has eroded from its existing location. **Sediment Control** practices include silt fences, sediment traps, earth dikes, drainage swales, check dams, subsurface drains, pipe slope drains, storm drain inlet protection, and temporary or permanent sedimentation basins.

Silvicultural Discharges: "Silvicultural point source" means any discernible, confined, and discrete conveyance related to rock crushing, gravel washing, log sorting, or log storage facilities which are operated in connection with silvicultural activities and from which pollutants are discharged into **Waters of the State**. The term does not include nonpoint source silvicultural activities such as nursery operations, site preparation, reforestation and subsequent cultural treatment, thinning, prescribed burning, pest and fire control, harvesting operations, surface drainage, and road construction and maintenance from which there is natural runoff during precipitation events.

Small Construction Activity: Is the clearing, grading, and excavation that result in land disturbance of equal to or greater than one acre and less than five acres including disturbance of less than one acre of total land area that is part of a larger **Common Plan of Development or Sale** if the larger common plan will ultimately disturb equal to or greater than one and less than five acres. **Small Construction Activity** does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility.

Spill Prevention Control and Countermeasure (SPCC): Federal regulation set forth in 40 CFR 112 requiring a **SPCC Plan** to be developed for facilities that store fuels and hazardous substances that meet the following criteria:

- Above ground fuel storage with the capacity for at least 660 gallons.
- Two or more above ground fuel storage tanks with the capacity for at least 1,320 gallons.
- Below ground fuel storage tanks with the capacity for at least 42,000 gallons.

Stabilized: Exposed ground surface has been covered by appropriate materials such as mulch, staked sod, riprap, wood fiber blanket, established grass bed, or other material that prevents erosion from occurring.

Storm Water: **Storm water** runoff, snow melt runoff, and surface runoff and drainage.

Storm Water Pollution Prevention Plan (SWPPP): A plan for **Storm Water** discharge that includes **Erosion Prevention** measures and **Sediment Controls** that, when implemented, will decrease soil erosion on a parcel of land and decrease off-site, non-point source pollution.

Support Activity: Associated **Construction Activity** that is directly related to the construction site (such as concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) required to have **NPDES permit Coverage** for discharges of **Storm Water** that may be located on site or in a remote location, but is not a commercial operation serving multiple unrelated construction projects by different **operators** nor operates beyond the completion of the **Construction Activity** at the last construction project it supports.

Temporary Erosion Protection: Methods employed to temporarily prevent erosion during the construction sequence or while **Final Stabilization** is being established. Examples of **Temporary Erosion Protection** include; straw, mulch, wood chips, and erosion netting.

Total Maximum Daily Load (TMDL): The sum of the individual wasteload allocations (WLAs) for point sources and load (Load Allocations) for nonpoint sources and natural background levels for a specific pollutant. The **Department** establishes **TMDLs** that are expressed in terms of either mass per unit of time, relative level of toxicity, or other appropriate measure.

Toxic Pollutant: Pollutants or combination of pollutants, including disease causing agents, after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism, either directly from the environment or indirectly by ingestion through food chains will, on the basis of information available to the **Department**, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunction (including malfunctions in reproduction) or physical deformations, in such organisms or their offspring.

Waters of the State: All waters within the jurisdiction of this state including all streams, lakes, ponds, impounding reservoirs, marshes, wetlands, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, situated wholly or partly within or bordering upon the state.

Appendix A: Abbreviations

BMP: Best Management Practice(s)

CFR: Code of Federal Regulations

CSO: Combined Sewer Overflow

CSW: Construction **Storm Water**

CSW-NOI: Notice of Intent

CSW-NOT: Notice of Termination

NDEQ: Nebraska Department of Environmental Quality

NDEQ Title 115: *Rules of Practice and Procedure*

NDEQ Title 117: *Nebraska Surface Water Quality Standards*

NDEQ Title 118: *Ground Water Quality Standards and Use Classification*

NDEQ Title 119: *Rules and Regulations Pertaining to the Issuance of Permits under the **National Pollutant Discharge Elimination System***

NDEQ Title 126: *Rules and Regulations Pertaining to the Management of Wastes*

NDEQ Title 132: *Integrated Solid Waste Management Regulations*

NPDES: National Pollutant Discharge Elimination System

SPCC: Spill Prevention, Control, and Countermeasures

SWPPP: Storm Water Pollution Prevention Plan

TMDL: Total Maximum Daily Load

Appendix B: Listing of the Nebraska Municipal Separate Storm Sewer System NPDES Permits

Cities

Beatrice
Bellevue
Boys Town
Columbus
Dakota City
Fremont
Grand Island
Hastings
Kearney
La Vista
Lexington
Norfolk
North Platte
Omaha
Papillion
Ralston
Scottsbluff
South Sioux City

Counties

Douglas
Dakota
Sarpy

Federal Facility

Offutt Air Force Base

State of Nebraska Facilities

Nebraska Department of Roads
University of Nebraska – Lincoln



Construction Storm Water Notice of Intent (CSW-NOI)

Readiness to Apply (Circle “yes” or “no” as it applies to this project)

Does a reasonable potential exist for permit authorization to be limited? [Part I.C.3] **YES NO**

If the answer to this question is Yes, contact NDEQ at 402-471-4220 before proceeding with this CSW-NOI.

Storm water Pollution Prevention Plan (SWPPP) Part III

- | | | |
|--|------------|-----------|
| a. Has a Storm Water Pollution Prevention Plan been developed for this project? | YES | NO |
| b. Has a qualified individual [Part III A] prepared the SWPPP ? | YES | NO |

Has the following been incorporated into the SWPPP?

- | | | |
|--|------------|-----------|
| c. Site and activity descriptions as per Part III.B; | YES | NO |
| d. Sediment and pollution control measures and record keeping as per Part III.C; | YES | NO |
| e. Erosion prevention measures and record keeping as per Part III.C; | YES | NO |
| f. Inspections, maintenance of BMPs and associated record keeping as per Part III.E, I-J; | YES | NO |
| g. Final stabilization addressed as per Part III.M; | YES | NO |
| h. Does the SWPPP include documentation supporting a determination of permit eligibility with regards to endangered and threatened species and critical habitat?
(Guidance is available on the NDEQ website: www.deq.state.ne.us) | YES | NO |

If any questions in Storm Water Pollution Prevention Plan (SWPPP), “a – h” above, have been answered No, complete those requirements before proceeding with this CSW-NOI.

A. Construction Site Description

- a. **Project Name:** _____
- b. **Physical Address and County** (Indicate general location description if no address is available):

- c. **Project Type:** Residential ____ Commercial/Industrial ____ Linear ____ Other _____
- d. **Project Size:** Total Area (acres): _____ Area to be disturbed (acres): _____
- e. **Identify surface waters within ½ mile of project boundary that will received storm water or discharge from permanent storm water management system.**

- f. **Name of Receiving Waters** (Add attachments if more than two (2) bodies of water and/or Outfalls): _____
Waterbody Type _____ (ditch, pond, stream, river etc.).

- g. **Legal Description ⁽¹⁾:** _____ Quarter of the _____ Quarter,
 _____ Section _____, Township _____ N, Range _____ (E or W)

(1) Applicants may enter a legal description in terms other than those requested. For example: N1/2, Section 8, Township 8 N, Range 6 W.

- h. Include a general location map with enough detail to identify the location of the construction site and waters of the state within one mile of the site. Has the map been included? **YES** **NO**
 (e.g., USGS 7.5 minute quad map, a portion of a city or county map, or equivalent map)

- i. **SWPPP Designer, company, address and phone number:**

_____	_____
First and Last Name	Company Name
_____	_____
Mailing Address	City, State, Zip Code
_____	_____
Phone Number	Email

- j. **SWPPP Location:**

- k. **Project start date** (approximate): _____

- l. **Project end date** (estimated): _____

- m. List any state or federally-listed threatened or endangered species, or state or federally-designated critical habitat that is in your project area to be covered by this permit.

- n. For sites previously authorized under a Construction Storm Water (CSW) permit **and** undergoing a transfer of **owner and / or certifying official**. List the previous NPDES CSW Permit Number:

NER 1 _____.

B. Certification

The appropriate individuals must sign information submitted on this **CSW-NOI** form as required in **NPDES** General Permit NER110000 Part VI.D.6, and below or the application will not be authorized. If more than one certifying official, submit multiple copies of the following information.

All permit applications shall be signed as per Title 119, Chapter 13 *Applications; Signatories* as follows:

002.01 For a corporation. By a **Responsible Corporate Officer**, which means:

- A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or
- The manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

002.02 For a partnership or sole proprietorship: By a general partner or proprietor, respectively.

002.03 For a municipality, State, Federal, or other public agency.

- By either a principal executive officer of the agency, or
- A senior executive officer having responsibility for the operations of a principal geographic unit of the agency.

Certifying Official:

"I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."

Certifying Official / Date: _____ / _____

Certifying Official, company name, address, and phone number:

_____	_____
First and Last Name	Company Name/Applicant
_____	_____
Phone Number	Title
_____	_____
Mailing Address	City, State, Zip Code

Certifying Official #2 (optional)/ Date: _____ / _____

Certifying Official #2, company name, address, and phone number:

_____	_____
First and Last Name	Company Name/Applicant
_____	_____
Phone Number	Title
_____	_____
Mailing Address	City, State, Zip Code

Authorized Representative, company name, address, and phone number:

_____	_____
First and Last Name	Company Name
_____	_____
Phone Number	Title
_____	_____
Mailing Address	City, State, Zip Code

Submit this form to:

Water Quality Division
Storm Water
 Suite 400, The Atrium
 1200 'N' Street
 PO Box 98922
 Lincoln NE 68509-8922



Nebraska Department of Environmental Quality

Construction Storm Water Notice of Transfer (CSW-Transfer)

These prerequisite requirements must be completed prior to completing the CSW-TRANSFER form.

1. Transfer Prerequisites:

- a. Has the current **owner** and/or **permittee** of the **Construction Activity** provided the new **owner** and/or **permittee** with a copy of the **NPDES** General Permit Number NER110000? YES NO
- b. Has the new **owner** and/or **permittee** been made aware that they must submit a Notice of Intent (CSW-NOI) to the **Department** and a copy of the CSW-NOI to the Municipality within whose jurisdiction they are located? (See Appendix B for a list of municipalities to whom this is relevant) YES NO
- c. Has the new owner and/or permittee been made aware of their responsibility to fulfill all requirements of the permit? YES NO
- d. Have all violations (if any) of this permit authorization been disclosed to the new **owner** and/or **permittee**? YES NO

If "NO" has been answered to any of the above, fulfill these requirements before submitting the completed CSW-TRANSFER.

2. Permit & Property Description for Transfer

- a. **Construction Storm water General Permit Authorization Number** site is currently operating under: NER1 ____ .
- b. **Current Project Name** (as submitted on the CSW-NOI):

- c. **Transfer Portion Information** - Identification of the transferred portion of the property (such as a single lot, lot size, lot number, utility right of way, easement, etc.):

- d. **Property Transfer Size:** Total Acres _____; Acres remaining after transfer: _____
- e. **Current Applicant Name:** _____
Certifying Official Name: _____
(These must be the same as on the original CSW-NOI listed in 2.a, b above)
- f. **Mailing Address:** _____

Telephone Number:(____)_____ **(optional) E-Mail:**_____
- g. **Effective Date of Property Transfer:** _____

3. New Information for Portion of Site Transferred

The Certifying Official shall provide the **Department** and the Municipality within which they operate copies of this form with the following Project Information:

a. **New Project Name:** _____

b. **New Owner and/or Permittee Information:**

1) **Company Name:** _____

2) **Certifying Official Name**_____

3) **Certifying Official's Title**_____

4) **Mailing Address**_____

5) **Telephone Number:** (____)_____, **E-Mail**_____(optional)

c. **Signatures:**

For an **permittee** transferring authorization of any portion of the **Construction Activity** to a new **permittee**:

1) **Current Certifying Official** / Date:_____ / _____

2) **New Certifying Official** / Date:_____ / _____

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

Submit this form to:

Water Quality Division
Storm Water
 Suite 400, The Atrium
 1200 'N' Street
 PO Box 98922
 Lincoln NE 68509-8922

Both parties must keep copies of this form. The party from whom the authorization is transferred must submit the original *CSW-TRANSFER* to the **Department** and the Municipality within which the construction project is located (see *Appendix B* for a list of municipalities). Also give the new holder of the authorization a copy of the *CSW-TRANSFER*.



Nebraska Department of Environmental Quality

Construction Storm Water Notice of Termination (CSW-NOT)

1. Termination Prerequisites

- a. Have the **final stabilization** requirements been met on the entire site? [See Part III.M]; **YES** **NO**
- b. Has the entire **Construction Activity** been transferred to another **operator/permittee** who has received authorization under the conditions of a **NPDES** permit for **Storm Water** runoff? [See Part V] **OR** has coverage under an alternative NPDES permit been obtained by the same **operator/permittee**? **YES** **NO**

What is the alternative **NPDES** Permit Number? NER____

*If any of the termination prerequisite questions are answered **Yes**, complete the remaining **NOT** form.*

Construction Storm Water – Notice of Termination (CSW - NOT)

2. Project Information

NPDES General Permit Number: **NER110000** Permit Authorization Number: NER_____

Project Name (from original CSW-NOI): _____

3. Signature

*The appropriate individuals must sign information submitted on this **CSW-NOT** form as required in **NPDES** General Permit NER110000 Part VI.D.6 or the authorization will not be terminated.*

Certifying Official Signature

Date

Print **Certifying Official** Signature

Submit this form to:

Water Quality Division
Storm Water
Suite 400, The Atrium
1200 'N' Street
PO Box 98922
Lincoln NE 68509-8922
Telephone. 402/471-4220
Fax: 402/471-2909

APPENDIX B

**NDEQ THREATENED AND ENDANGERED SPECIES
GUIDANCE CHECKLIST FOR STORMWATER
GENERAL PERMIT #NER110000**



THREATENED & ENDANGERED SPECIES
Guidance Checklist for
NPDES Construction Storm Water General Permit
#NER110000

*** **Disclaimer:** This checklist was developed for guidance purposes only in an effort to assist Construction Storm Water permit applicants to identify potential locations of threatened and endangered species. Completion of this checklist is not a requirement for permit authorization and is not intended to be used as a substitute for a professional environmental review. The use of this form does not relieve the permittee from further review or enforcement action by the Department of Environmental Quality (NDEQ) or Nebraska Game and Parks Commission (NG&PC).

Section I

1. For projects not located in Lancaster County: Is the project located outside of designated city limits? ☒ No ☐ Yes
2. For projects located in Lancaster County: Does the project discharge storm water to Salt Creek, Little Salt Creek or Rock Creek? ☐ No ☐ Yes
*If project is not in Lancaster County check **No**.*
3. For all projects: Is this project located in mature oak woodlands within 5 miles of the Missouri River in the area stretching from the Kansas border to Ponca? ☒ No ☐ Yes
4. For all projects: Is this project within 0.25 miles of a *stream of concern* or does it discharge to an stream of concern? (See *Attached Stream Map*) ☒ No ☐ Yes
5. For projects located within the distribution of the American Burying Beetle (See *Attached Map*): Is the project located on potential habitat*? ☒ No ☐ Yes
*If it is not within the American Burying Beetle distribution, check **No**.*

* *Potential habitat constitutes land which has not been previously disturbed, typically by crop agriculture, and land not located within city limits.*

- ♦ *If you answered **No** to all questions in Section I, a NDEQ and NG&PC review may not be needed (see disclaimer above). Include this form with your SWPPP documentation.*
- ♦ *If you answered **YES** to only question 1, complete Section II.*
- ♦ *If you answered **YES** to any of questions 2 thru 5 in Section I, consultation with NDEQ & NG&PC is necessary (Section III).*

Section II

1. Will project construction take place between April 1 and May 10 or October 1 and November 15 in the following locations? ☐ No ☐ Yes
 - In non-urban areas within 3 miles of the Platte, Loup, Middle Loup, North Loup or Niobrara Rivers; or
 - In non-urban areas within 1 mile of a wetland within the Primary Whooping Crane Use area.
2. Will project construction take place between April 1 and June 15 in the following locations? ☐ No ☐ Yes
 - A wheat field or heavily grazed prairie in
 - Kimball County; or
 - Banner County (south of Harrisburg); or
 - Cheyenne County (west of Sidney).
3. Will project construction take place between April 15 and September 15 within 0.25 miles of rivers at the following locations? ☐ No ☐ Yes
 - The Lower Platte River from Columbus to Plattsmouth; or
 - The Missouri River from where it joins the Nebraska/South Dakota state border to Ponca; or
 - The Loup River between St. Paul and Columbus; or
 - The Niobrara River between Springview and where the Missouri and Niobrara Rivers converge.
4. Will project construction take place between April 15 and September 15 in the following locations? ☐ No ☐ Yes
 - An active or recently active sand and gravel operation with bare sand substrate located within 5 miles of the Platte, Loup, South Loup, Middle Loup, North Loup, Niobrara, Elkhorn, or Missouri Rivers.
5. Is the project construction on a non-crop, non-urban site in Pawnee County (west of Pawnee City), Johnson County or Gage County (south of Beatrice)? ☐ No ☐ Yes
6. Is the project construction within 1 mile of the North Platte, Platte, Little Nemaha, Cedar, Loup, South Loup, North Loup, Calamus, Niobrara, Elkhorn Rivers, or Lodgepole Creek from Kimball to the Wyoming State line? ☐ No ☐ Yes
7. Is the project construction on a non-crop, non-urban site in the Swift Fox distribution area? (See *Attached Distribution Map*) ☐ No ☐ Yes
8. Will the project construction impact open active sandy blowouts in Cherry County, the south east quarter of Sheridan County, or the north half of Thomas, Hooker or Grant Counties? ☐ No ☐ Yes
9. Is the project construction within 0.5 miles of the Niobrara River from Highway 29 to the Wyoming state line? ☐ No ☐ Yes
10. Will the project construction impact wet meadows in the Orchid distribution area? (See *Attached Distribution Map*) ☐ No ☐ Yes

♦ If you answered **No** to all questions in Section II, a NDEQ and NG&PC review may not be needed (see disclaimer above). Include this form with your SWPPP documentation.

- ◆ If you answered **YES** to any of questions in Section II, consultation with NDEQ & NG&PC is necessary (Section III).

Section III

- ◆ If you answered Yes to any of the questions in Section I or II, Please complete the information in this section and submit the information to NDEQ.
- ◆ Questions regarding use of this form may be directed to NDEQ staff at (402) 471-8330.
- ◆ Questions regarding specific items in Section I or II may be directed to NG&PC staff at (402)471-5444.

Applicant Information

Project Name: _____ County: _____
Physical Address: _____ Date: _____
Legal Description: _____ (Q), Section _____, Township _____ N, Range _____ (E or W)
Latitude: _____ Longitude: _____ Method: _____
Project Contact: _____ Telephone: _____
Email: _____

Type of Construction: ☐ Residential ☐ Commercial ☐ Industrial ☐ Linear
☐ Livestock ☐ Other _____

Size of Construction Area: _____ acres Size of Borrow Area: _____ acres
Current Land Use: _____

Description of Project: *Description should include the general project description. A second page should be used if necessary.*

Map of Project Area: *Topographic and/or aerial maps with the specific project area delineated are encouraged as this will expedite processing time.*

NDEQ:

Water Quality Division

Storm Water

Suite 400, The Atrium
1200 'N' Street
P.O. Box 98922
Lincoln, NE 68509-8922
(402) 471-8330

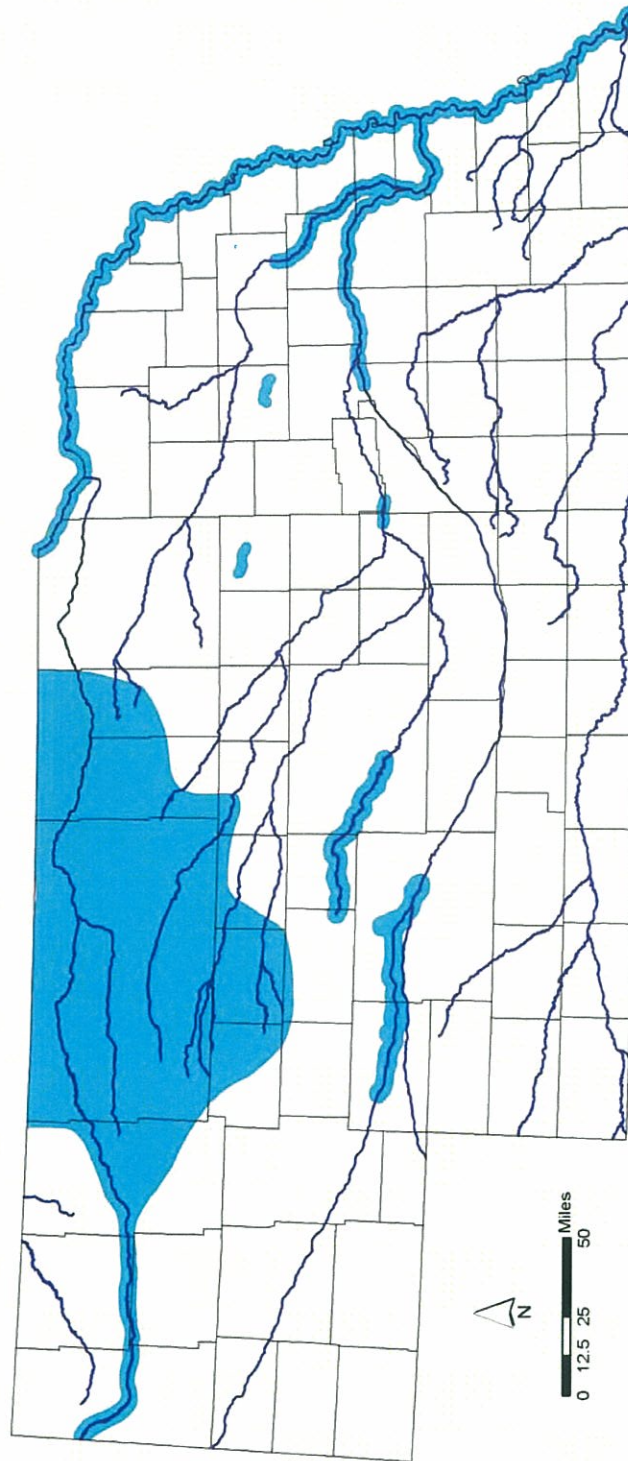
NG&PC:

Nebraska Game & Parks Commission

Environmental Analyst Supervisor, Heritage Division

2200 North 33rd Street
P.O. Box 30370
Lincoln, NE 68508-2707
(402) 471-5444

Stream and River Reaches of Concern for Nebraska Fish Species



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Miles

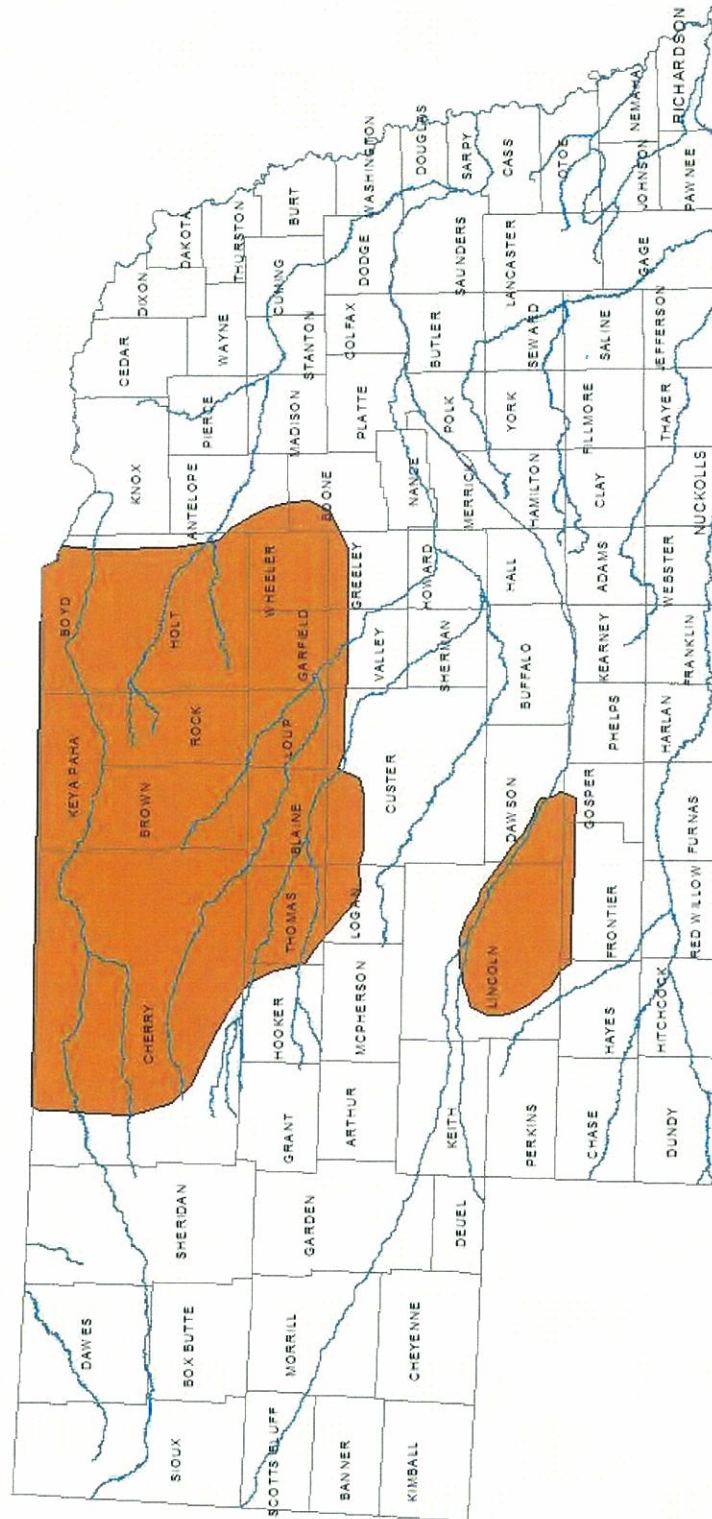
Legend

- Major_Rivers
- Counties
- Areas of Concern

Map produced by the Nebraska Game and Parks Commission
February 19, 2008

Streams and rivers within shaded areas are of concern for at-risk fish species.

American Burying Beetle Distribution



Nebraska Game and Parks Commission 2008

[illegible]

A map of Nebraska showing its county boundaries and names. The counties are color-coded into four distinct regions: a large green area covering the western and central parts of the state; a yellow area along the eastern border; a light blue area in the north-central part; and a small orange area in the northeast corner. Major rivers like the Platte, Missouri, and Republican are shown in blue. The map includes labels for all 93 counties, such as Cherry, Kearney, Lancaster, and Lincoln.

APPENDIX C

SWPPP INSPECTION FORMS

BEST MANAGEMENT PRACTICE INSPECTION AND MAINTENANCE REPORT FORM

SILT FENCE

Name/Title of Inspector: _____

Days Since Last Rainfall: _____

Amount of Last Rainfall: _____ inches

Date and Time of Inspection: _____

Weather Conditions at Time of Inspection: _____

Location of Silt Fence	Is the Bottom of the Fabric Still Buried?	Is the Fabric Torn or Sagging?	Are the Posts Tipping Over?	How Deep is the Sediment?	Any Discharge of Sediments?	Is the Silt Fence Placed in Adequate Location?	Is Silt Fence Functioning as Designed?

MAINTENANCE OR CORRECTIVE ACTION REQUIRED FOR SILT FENCE: _____

TO BE PERFORMED BY: _____

ON OR BEFORE: _____

BEST MANAGEMENT PRACTICE INSPECTION AND MAINTENANCE REPORT FORM

INLET PROTECTION BARRIERS

Name/Title of Inspector: _____

Days Since Last Rainfall: _____

Amount of Last Rainfall: _____ inches

Date and Time of Inspection: _____

Weather Conditions at Time of Inspection: _____

Location of Inlet Protection Barrier	In Place?	Depth of Sediment?	Condition of Inlet?	Any Discharge of Sediments?	Is Barrier Placed in Adequate Location?	Is Barrier Functioning as Designed?

MAINTENANCE REQUIRED FOR INLET PROTECTION BARRIERS: _____

TO BE PERFORMED BY: _____

ON OR BEFORE: _____

BEST MANAGEMENT PRACTICE INSPECTION AND MAINTENANCE REPORT FORM

STABILIZED CONSTRUCTION ENTRANCE

Name/Title of Inspector: _____

Days Since Last Rainfall: _____

Amount of Last Rainfall: _____ inches

Date and Time of Inspection: _____

Weather Conditions at Time of Inspection: _____

Location of Construction Entrance	Is Sediment Being Tracked onto Road?	Is the Entry Surface Clean or Sediment Filled?	Does All Traffic Use the Entrance?	Is Entrance Placed in Adequate Location?	Is Entrance Functioning as Designed?

MAINTENANCE REQUIRED FOR STABILIZED CONSTRUCTION ENTRANCES: _____

TO BE PERFORMED BY: _____

ON OR BEFORE: _____

**BEST MANAGEMENT PRACTICE
INSPECTION AND MAINTENANCE REPORT FORM**
(Completed weekly or as soon as possible after a significant storm event)

STABILIZATION MEASURES

Name of Inspector: _____ Inspection Date: _____
Days Since Last Rainfall: _____ Inspection Time: _____
Amount of Last Rainfall: _____

Area or Drainage Areas*	Date Since Last Disturbance	Date of Next Disturbance	Stabilized (Yes or No)	Control Measures Implemented	Current Conditions of Control Measures

* See site map for drainage areas. Site may include borrow sources, haul roads, contractor's yard, stockpiles, etc.

** Areas that will be exposed more than 14 days must be stabilized within 14 days

STABILIZATION REQUIRED: _____

TO BE PERFORMED BY: _____ **ON OR BEFORE:** _____

Control Measure Codes		Condition Codes
1. Temporary Seeding	14. Rock Bed at Construction Exit	U – Upgrade Needed
2. Permanent Plant, Sod, or Seed	15. Timber Mat at Construction Entrance	R – Replacement Needed
3. Mulch	16. Channel Liner	M – Maintenance Needed
4. Soil Retention Blanket	17. Sediment Trap	C – Cleaning Needed
5. Buffer Zone	18. Sediment Basin	I – Increase Measures
6. Preserve Natural Resources	19. Storm Inlet Sediment Trap	S – Stable (no action required)
7. Silt Fence	20. Stone Outlet Structure	
8. Hay Bales	21. Curb and Gutter	
9. Rock Berm	22. Storm Sewers	
10. Diversion Dike	23. Velocity Control Devices	
11. Diversion Swale	24. Excess Dirt Removed From Road	
12. Pipe Slope Drain	25. Haul Roads Dampened for Dust	
13. Paved Flume	26. Cleanup of Possible Contaminants	

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry or the person who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____

**BEST MANAGEMENT PRACTICE
INSPECTION AND MAINTENANCE REPORT FORM**

SWPPP UPDATE FORM

CHANGES REQUIRED TO THE SWPPP:

REASONS FOR CHANGE:

TO BE PERFORMED BY: _____

ON OR BEFORE: _____

BEST MANAGEMENT PRACTICE
INSPECTION AND MAINTENANCE REPORT FORM

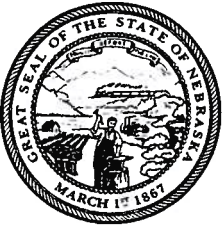
CONSTRUCTION ACTIVITIES LOG

Name of Inspector	Date	Major Grading Activities	Temporary Suspension of Construction Activities	Permanent Suspension of Construction Activities	Initiation of Stabilization Measures	Comments

Date	Additional Changes

APPENDIX D

AREA OF CONTAMINATION (AOC) DESIGNATION



Dave Heineman
Governor

JUN 15 2012

STATE OF NEBRASKA

DEPARTMENT OF ENVIRONMENTAL QUALITY
Michael J. Linder
Director

Suite 400, The Atrium
1200 'N' Street
P.O. Box 98922
Lincoln, Nebraska 68509-8922
Phone (402) 471-2186
FAX (402) 471-2909
website: www.deq.state.ne.us

Kevin Lombardozzi
Director, Environmental Management
NL Industries, Inc.
5430 LBJ Freeway
Suite 1700
Dallas, Texas 75240-2697

Re: Request for Area of Contamination (AOC) Designation
Former Carter White Lead Site CERCLA Removal Action
NDEQ ID # - 86674
Program ID: SF NEN000704909

Dear Mr. Lombardozzi:

The Nebraska Department of Environmental Quality Waste Management Compliance Unit (NDEQ) has reviewed your May 31, 2012 Area of Contamination (AOC) request for NL Industries, Inc. (former Carter White Lead Site), located at the junction of East 21st and East Locust Street, Omaha, Nebraska. In your request you proposed an AOC boundary delineated on Figure No. 1, 2 and 3 of the submittal.

The AOC as requested is approved and includes an area bounded by East Locust Street on the North; North 22nd Street on the East; Avenue J on the South; and abutting property on the West. The designated AOC does not fall outside these boundaries and should additional information be identified that indicates the AOC must be changed or revised it must be done so at the earliest in consultation with the Department's (NDEQ) Waste Management Section.

Please call if you have any questions.

Sincerely,

Jeffery L. Edwards
Compliance Unit Supervisor
Waste Management Section
Waste Management Division

CC: Michael B. Davis, U.S. EPA – Region VII
Thad Slaughter, ENTACT LLC



NL INDUSTRIES, INC.

THREE LINCOLN CENTRE

5430 LBJ FREEWAY

SUITE 1700

DALLAS, TEXAS 75240-2697

TELEPHONE: 972.233.1700

TELEPHONE FACSIMILE: 972..934.5358

Kevin Lombardo

Director, Environmental Management

(972) 448-1480

kevinl@valhi.net

May 31, 2012

Jeff Edwards

Waste Management Section

Compliance Unit Supervisor

Nebraska Department of Environmental Quality

Suite 400, The Atrium, 1200 N Street

P.O. Box 98922

Lincoln, NE 68509-8922

Mike Felix, Section Supervisor

Waste Management Division, Remediation Section

Nebraska Department of Environmental Quality

Suite 400, The Atrium, 1200 N Street

P.O. Box 98922

Lincoln, NE 68509-8922

Re: Request for Area of Contamination (AOC) Designation
Former Carter White Lead Site CERCLA Removal Action

Dear Mr. Edwards:

As you requested in our recent call with EPA, NL Industries Inc. hereby submits a request that an Area of Contamination (AOC) be designated for the implementation of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) removal action proposed for the former Carter White Lead Site located at the intersection of E. 21st Street and E. Locust Street in Omaha, Nebraska (Site). The proposed AOC boundary is presented in the attached Figure 1- Site Layout Plan and is identical to the "Site Boundary" approved by the United States Environmental Protection Agency (EPA). The "Site Boundary" outline is defined in ENTACT, LLC's (ENTACT) draft "Time Critical Removal Action Workplan - Former Carter White Lead Site Revision 0" dated January 27, 2012 (Workplan). A copy of the Workplan is enclosed.

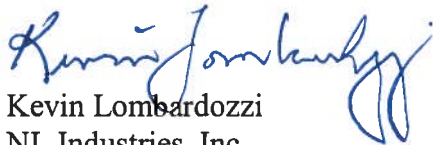
The extent of lead impact to soil has been delineated and the Site Boundary determined based on the EPA's 2009 investigation of the Site. Field activities included in-situ XRF field screening on and off site, collection of surface and subsurface soil samples for field screening and/or laboratory analysis for metals and collection of soil samples for lead speciation. The results of the investigation are reported in the document entitled "Removal Assessment Report, Rev. 01, Former Carter White Lead Site, Omaha Nebraska" written by Tetra Tech EM Inc., submitted to the EPA in 2010. A copy of this report is enclosed.

Jeff Edwards, Nebraska DEQ
Mike Felix, Nebraska DEQ
May 31, 2012
Page 2

As more particularly described in the Workplan, the major remedial activities proposed for the Site are excavation, consolidation, treatment and staging of lead-impacted material prior to off-site disposal and the installation of various soil or other covers. All of the proposed activities will be conducted within the AOC.

While we agreed to submit this request, NL would like to note for the record that we do not believe that an AOC designation is required for this project. Nevertheless, we want to thank you for your assistance in facilitating the proposed removal action for the Site. If you have questions concerning our request for the AOC designation for the Site, please contact me at (972) 448-1480.

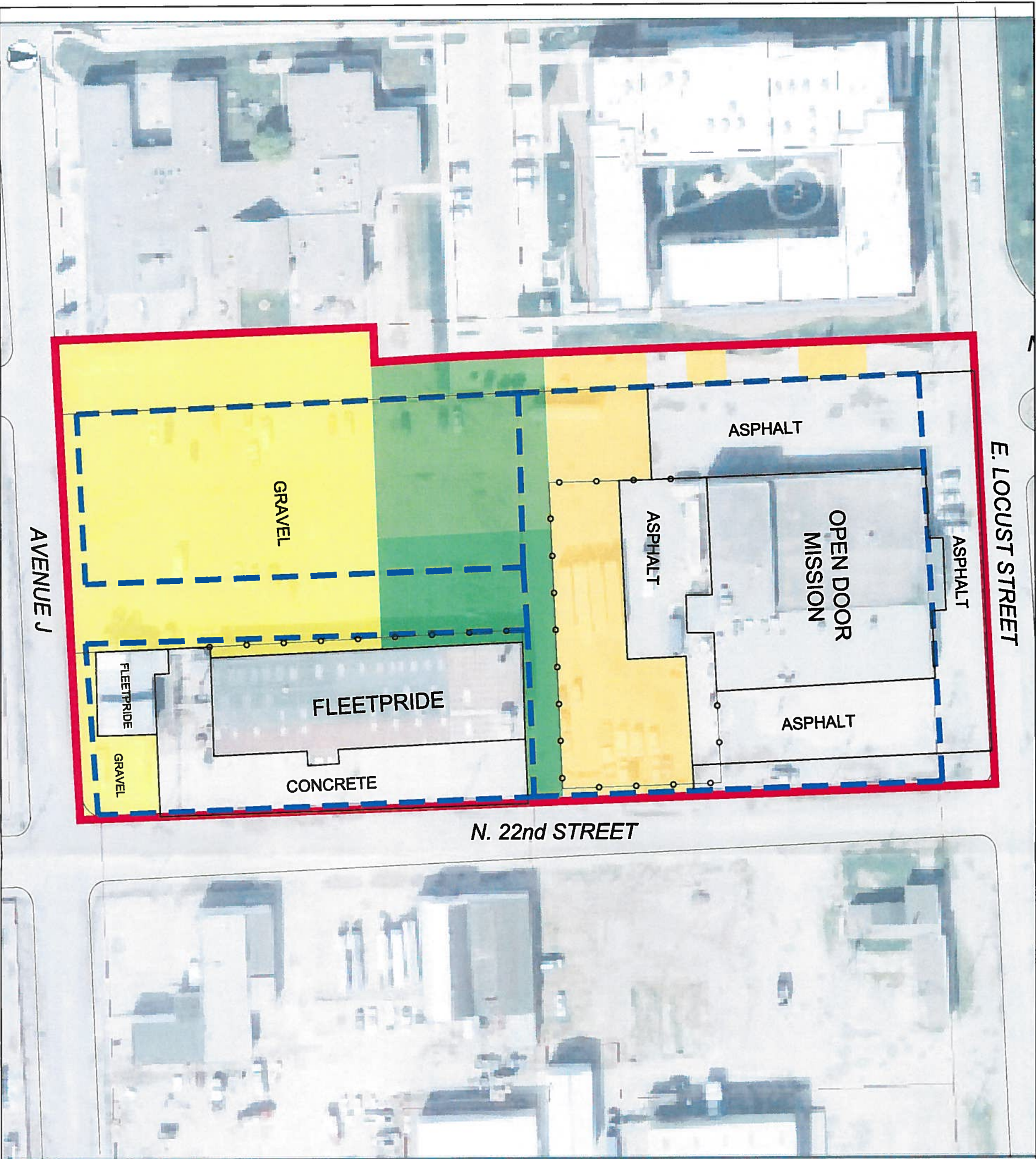
Respectfully,

A handwritten signature in blue ink, appearing to read "Kevin Lombardozi".

Kevin Lombardozi
NL Industries, Inc.

Enclosures

cc: Michael B Davis, U.S. EPA-Region 7 (no enclosure)
Thad Slaughter, ENTACT LLC (no enclosure)

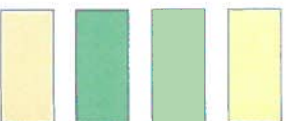


LEGEND

SITE BOUNDARY

PROPERTY BOUNDARY

FENCE



PHASE 1 - EXCAVATION DEPTH 1'
 PHASE 2 - EXCAVATION DEPTH 2'
 PHASE 2 - EXCAVATION DEPTH 1'
 PHASE 3 - EXCAVATION DEPTH 1'



REMOVAL ACTION PHASE MAP

FORMER CARTER WHITE
 LEAD SITE
 OMAHA, NEBRASKA

FIGURE 3

NO.	DATE	REVISION	APP.



3129 Bass Pro Drive • Grapevine, TX 76051
 (972) 680-1323 • Fax (972) 680-7464

Scale: SEE DWG Drawn By: MA Checked By: JS Date: 1/30/12