Final

NEW HAVEN DEPOT STORM WATER POLLUTION PREVENTION PLAN

YOU ARE THE KEY

Defense Logistics Agency
Defense National Stockpile Center

New Haven Depot
New Haven, Indiana

PARSONS

This Storm Water Pollution Prevention Plan was prepared for:

Defense Logistics Agency
Defense National Stockpile Center

Prepared By:

PARSONS

290 Elwood Davis Road, Suite 312
Liverpool, New York 13088
315-451-9560

JUNE 2009

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CAUTION
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APPENDIX A SPILLS AND LEAKS FORM

APPENDIX B ANNUAL SITE COMPLIANCE REPORT

ACRONYMS

AOC	AREA OF CONCERN
BMP	BEST MANAGEMENT PRACTICE
CERCLA	COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT
CSWMP	CONSTRUCTION STORM WATER MANAGEMENT PLAN
CWA	CLEAN WATER ACT
DLA	DEFENSE LOGISTICS AGENCY
DNSC	DEFENSE NATIONAL STOCKPILE CENTER
GSA	GENERAL SERVICES ADMINISTRATION
HWMP	HAZARDOUS WASTE MANAGEMENT PLAN
IDEM	INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
ISCP	INSTALLATION SPILL CONTINGENCY PLAN
MEP	MAXIMUM EXTENT PRACTICABLE
MS4	MUNICIPAL SEPARATE STORM SEWER SYSTEM
NOI	NOTICE OF INTENT
NPDES	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
POC	POINT OF CONTACT
PPT	POLLUTION PREVENTION TEAM
RCRA	RESOURCE CONSERVATION AND RECOVERY ACT
RQ	REPORTABLE QUANTITY
SPCC	SPILL PREVENTION, CONTROL AND COUNTERMEASURE
SPDES	STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM
SWPPP	STORM WATER POLLUTION PREVENTION PLAN
USEPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
USGS	UNITED STATES GEOLOGICAL SERVICE

SECTION 1

INTRODUCTION

1.1 PURPOSE OF THIS STORM WATER POLLUTION PREVENTION PLAN

The purpose of this manual is to remind you, the Defense Logistic Agency's (DLA) Defense National Stockpile Center (DNSC) employee, that *you* are the key to storm water pollution prevention. This manual will provide you with guidance on how to satisfy this DNSC's Storm Water Pollution Prevention Plan (SWPPP) for the New Haven depot. The key elements that you will need to complete are as follows:

- Each year during the third quarter (April through June) the Pollution Prevention Team (PPT; identified on Table 3.1) will meet and review the items listed on Table 3.1.
- By the end of the third quarter, the team will complete the Annual Site Compliance Report (Appendix B).
- The Spills and Leaks Form and Annual Site Compliance Report (Appendices A and B, respectively) will be submitted to Chief, Environmental Management and Safety & Occupational Health Division (currently Randy Nida) by June 30 of each year.
- During the course of each year, annual general storm water training will be provided for all personnel during one monthly safety meeting. This training will be prepared for you and will be provided on CD-ROM for your use.

1.1.1 SWPPP Revisions

This SWPPP is a "living document." It will require periodic updates, the addition of data, the appending of reports, and other modifications. Whenever there is a change in facility operations, such as sources of pollution or control measures, which have the potential to impact storm water quality, the SWPPP must be updated in a timely manner to reflect these changes.

This SWPPP is an update of the previous SWPPP, issued in 1996.

1.2 WHAT IS STORM WATER?

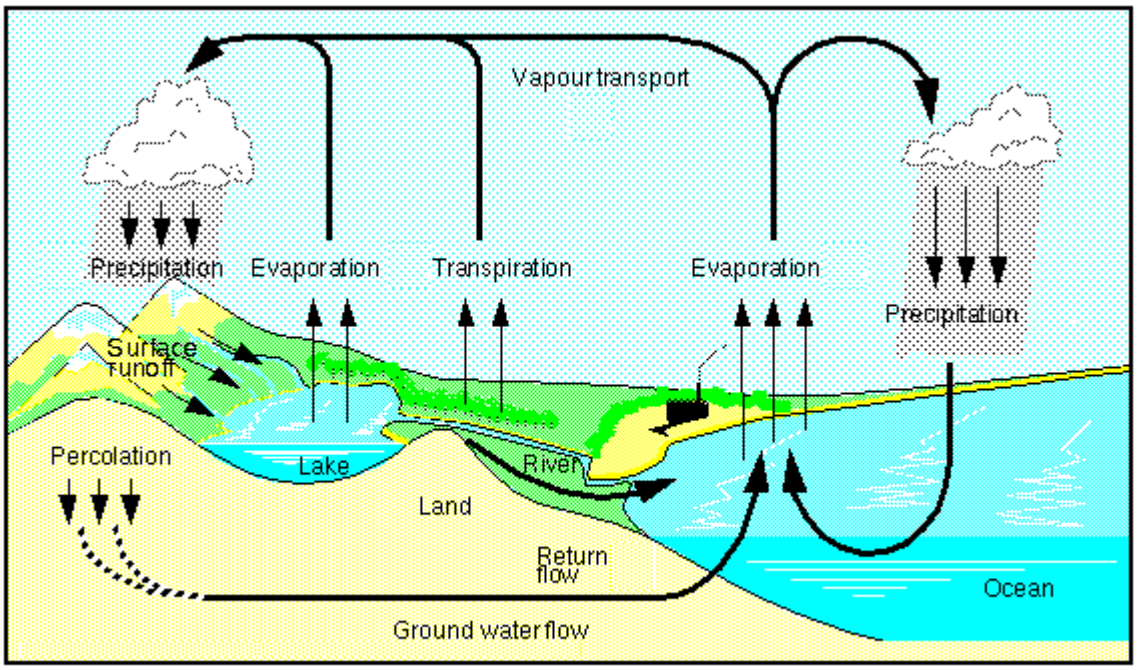
Storm water can be defined as precipitation runoff, snow melt runoff, and surface runoff and drainage. Although it may seem obvious, heavy rains and melting snow can significantly increase the amount of storm water flowing into natural watercourses, such as rivers and lakes, or man-made distribution systems, such as canals and sewer systems. However, other factors also influence storm water runoff. Principal factors directly influencing storm water runoff include the following:

- **Rainfall duration** – even a light rain can saturate soil and result in storm water runoff, if rain falls for a long enough time.
- **Rainfall intensity** – heavy rain will saturate the soil more quickly than a light rain, resulting in the generation of runoff more quickly.
- **Moisture in Soil** – soil that is already moist will result in runoff being generated sooner than would be the case for dry soil because the dry soil has a greater capacity to absorb rainfall. Frozen soil can result in all of the rain that falls or snowmelt to run off the ground surface as sheet flow.
- **Soil Composition** – hard, clay soils absorb little water, while sandy soils easily allow water to flow through.
- **Vegetative cover** – roots, layers of leaves, branches and pine needles (i.e., ground cover) readily allow water to soak into the soil. Barren surfaces tend to increase storm water runoff.
- **Ground slope** – the rate of storm water flow on flat land is typically slow, with the opportunity for the water to infiltrate into the soil, while water that falls on steeply sloping land tends to rapidly runoff in a down slope direction.
- **Human influences** – human activities have a definite impact on storm water runoff. Impervious surfaces (i.e., surfaces that do not absorb water), such as building roofs, paved roads and parking lots, greatly increase the amount of runoff. Bare soils from construction activities and some agricultural land uses also result in increased amounts of storm water runoff being generated.

1.3 WATER (OR HYDROLOGIC) CYCLE

Water in and on the earth moves in a continuous cycle. This is called the Water (or Hydrologic) Cycle. As water evaporates from oceans and lakes, vapors rise and condense into clouds. The clouds then move over land and precipitation (water) falls in the form of rain, ice or snow. The water travels through the soil (called infiltration or percolation) and recharges the groundwater, or travels overland to fill in streams and rivers, eventually flowing back into the

oceans and lakes where evaporation starts the process anew. Storm water runoff is a part of this process. Figure 1.1 illustrates the Water Cycle.



Courtesy Erich Roeckner, Max Planck Institute for Meteorology

Figure 1.1 The Water Cycle

1.4 STORM WATER CONVEYANCE

Beginning in the mid-1800's, storm water conveyance systems were constructed in cities and developed areas throughout the world. These systems often consisted of ground surface drain inlets emptying into buried pipes or tunnels. Storm water flowed into the underground systems, carrying with it whatever sediment, oil, grease, toxics, pathogens, and other pollutants that were present on the streets above.

The conveyance systems usually consisted of pipes or tile tunnels with impervious sides and bottoms, so all the storm water and collected pollutants were carried directly to a point of discharge (or outfall), such as a nearby river, lake or ocean.

It is uncommon for storm water in a collection system to be treated (or cleaned) before emptying into a body of water. Some municipal storm water systems are combined with a sanitary wastewater sewage system, and the combined storm water and wastewater are processed at a treatment facility. However, these combined systems can easily be overwhelmed during heavy rain, causing the system to overflow, resulting in untreated storm water and sewage being released into the environment.

1.4.1 Effects of Increased Urbanization

As populations grow, cities and suburban areas expand, resulting in the creation of more paved and impervious surfaces, such as buildings, roads, driveways, parking areas and the like. Some effects of this increased urbanization and the proliferation of impervious surfaces are listed below:

- Decreased infiltration of storm water into the ground
- Reduced amount of groundwater recharge
- Contamination and slowing of subsurface flow
- Increased erosion
- Increase of sediment and pollutants introduced into waterways
- Increased storm water runoff
- Acid rain

SECTION 2

STORM WATER REGULATION

2.1 Regulatory Requirements

Storm water regulations are covered in the following sections.

2.1.1 Phase I

Federal storm water regulations were first issued in 1990. Under Phase I of the storm water program, the United States Environmental Protection Agency (USEPA) regulations focused on the use of National Pollutant Discharge Elimination System (NPDES) and State Pollutant Discharge Elimination System (SPDES) permit coverage to address storm water runoff from "medium" and "large" municipal separate storm sewer systems (MS4s), direct industrial storm water discharges, and construction activity impacting five or more acres of land.

A SPDES permit has not been issued to the New Haven Depot, as the State of Indiana regulations appear to exempt the facility from coverage. In accordance with DNSC policy, this SWPPP has been developed and meets the requirements of the Indiana Department of Environmental Management (IDEM) general storm water discharge permit. The New Haven Depot will voluntarily comply with Phase I requirements of IDEM's general permit.

2.1.2 Phase II

Phase II of EPA's storm water program was published in 1999, and expands the NPDES program to cover "small" MS4s in urban areas, as well as small construction activities between one and five acres in size. MS4s are "municipal" separate storm sewer systems that convey only storm water, and the definition of "municipal" generally includes federal facilities, such as storage depots. However, these facilities are covered only if they have a separate storm sewer system (rather than a combined storm water and sanitary wastewater sewer system) and are located in an "Urbanized Area", which is defined as an area with a total population of at least 50,000 and a population density of at least 1,000 people per square mile.

Implementation of USEPA storm water regulations relies on most individual states issuing general permits covering MS4s. In Indiana, regulated MS4 facilities must file a Notice of Intent, (NOI) in order to receive a SPDES general permit. Once covered, regulated facilities will normally have up to five years to fully implement a storm water management program. These programs must be designed to reduce the discharge of pollutants to the "maximum extent practicable" (MEP) to protect water quality.

The New Haven Depot is not within an Urbanized Area as defined by the Census Bureau, and, therefore, is not subject to the Phase II regulations. This SWPPP has been prepared to conform with Phase II requirements to the extent possible. Facilities subject to Phase II requirements must address the following six minimum control measures, and specific procedures being implemented at New Haven are noted:

- **Public education and outreach** – to increase awareness of sources of storm water pollution and measures used to control these sources. As part of its environmental program, DNSC may periodically for a "working group" of local citizens, elected officials and other interested parties to discuss environmental issues at the depot. DNSC periodically issues newsletters to the local public and holds meetings for the "working group" and the public to inform everyone of major environmental issues at the New Haven Depot.

- **Public participation/involvement** – an informed and knowledgeable community is critical to the success of a SWPPP. The community must be included in the SWPPP development process. Workers at the New Haven facility, including management, have provided input to this SWPPP.

- **Illicit discharge detection and elimination** – sometimes connections of sanitary sewer lines are illegally made to storm water systems, greatly increasing concentrations of pollutants in storm water. Phase II requires the elimination of these connections. Section 5 of this plan discusses the assessment of non-storm water discharges and illicit connections at the New Haven Depot.

- **Construction site runoff control** – land stripped of vegetative cover will increase the amount of runoff, as well as the sediment load contained in that runoff. Phase II requires the development of a construction site ordinance; however, an ordinance has not been developed for the depot. Any construction projects undertaken at the New Haven Depot will include provisions for storm water management and erosion control, and mitigation of impacts.

- **Post-construction runoff control** – many techniques exist that can be implemented to reduce the amount of storm water that enters a drainage system and increase the amount that infiltrates into the ground. Post-construction measures and controls must be developed as part of Phase II. As mentioned above, any construction projects at the New Haven Depot will include provisions for storm water management and erosion control to minimize impacts, both during and post-construction.

- **Pollution prevention/good housekeeping** – steps taken by facility/property occupants to minimize the amount of pollutants discharged from industrial areas into storm water systems. The New Haven Depot has implemented a series of best management practices (BMPs) designed to protect storm water quality (Section 4).

As new construction is not anticipated at the depot, a Construction Storm Water Management Plan (CSWMP) has not been included as part of this SWPPP (as Phase II would require). In the event a construction project sized one acre or more in size is planned, a CSWMP must be prepared, and appropriate BMPs developed and implemented.

When a regulated facility applies for a NPDES or SPDES permit, the facility must identify its BMPs and measurable goals for each of the six above-mentioned control measures.

2.1.3 New Haven Depot's SPDES Permit

A SPDES permit has not been issued by IDEM to the New Haven Depot, but the DNSC will voluntarily comply with the IDEM SPDES general permit requirements.

2.1.4 SPDES Permit Requirements

In order to comply with the provisions of a SPDES Permit, the depot is required to:

- Perform an annual review by completing the Spills and Leaks Form and Annual Site Compliance Report located in Appendices A and C, respectively (the Spills and Leaks Form should be completed whenever there is a spill, not necessarily once per year). Directions for completing the Annual Site Compliance Report are provided in Appendix B.
- Update this SWPPP whenever conditions change, as noted during inspections or otherwise (i.e. materials becoming exposed to or removed from exposure to storm water runoff).

2.2 SIGNIFICANT SPILLS AND LEAKS

Significant spills and leaks of toxic or hazardous pollutants that occur in areas exposed to precipitation or that otherwise drain to a storm water conveyance at the facility must be reported as soon as possible. Spills and leaks should be documented in this SWPPP. As of the date of this SWPPP, no spills or leaks have occurred at the depot.

USEPA has defined "significant spills" to include releases within a 24-hour period of hazardous substances in excess of reportable quantities (RQ) under the Clean Water Act (CWA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Reportable quantities are set amounts of substances in pounds, gallons, or other units.

Substances present at the New Haven Depot and the corresponding RQs are provided in Table 2.1. These RQ's are applicable only to CERCLA regulations, and smaller quantities of spilled substances may be reportable to other state agencies.

Table 2.1

Reportable Quantities (RQ) of Hazardous Substances - New Haven Depot

Substance	Component(s)	RQ (gallons)
Gasoline [a]	Benzene	30[b]
Elemental Mercury	Mercury	1 pound

[a] Other substances with RQs are present in gasoline, but benzene has the lowest RQ and would trigger reporting requirements.
[b] The quantity of benzene in the gasoline may range from 0 to 5%; this RQ is based on 5% volume.

2.2.1 Action Following a Significant Spill

If a hazardous substance listed in Table 2.1 is released to the environment in excess of the RQ, the depot is required to notify the National Response Center at (800) 424-8802 as soon as possible. Releases are defined to include any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment. Simply put, a release is when a material gets out of its designated container into the environment.

In the event a hazardous substance is spilled that is not included on Table 2.1, the product's Material Safety Data Sheet (MSDS) will indicate the RQ, if applicable. An extensive listing of RQs is also available on the USEPA website. Materials are listed alphabetically by chemical name and also by Chemical Abstracts Service (CAS) Registry Numbers®. The internet address is: http://www.epa.gov/ceppo/pubs/title3.pdf. Calculations may be required to determine the RQ of a product if individual components of a product are considered a hazardous material.

All significant spills and leaks of toxic or hazardous pollutants that have occurred in the past three years (prior to the effective date of this SWPPP) must be reported on the Spills and Leaks Form, included in Appendix A. Any release of a hazardous or toxic substance must be handled in accordance with DNSC's Spill Prevention, Control and Countermeasure (SPCC) plan.

2.3 WHY DO WE DO THIS? – OBJECTIVES OF THE SWPPP

The purpose of the storm water pollution prevention plan is to minimize or eliminate the potential for contamination of storm water by DNSC activities. The plan is to address physical changes that could be made at DNSC facilities to minimize or eliminate the potential for the contamination of storm water. Also, the purpose of the plan is to investigate sources of potential contamination, develop on-going practices and procedures for minimizing or eliminating storm water pollution, and implement those practices and procedures.

The primary objectives of this SWPPP are to:

- Identify and characterize potential sources of storm water pollution
- Select and design BMPs to be implemented for control of pollution sources
- Develop a program of continuing inspection, maintenance and monitoring to facilitate reduction or elimination of storm water pollution.

2.4 YOU ARE THE KEY

DNSC's Environmental, Safety and Occupational Health (ESOH) Policy Statement provides the foundation for controlling the environmental impacts of DNSCs activities, commodities, and services, and establishes environmental goals and objectives. Compliance with this SWPPP and protecting water quality are a part of these goals.

The key elements of the ESOH Policy Statement include:

- Compliance with all relevant environmental, safety and occupational health laws and regulations, and DNSC's policies and procedures.

- Fostering a dialogue with employees and the public regarding the potential impact of DNSC's operations.
- Promoting environmental stewardship through the prevention of pollution.
- Supporting efforts to conserve and improve natural resources in the regions in which DNSC operates.
- Continually improving DNSC's environmental, safety and occupational health performance through training, and integrating environmental, safety and occupational health considerations for DNSC's business planning processes.

DNSC adopts the ESOH Policy Statement and will conduct its business activities and operations in a manner that is consistent with DNSC's policy statement.

2.4.1 The SWPPP Needs Your Help

You, the DNSC employee, are the key to making this plan effective and keeping the storm water drainage system free of pollutants.

- You are in the best position to protect storm water quality.
- You know your depot.
- You know your job responsibilities and procedures.
- You can make a positive difference by taking the appropriate steps in the event of a spill or emergency.
- You can provide input needed to update and improve the SWPPP.

It is your duty (and every DNSC employee's duty) to keep an eye open to identify conditions that may contribute to contamination of storm water runoff. During your daily routine should you notice a potential problem, take the steps to fix it! Keep the lines of communication open. At your monthly safety meetings address any concerns you may have about the current status of your SWPPP. If you see a situation that requires immediate action, act responsibly. Fix the problem or contact personnel who can.

Knowledge of any storm water contamination, including that from non-DNSC property that may share the storm water drainage system servicing the depot; should be brought to the attention of the depot manager or PPT member (see Section 3.2).

It is the responsibility of every DNSC employee to remember that whatever goes down into the storm water system will end up in our local waterways. Often times, that waterway is used for recreation, as a source for food (i.e., fish), and as a source for drinking water.

2.5 TRAINING

Employee training is essential to effective implementation of the SWPPP. The purpose of a training program is to teach personnel at all levels of responsibility the components and goals of the Plan. When properly trained, personnel are more capable of preventing spills, responding

safely and effectively to an incident when one occurs, and recognizing situations that could lead to storm water contamination.

2.5.1 Existing Training

During the course of each year, general storm water pollution prevention training will be provided for all depot employees during at least one monthly safety meeting.

2.5.2 Additional Training Required

- All members of the Storm Water Pollution Prevention Team (PPT) will meet annually to discuss the SWPPP. The Team Leader will coordinate the meetings and will update members on new developments regarding Federal and Indiana storm water regulations.
- All site POCs will be given a copy of the SWPPP, which will be posted at the site. A PPT member will brief the POC annually on Plan changes and requirements, in the form of a written report.
- Team members will receive annual training in storm water pollution prevention and good housekeeping practices.

2.5 INTERNET ACCESS

This SWPPP, along with the DNSC ESOH Policy Statement, are available at the "I Am The Key" link on the DNSC's Home Page located at: https://www.dnsc.dla.mil/iamthekey/login.aspx.

SECTION 3

NEW HAVEN DEPOT

3.1 DNSC NEW HAVEN DEPOT

The Defense Logistic Agency's (DLA) Defense National Stockpile Center (DNSC) at the New Haven Depot has prepared this SWPPP voluntarily to comply with IDEM SPDES general permit requirements, although the depot is not a permitted site.

3.1.1 Location and Site Description

The depot is located at 15411 Dawkins Road (Indiana Route 14), approximately three miles east of New Haven, in Jefferson Township, Allen County, Indiana. The depot was constructed in the 1940's and currently occupies approximately 268 acres. A small industrial park to the north of the depot is on land that was previously part of the depot property. The contour of the land is generally flat, slightly sloping to the north towards Edgerton Road and the Maumee River. Coordinates of the site are 41° 04' 36" north latitude, and 84° 56' 20" west longitude.

To the west of the depot is an aluminum smelting plant. Railroad tracks run immediately adjacent to the depot's southern property boundary, with several rail lines running through the depot property. The predominant land use in the areas surrounding the depot is agricultural, with a mixture of homes, farms and small businesses in the vicinity.

This depot is legally known as Defense National Stockpile Center, and is operated by the Defense Logistics Agency of the United States government. The property is owned by the General Services Administration (GSA). Operations within the New Haven Depot primarily include the storage and handling of metal ingots, drums and piles of metallic and other ores. These materials are stored inside warehouses and outside in open areas.

This SWPPP applies to the current DNSC property and the storm water drainage system located on the DNSC property. The drainage system also serves the industrial area to the depot's north that was formerly a part of the depot. The industrial area is no longer owned by the GSA or controlled by the DLA, and is not covered under this SWPPP.

Maps are included in this SWPPP that show the depot, the storm water system and other attributes:

- **Figure 3-1 – Site Location Map**. A topographic map of the depot site and surrounding vicinity taken from a USGS quadrangle map showing surface features, including ponds, waterways, and highways near the depot.
- **Figure 3.2 – New Haven Depot Site Map.** Shows the entire depot with current boundaries, storm water drainage system outfalls, Open Area numbers, buildings and other features.

- **Figure 3.3 – New Haven Depot, West Area Map.** Shows detail of the western portion of the depot, including the direction of surface flow, Areas of Concern, and former stockpile numbers and locations.
- **Figure 3.4 – New Haven Depot, Center Area Map.** Shows detail of the central portion of the depot, including the direction of surface flow, Areas of Concern, and former stockpile numbers and locations, and the storm sewer system.
- **Figure 3.5 – New Haven Depot, East Area Map.** Shows detail of the eastern portion of the depot, including the direction of surface flow, surface depressions, Areas of Concern, and former stockpile numbers and locations.

3.1.2 Storm Water Management System

The storm water drainage system at the New Haven Depot consists of a network of below-grade sewer pipes and catch basin inlets, a network of grass-lined surface swales, and four outfall discharge points along the northern property boundary. This drainage system conveys storm water runoff from most areas of the depot, with minor contributions from adjacent non-DNSC properties. A portion of the runoff from the depot's roads, rooftops and stockpiles does not always reach the storm drainage system; rather it typically infiltrates into the ground, or settles into one of a few ground depressions or low spots on the depot property. These depressions are located near the southeast corner of the depot, and do not appear to drain offsite. Features of the storm water drainage system are shown on Figures 3.2 through 3.5.

Swales and Sewers

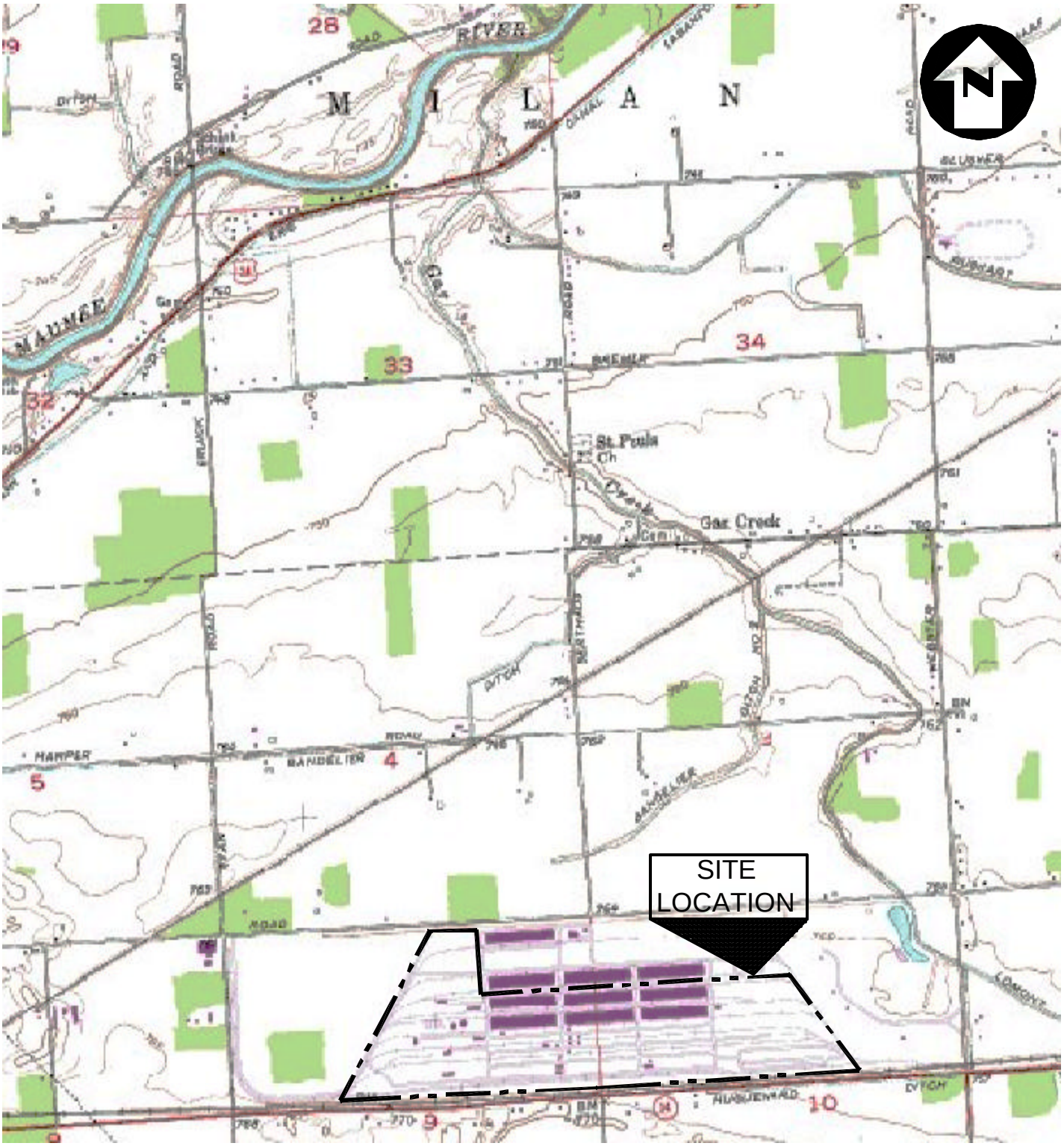
A grass-lined swale in a roughly north-south orientation exists along the west depot property line, and flows to the north, emptying into a ditch along the south side of Edgerton Road (located north of the depot). Four additional grass-lined swales, also situated in a north-south orientation, flow northward through the center sections of the depot property. These four swales also discharge to the unnamed ditch along Edgerton Road.

Numerous swales of an east-west orientation are located throughout the warehouse area of the depot, and these swales discharge into below-grade storm sewers through surface inlets and catch basins. These sewers form a portion of the center two swales at the depot. They drain to the north to Outfalls 2 and 3, which then continue beyond the depot's property, through the industrial park to the north, before emptying into the Edgerton Road ditch.

Storm water runoff that does not reach the drainage ditches or storm sewers on the depot property gradually infiltrates into the soil, recharging shallow groundwater.

Outfalls

The four outfalls of the depot's storm water drainage system each discharge into the drainage ditch along the south side of Edgerton Road. This ditch flows in an easterly direction, and also conveys runoff originating from other non-DNSC property along the road. It eventually empties into the Lamont Ditch, located approximately one-half mile east of the depot. The Lamont Ditch flows northward into the Gar Ditch, which flows to the Maumee River, located approximately two miles north of the depot property. The Maumee River eventually empties into Lake Erie.



2000 1000 0 2000

SCALE IN FEET

DEPOT BOUNDARY

INDIANA
QUADRANGLE LOCATION

FIGURE 1

NEW HAVEN DEPOT
15411 DAWKINS RD.
NEW HAVEN, IN 46774-9644

SITE LOCATION MAP

PARSONS
290 ELWOOD DAVIS ROAD, LIVERPOOL, NY 13088, PHONE: 315-451-9560

P:\742714\NEW HAVEN\CAD\714C001.DWG, 2/18/04, CLW

SEE DETAIL BELOW

OUTFALL 001

OUTFALL 002

OUTFALL 003

OUTFALL 004

EDGERTON ROAD

LAMONT DITCH

ALUMINUM SMELTING PLANT

POND

WETLANDS

LAKE ASHLEY

8

147

WHSE. T-210

WHSE. T-211

WHSE. T-212

312

14

18

WHSE. T-213

WHSE. T-214

WHSE. T-215

313

T-127

216

217

218

316

T-124

125

219

220

221

319

222

223

219A

T-111

224

325

226

227

600

HIGHWAY 14

GUARD SHACK

BERTHAUD ROAD

LEGEND

BUILDINGS WITH BUILDING NUMBER

SITE BOUNDARY

DITCH/POND

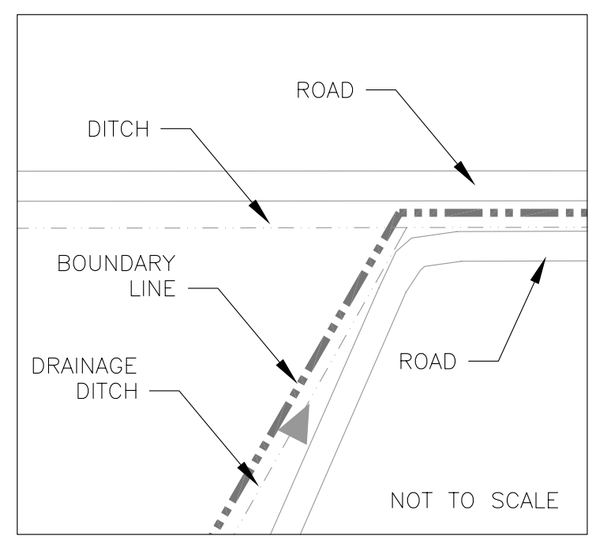
STORM SEWER AND INLETS

COMMODITY STOCKPILES OR STORAGE

216 OPEN AREA NUMBERS

RAILROAD

LOCATIONS OF STOCKPILES AND OPEN AREAS ARE APPROXIMATE



600 300 0 600 1200

SCALE: 1"=600'

FIGURE 3.2

NEW HAVEN DEPOT
NEW HAVEN, INDIANA

SITE MAP

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

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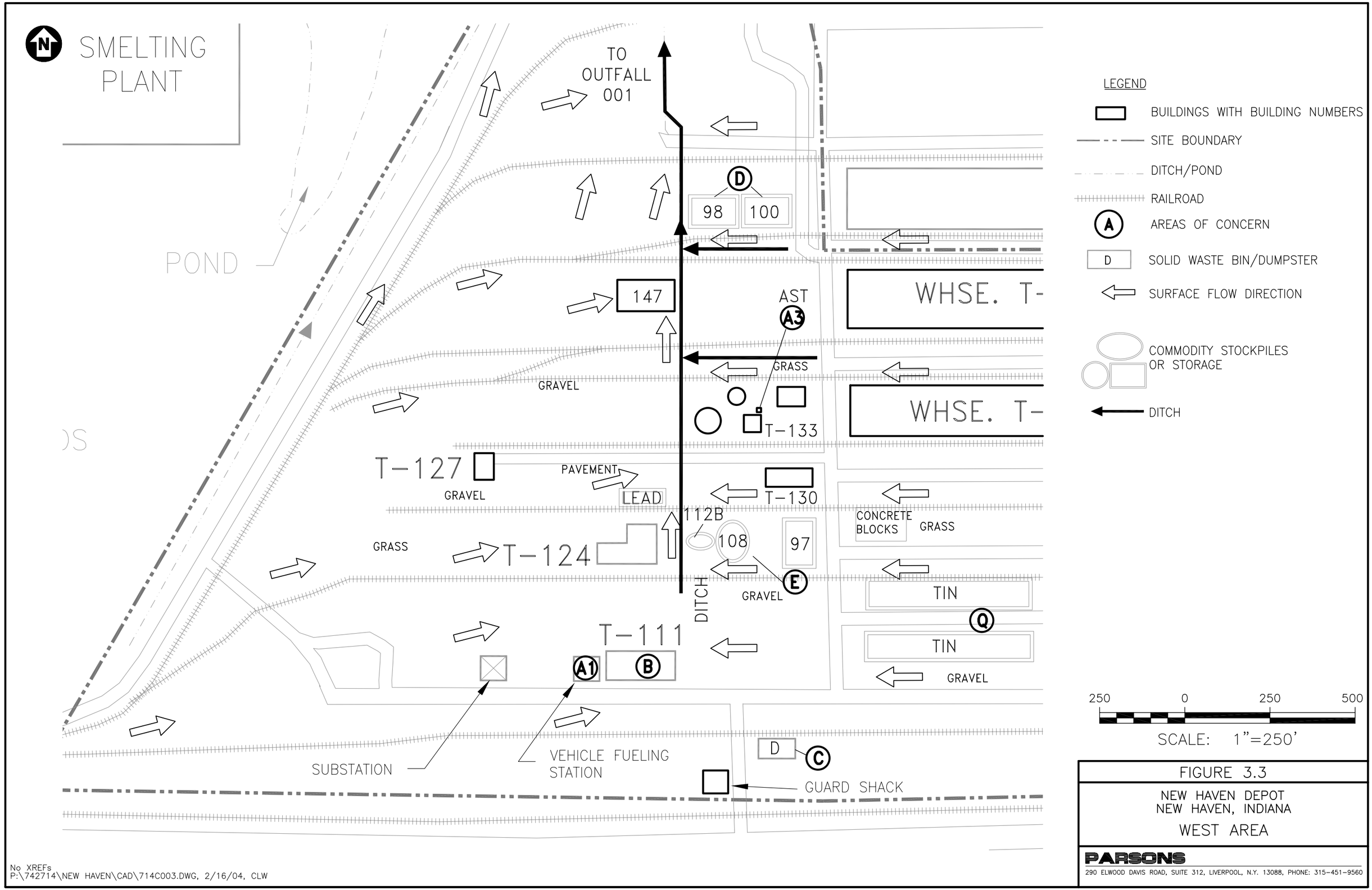
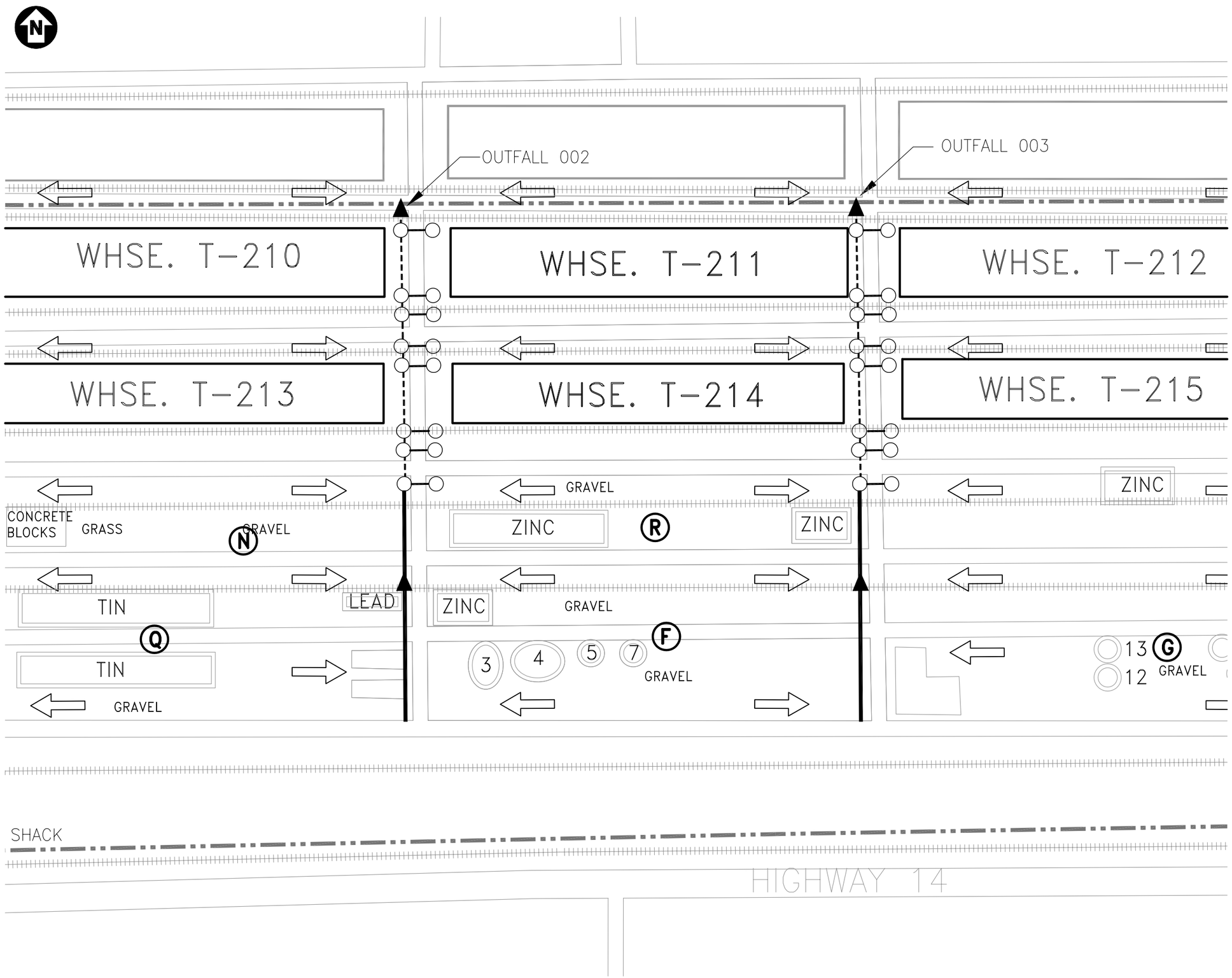


FIGURE 3.3

NEW HAVEN DEPOT
NEW HAVEN, INDIANA

WEST AREA



LEGEND

- BUILDINGS WITH BUILDING NUMBERS
- SITE BOUNDARY
- DITCH/POND
- RAILROAD
- (A) AREAS OF CONCERN
- [D] SOLID WASTE BIN/DUMPSTER
- SURFACE FLOW DIRECTION
- COMMODITY STOCKPILES OR STORAGE
- DITCH

NOTES:

- (N) AREA OF CONCERN INCLUDES ALL LEAD PIGS
- (P) AREA OF CONCERN INCLUDES ALL ANTIMONY
- (Q) AREA OF CONCERN INCLUDES ALL TIN PIGS
- (R) AREA OF CONCERN INCLUDES ALL ZINC SLABS

250 0 250 500

SCALE: 1"=250'

FIGURE 3.4

NEW HAVEN DEPOT
NEW HAVEN, INDIANA

CENTRAL AREA

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

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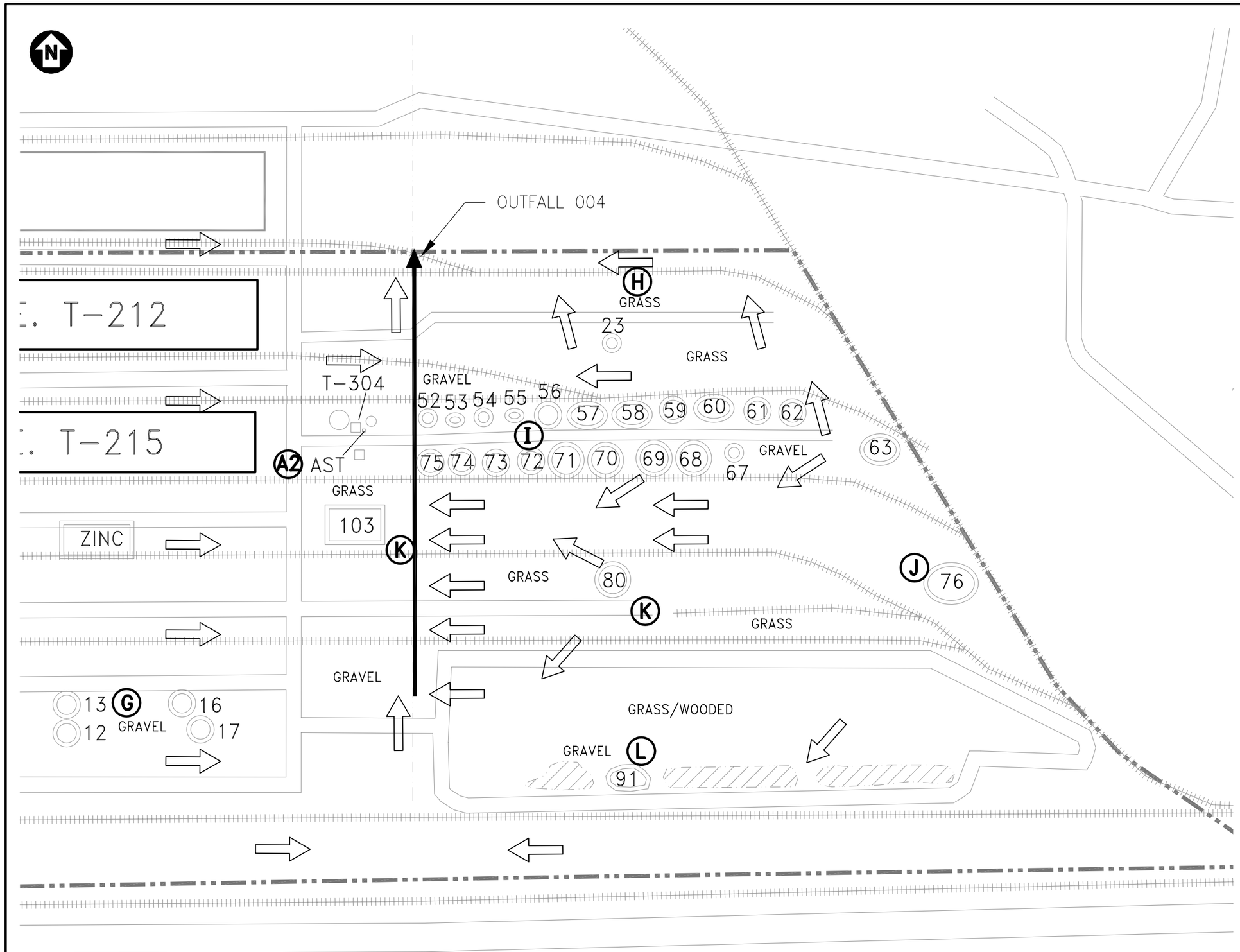

LEGEND

- BUILDINGS WITH BUILDING NUMBERS
- SITE BOUNDARY
- DITCH/POND
- RAILROAD
- (A) AREAS OF CONCERN
- D SOLID WASTE BIN/DUMPSTER
- SURFACE FLOW DIRECTION
- COMMODITY STOCKPILES OR STORAGE
- DITCH

NOTE:

AREA OF CONCERN (K) INCLUDES 4 STOCKPILES

250 0 250 500

SCALE: 1"=250'

FIGURE 3.5

NEW HAVEN DEPOT
NEW HAVEN, INDIANA

EAST AREA

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

No XREFs
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Any contamination entering the storm water system can eventually end up in the groundwater and nearby ditches, streams and rivers, negatively affecting the quality of water which is a resource for both wildlife and humans. Pollutants entering the storm water system can have a negative effect on human health.

3.1.3 Off-Site Surface Water Bodies

Two off-site surface water bodies are located near the depot property. A pond is located on the neighboring aluminum plant property, located adjacent to the northeast. This pond appears to collect storm water runoff from the aluminum plant and property to its south, and discharges into the ditch along Edgerton Road. This pond does not appear to be hydrologically connected to the depot's property or perimeter swale, and its apparent purpose is for storm water management. As the depot's property generally slopes away from this pond, the contribution of storm water sheetflow runoff from the depot property to the pond appears to be minor. According to depot personnel, the pond has not been observed to overflow onto the depot property.

A small lake known as Lake Ashley lies approximately one-quarter mile to the east of the depot. Maps from the 1940's show the lake area as an excavation site; thus it is not a naturally formed water body. There is no known hydrologic connection between the lake and the nearby Lamont Ditch, although previous reports indicate the potential for overflow from Lake Ashley into the Lamont Ditch during flood events.

3.2 POLLUTION PREVENTION TEAM

The SWPPP must identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team (PPT) that are responsible for developing the SWPPP and assisting the facility manager in its implementation, maintenance and revision. The SWPPP shall clearly identify the responsibilities of each team member, and the activities and responsibilities of the team shall address all aspects of the facility's SWPPP.

When establishing a PPT, it is vital to identify the key people on-site who are most familiar with the facility and its operations, and to provide adequate structure and direction to the facility's entire storm water management program. The PPT concept is flexible and should be molded to conform to the resources and specific conditions of the facility. Specific activities of the team, the number of members, and their background and experience may vary from facility to facility.

3.2.1 PPT Organization

Effective organization of the pollution prevention team is important in order for the team to be able to accomplish the task of developing and implementing a comprehensive SWPPP. There are two important features in organizing a team of this nature:

- Selecting the right individuals to serve on the team
- Establishing good channels of communication.

The New Haven Depot PPT is identified in Table 3.1.

Table 3.1
POLLUTION PREVENTION TEAM

The following Team Members are responsible for developing, implementing, modifying, and providing required reports for the Storm Water Pollution Prevention Plan and related activities.

Member	Responsibilities
John Olszewski, Team Leader, Distribution Facilities Manager (219) 937-5383, ext. 104	· Coordinates all stages of SWPPP development and implementation. · Coordinates employee training programs. · Completes annual site compliance reports. · Conducts or contracts annual inspection and certification of non-storm water discharges, as required. · Administers and oversees all team members' activities. · Coordinates SWPPP updates as needed. · Maintains all records and submits reports, as necessary. · Maintains updated spill records and updates the SWPPP to reflect any spills that occur on-site.
Eric Deal Member, General Supply Specialist (219) 937-5383x 109	· Ensures good housekeeping practices. · Conducts on-site preventive maintenance inspections. · Updates material inventories. · Assists the Team Leader during annual site compliance reports.
Frank Falgier, Member, General Supply Specialist (219) 937-5383x 102	· Attends meetings and assists other team members as needed. · Provides input concerning commodity storage and removal that may affect the SWPPP.
Rob Skruck, Member, Environmental Protection Specialist (W): (330) 652-1456	· Coordinates activities within DNSC- Environmental Field Activities Group (DNSC-ME). · Provides input and information on appropriate BMPs. · Provides annual Storm Water Training. · Assures that all necessary permits are in place and up-to-date. · Coordinates any changes in the SWPPP with cognizant contracting and depot personnel.

In the event that a member of the PPT leaves his/her position at the depot, a replacement will be named as soon as practical. The best-qualified person should be named as the replacement, and not necessarily the new individual in the former PPT member's position.

3.3 FORMS

Appendices A and C contain two forms that will be completed by the PPT:

- Annual Site Compliance Report (Appendix B - completed annually)

- Spills and Leaks Form (Appendix A - completed as required, and at least annually)

Directions for completing the Annual Site Compliance Report and conducting Routine Visual Inspections are located in Appendix B.

3.4 AREAS OF CONCERN

Any location at the depot where material is stored in an outdoor location, or where potentially exposed to precipitation and/or storm water runoff, is considered an Area of Concern (AOC), if there is the potential to impact storm water quality.

AOCs at the New Haven Depot (indicated on Figures 3.3 – 3.5) include the following:

A-1. Vehicle fueling station with two aboveground storage tanks (ASTs) – located on the west side of Building T-111, adjacent to the fueling pumps. The two tanks do not have overhead cover, and are situated on a concrete pad surrounded on two sides by a gravel-covered driveway, on one side by a paved road, and the fourth side by the building. Storm water runoff generally infiltrates into the gravel and nearby grass-covered areas, with runoff reaching the western-most drainage swale during heavier precipitation events, eventually flowing through Outfall 1. The ASTs include:

- one 1,000-gallon diesel fuel tank
- one 1,000-gallon gasoline tank

A-2. AST at Building T-304 – One 300-gallon diesel AST is located on the east side of building T-304, situated on a concrete slab surrounded by a gravel-covered area. This AST stores #2 fuel oil to power the pumps in the east pump house. Storm water runoff infiltrates the gravel, with runoff reaching the eastern-most drainage swale during heavier precipitation events, eventually flowing through Outfall 4.

A-3. AST at Water Tower - One 2,000-gallon diesel AST located on the north side of the west pump house building (Building T-133), situated on a concrete slab surrounded by grass-covered areas. This AST stores #2 fuel oil to power the pumps in the west pump house. Storm water runoff infiltrates into the grass-covered areas, with runoff potentially reaching the drainage swale connecting to Outfall 1.

B. Vehicle maintenance and cleaning areas – Vehicle maintenance was generally performed inside Building T-111, with oil, solvents and anti-freeze stored inside the building. Vehicles included off-road machinery used at the depot (i.e., bulldozers, all-terrain vehicles), but generally not street-legal cars and trucks, which are usually maintained off-site. However, since operations at the depot have decreased, vehicle maintenance activities are seldom performed. Runoff generated by spills, washing fluids or other sources outside the building infiltrates the nearby gravel and grassy areas, with greater amounts entering the western drainage swale, eventually flowing through Outfall 1. Any product spilled inside the building should be contained and not allowed to enter floor drains. (The floor drains are connected to the sanitary sewer system, and do not discharge to the storm water outfalls.)

C. **Solid waste bins** (dumpsters) – one solid waste dumpster is located on the gravel parking lot near the guard shack at the main entrance. The bin has a hinged cover that is kept closed, except when in use. Only common office and kitchen-type refuse is allowed to be disposed in the dumpster. Storm water runoff from this area infiltrates into the ground, or drains to nearby swales that empty through Outfall 1.

Former Commodity Storage - The following Areas of Concern contain one or more former stockpiles of materials. Most piles were exposed to precipitation, but have since been sold off and removed from the site; only residuals remain on the ground surface. A remedial investigation has been conducted to assess the impact of these former commodity piles on the environment. Refer to the Remedial Investigation Report for more information.

Commodities exposed to precipitation were stored on various surfaces, including concrete, gravel and grass. Runoff from these stockpiles may have picked up precipitates from the commodity, and may have left a contaminated footprint on an impervious surface. Runoff containing precipitates into the outfalls may also carry these contaminants into the receiving body of water.

Table 3.2 lists the former commodity stockpiles and includes Open Area number, outfall, stockpile number, material, approximate stockpile dimensions surrounding surfaces and any containment. All of the following stockpiles have been removed from the site, but residuals may remain on the ground surface:

D. **Open Area 8**, Pile No. 98: stockpile on a paved surface, and Open Area 7 located to the northwest where baddelyite was stored on a compacted surface.

E. **Open Area 125**, Pile Nos. 97, 108, and 112B: stockpiles on a gravel-covered surface.

F. **Open Area 223**, Pile Nos. 3, 4, 5 and 7: four stockpiles on a partially gravel-covered, partially grassed surface.

G. **Open Area 224**, Pile Nos. 12, 13, 16 and 17: four stockpiles on a gravel-covered surface.

H. **Open Area 312**, Pile No. 23: stockpile on a partially gravel-covered, partially grassy surface.

I. **Open Area 313**, Pile Nos. 52 through 75: 21 stockpiles on a gravel-covered surface.

J. **Open Area 316**, Pile No. 76: one stockpile on a gravel-covered surface.

K. **Open Areas 319**, Pile Nos. 80 and 103: two stockpiles on grass surfaces.

L. **Open Area 325**, Pile No. 91

Table 3.2
Former Commodity Stockpiles – Areas
New Haven Depot, New Haven, IN

Open Area No.	Outfall No.	Pile No.	Material	Width (feet)	Length (feet)	Height (feet)	Surrounding Surface	Contain-ment
8	1	98	Fluorspar, Metallurgical	100	128	30	Pavement	RRT
125	1	97	Fluorspar, Metallurgical	108	109	35	Gravel	5 RRT
		108	Ferrochrome	38	88	9	Gravel	None
125	1	112B	Ferrochrome	10	10	3	Gravel	None
223	2	3	Ferrochrome	21	100	7	Gravel/grass	None
	2	4	Ferrochrome	72	82	21	Gravel/grass	None
	2	5	Ferrochrome	33	40	12	Gravel/grass	None
	3	7	Ferrochrome	27	27	10	Gravel/grass	None
224	3	12	Ferrochrome	32	32	10	Gravel	None
		13	Ferrochrome	32	48	8	Gravel	None
		16	Ferrochrome	42	64	13	Gravel	None
		17	Ferrochrome	15	33	6	Gravel	None
312	4	23	Ferromanganese	40	60	12	Gravel/grass	None
313	4	52	Ferrochrome	40	96	12	Gravel	None
		53	Ferrochrome	12	12	4	Gravel	None
		54	Ferrochrome	86	96	16	Gravel	None
		55	Ferrochrome	52	80	12	Gravel	None
		56	Ferrochrome	60	80	14	Gravel	None
		57	Ferrochrome	46	70	14	Gravel	None
		58	Ferrochrome	50	70	14	Gravel	None
313 (cont.)	4	59	Ferrochrome	56	74	10	Gravel	None
		60	Ferrochrome	74	74	18	Gravel	None
		61	Ferrochrome	64	70	14	Gravel	None
		62	Ferrochrome	40	46	12	Gravel	None
		63	Ferrochrome	28	60	8	Gravel	None
		67	Ferrochrome	18	18	6	Gravel	None
		68	Ferrochrome	74	90	20	Gravel	None
		69	Ferrochrome	46	74	16	Gravel	None
		70	Ferrochrome	56	66	18	Gravel	None
		71	Ferrochrome	56	66	18	Gravel	None
		72	Ferrochrome	42	52	16	Gravel	None
		73	Ferrochrome	58	60	16	Gravel	None
		74	Ferrochrome	58	60	18	Gravel	None
		75	Ferrochrome	46	60	14	Gravel	None
316	4	76	Ferromanganese	20	20	2	Gravel	None
319	4	80	Ferromanganese	40	40	15	Grass	None
		103	Fluorspar, Metallurgical	50	266	20	Gravel	3 RRT

RRT indicates railroad ties and the number of ties stacked (i.e., 5 RRT means ties stacked 5-high).
Pile dimensions are approximate. Open Area numbers taken from DNSC documents.

The following AOCs formerly contained commodities stored in some manner other than stockpiles. The materials, or the containers that the materials are stored in, were exposed to precipitation, with storm water runoff infiltrating into the ground, or flowing into swales that empty into Outfalls 1 through 4. Table 3.3 lists each formerly-stored material, Open Area number, outfall and surrounding surfaces. Commodity quantities as of 2006 are provided, but all materials have been removed; some residuals may remain on the ground surface.

Table 3.3
Other Former Commodities Stored Outdoors
New Haven Depot

Open Area No.	Outfall No.	Stored Material	Approximate Quantity	Surrounding Surface
Pad 18	1	Lead pigs (Grade E)	874 pigs	Concrete
Pad 18	1	Lead pigs (Grade B)	2,645 pigs	Concrete
219	1 and 2	Lead pigs (Grade E)	483 pigs	Gravel
18	1	Concrete blocks (railroad tie containment)	unknown	Grass
14	1	Aluminum Oxide, in 55-gal. drums	1,121 drums	Gravel
217	2 and 3	Zinc slabs	3,516 slabs	Gravel
220	2 and 3	Zinc slabs	187,746 slabs	Gravel
222	1 and 2	Tin pigs	1,210 pigs	Gravel

Materials had no containment, unless noted otherwise.

M. Lead pigs – stored in Open Area 219 and Pad 18.

N. Aluminum Oxide in drums – stored in Open Area 14.

O. Lead pigs – stored on Pad 18.

P. Tin pigs – stored in Open Area 222.

Q. Zinc slabs – stored in Open Areas 217, 218 and 220.

3.4.1 BMPs at Areas of Concern

Best management practices are discussed in Section 4. BMPs utilized for the above-mentioned AOCs are detailed on the annual site compliance reports, presented in Appendix B. In summary, the following BMPs are in effect at each New Haven Depot AOC:

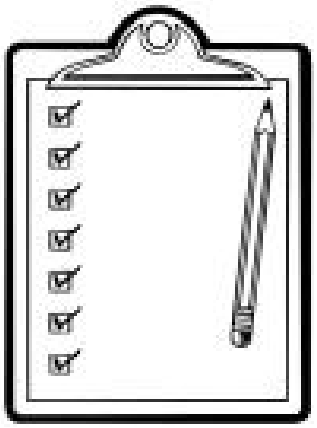
- **Good Housekeeping** - Materials are stored in clean, well-maintained areas.
- **Spill Prevention and Proper Fluid Disposal** - No spills from the AOCs into the storm water drainage system have occurred; waste fluids are not disposed in the storm water system.
- **Commodity Stockpile Maintenance and Outloading** - Storm drains and surface water flow pathways in the vicinity of outloading work areas, must be blocked using materials

such as hay bales. Commodity covers or containers must be maintained in good condition.

- **Proper Herbicide and Pesticide Use** - Applications are in compliance with DNSC Pest Management Plan.
- **Illicit Discharge Connections** - There are no illicit discharge connections to the storm sewer system.
- **Street and Parking Lot Sweeping** - Areas are kept swept and free of debris.
- **Catch Basin and Ditch Cleaning** - Catch basins and ditches are free of debris and proper flow is maintained in ditches.
- **Road Salting and Sanding** - Use of salt or alternative deicing products around storm water drainage pathways is minimized. Areas of sand application are kept clear of major accumulations.
- **Snow Removal** - Snow from around the vicinity of AOCs should be removed to an area where it can melt and infiltrate into the ground.

3.5 RECORDKEEPING AND REPORTING

In general, SPDES permits require that records of all preventative maintenance inspections, records of employee training sessions and the annual site compliance report be retained for a minimum of three years after the expiration date of the SPDES permit. The New Haven Depot does not have a SPDES general permit; however, records are being retained voluntarily in accordance with general permit requirements. These records should be maintained at the depot office, or an alternative location as determined by the depot manager.



SECTION 4

BEST MANAGEMENT PRACTICES

To voluntarily comply with the terms of IDEMs SPDES general permit, the DNSC has developed and implemented this SWPPP in order to:

- Reduce the discharge of pollutants to the "maximum extent practicable" (MEP)
- Protect water quality
- Satisfy the appropriate water quality requirements of the Clean Water Act.

Implementation of the MEP standard will typically require the development and implementation of BMPs and the achievement of measurable goals to satisfy minimum control measures.

Storm water BMPs help to manage the quantity and improve the quality of storm water runoff. The following USEPA-recommended BMPs are applicable at most DNSC facilities with storm water drainage systems.

4.1 EXISTING SOURCE CONTROLS

Keeping contaminants from entering the storm water drainage system is one method of reducing storm water runoff pollution. The New Haven Depot employs the following source control BMPs:

- **Good Housekeeping** – A clean and orderly work area reduces the possibility of accidental spills caused by mishandling of chemicals and equipment, and can reduce safety hazards to everyone. Well-maintained material and chemical storage areas will reduce the possibility of storm water mixing with pollutants. Some simple procedures applicable to promote good housekeeping include:
  - Prompt cleanup of spills and debris
  - Reducing discharge of wash water (i.e., from vehicles and buildings)
  - Scheduled maintenance of machinery
  - Proper material storage practices and inventory controls
  - Routine and regular clean up schedules
  - Maintaining well-organized work areas
  - Minimizing the exposure of materials to rainfall
- **Spill Prevention and Proper Fluid Disposal** – Conscientious attention to detail can reduce the impact of vehicle maintenance activities on storm water discharge, as listed below:

- Appropriate and timely vehicle maintenance to prevent leaks
- Prompt repair of fluid leaks
- Proper disposal or recycling of used fluids
- Use of biodegradable cleaners
- Appropriate cleanup of spills and leaks
- Using commercial vehicle washing facilities rather than on-site washing.

- **Commodity Stockpile Maintenance and Outloading** – The former commodity stockpiles presented significant potential for impacting storm water quality. Covered or contained materials (i.e., sealed piles or drums) generally contained commodities that are a greater environmental threat than uncovered, open materials. These enclosures were kept intact and regularly inspected for tears, cuts, rust holes or other damage that could have resulted in leakage of the commodity and pollution of storm water runoff.

  The only commodity remaining at the New Haven Depot is mercury stored in a warehouse. Prior to beginning any outloading operations:

  - Workers should identify and locate all storm drains and surface water flow pathways in the vicinity of the work area.
  - Appropriate materials, such as hay bales, silt fence, or railroad ties, should be readily available and placed as a barrier between the outloading area and the storm drainage system, to help reduce the amount of any loose commodity material that could get washed into the storm drainage system by runoff from the outloading area.
  - Surface runoff that flows towards nearby drainage ditches, swales, streams, etc., should also be similarly blocked.

- These activities should be performed not only while storm water runoff is actively occurring, but also to plan ahead for any rainfall, snowfall, snowmelt, etc. that may occur during the outloading/repackaging operations.
- The intent is to minimize the amount of commodity material that could leave the site by way of storm water runoff.

- **Storm drain inlet marking or stenciling** – Applying a painted notice on or nearby storm drain inlets can increase awareness that the storm drainage system flows to a body of water, and not to a treatment facility. Lettering (i.e., "Dump No Waste, Drains to River" or "Only Rain in the Drain") or graphics placed at the curb or pavement adjacent to storm drains can lead people to refrain from dumping wastes into the storm drainage system by informing the community of where the drain discharges to.
- **Proper Herbicide and Pesticide Use** – runoff from lawns following maintenance and the improper use (i.e., over-application, spills) of fertilizers, pesticides and herbicides contribute to the pollution of storm water runoff. Use of native plants can reduce the need for fertilizers, and keeping grass at a height of at least four inches will decrease the amount of runoff by promoting infiltration. DNSC's Pest Management Plan is available at the "I Am The Key" link on the DNSC's Home Page located https://www.dnsc.dla.mil/iamthekey/login.aspx
- **Illicit discharge connections** – detection and elimination of illegitimate connections and discharges into storm water drainage systems is necessary.
- **Street and parking lot sweeping** – runoff from impervious streets and parking lots can contribute significant amounts of pollutants in storm water runoff. Sweeping paved areas that drain into the storm drainage system can remove a portion of this contribution.
- **Catch basin and roadside ditch cleaning** – Catch basins and ditches accumulate sediment and debris, so periodic cleaning is needed to ensure their continued effectiveness.
- **Road salting and sanding** – Runoff from paved areas that have salt, sand and ash applied as ice-prevention can carry large amounts of these materials into the drainage system. Minimizing the application of salt and sand (including alternative deicing products) can help reduce this form of pollution.
- **Snow Removal** – Accumulated snow that is removed from roadways and parking lots should be placed in an area where the snowmelt will infiltrate into the ground, such as grass-covered areas, and not in an area draining into the storm water system.

4.2 OTHER POTENTIAL BMP'S

Many additional types of BMPs exist to help reduce storm water runoff pollution. These are discussed in the sub-sections below.

4.2.1 Materials Management

Handling oil products should be done in accordance with the New Haven Depot Spill Prevention, Control and Countermeasure (SPCC) plan. The methods by which all materials are stocked, handled and used at the facility can contribute to storm water contamination. Several material management recommendations are as follows:

- Use alternative less-toxic cleaning supplies, such as baking soda
- Employing mechanical means of cleaning rather than chemical (removing materials physically rather than with chemicals)
- Recycling of oil and anti-freeze
- Storage of hazardous materials away from heavily-trafficked areas
- Storing hazardous material containers on spill pallets
- Storage of ice-melting salt indoors or within covered areas
- Maintaining adequate spill control equipment and supplies on-site
- Training facility personnel in materials management and spill control and response
- Reduce, reuse and recycle all materials whenever possible

4.2.2 Structural BMPs

In addition to the non-structural BMPs listed above, structural BMPs can be implemented when new or completely rebuilt systems are installed. Structural BMPs are designed to allow runoff to gradually infiltrate into the ground instead of being released into a body of water. A partial list of structural BMPs includes the following:

- Porous pavement
- Infiltration basins
- Underground vaults
- Constructed wetlands
- Vegetated channels

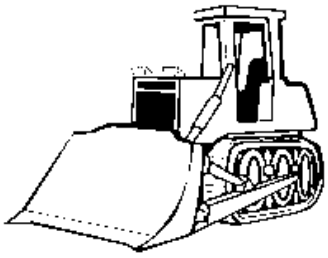
Minimizing directly connected impervious surfaces (i.e., paved parking lots, streets, roofs) also limits the amount of runoff into a drainage system. For example, roof downspouts can be disconnected from the drainage system, or curbs and gutters can be eliminated from paved areas, with the runoff allowed to run into vegetated areas before flowing into the drainage system.

4.2.3 Construction Activities

Although no construction is foreseen at the depot, future construction projects may require the implementation of runoff controls. Construction site storm water management and erosion controls must be implemented to minimize soil erosion during construction activities that disturb one or more acres of land. To comply with Phase II regulations, a construction site ordinance must be developed.

Construction site storm water management and erosion controls include:

- Use silt fences or other perimeter controls
- Installing temporary diversion dikes or channels
- Maintaining grass-lined channels for storm water conveyance
- Preserving natural vegetation, and seeding, mulching and/or sodding exposed soils
- Using geotextile fabrics on exposed surfaces
- Controlling dust during construction through the minimal wetting of surfaces.



SECTION 5

NON-STORM WATER ASSESSMENT

5.1 NON-STORM WATER DISCHARGES

Non-storm water discharge is water unrelated to precipitation or storm water runoff that enters a storm water drainage system. The following are examples of non-storm water discharges that are typically authorized by SPDES general permits:

- Fire Hydrant Flushings
- Potable Water Sources Including Waterline Flushings
- Irrigation Drainage
- Lawn Watering
- Routine External Building Washdown (not with use of 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.)
- Air Conditioning Condensate
- Springs
- Uncontaminated Ground Water
- Foundation or Footing Drains (with uncontaminated water)

Appropriate pollution prevention measures are required to reduce any sources of pollutants in non-storm water discharges.

5.2 AUTHORIZED NON-STORM WATER DISCHARGES AT NEW HAVEN DEPOT

The following non-storm water discharges are present at the New Haven Depot and are authorized for discharge into the storm water drainage system:

- Air conditioning condensate
- Fire hydrant flushing
- Sprinkler system discharge (when accidentally tripped)

5.3 INSPECTION OF STORM WATER DRAIN INLETS

According to information obtained from the depot, a review of facility drawings, and discussions with depot personnel, there do not appear to be any illicit connections to the storm sewer system.

APPENDIX A

SPILLS AND LEAKS FORM

SPILLS AND LEAKS FORM

DLA/DNSC New Haven Depot

Directions: Record below all significant spills and significant leaks of toxic or hazardous pollutants that have occurred at the site since the last annual report was submitted.

Definitions: Significant spills include, but are not limited to, the release of oil or hazardous substances in excess of reportable quantities (see Section 2.2).

	DESCRIPTION			RESPONSE PROCEDURES	
Date	**Location**	**Type of Material**	**Quantity**	**Amount Recovered**	**Material is no longer exposed to Storm Water** (yes or no)

Evaluator: _____

Date: _____

APPENDIX B

ANNUAL SITE COMPLIANCE REPORT

DIRECTIONS FOR COMPLETION OF ANNUAL SITE COMPLIANCE REPORT

NEW HAVEN DEPOT

There are two elements to the DNSC's annual reporting requirement that you must perform:

1. Routine visual inspection of your storm water system and all areas of the depot where potential exposure of AOCs exists; and

2. Completion of the Annual Site Compliance Report.

1. ROUTINE VISUAL INSPECTIONS

The routine visual inspections are not meant to be a comprehensive evaluation of the entire storm water pollution prevention program. Rather, they are meant to be a regular visual assessment of the site to identify conditions that may contribute to contamination of storm water runoff with pollutants from the facility.

The visual inspection is a simple way that you can confirm that the chosen pollution control measures are in place and working. Inspections should periodically take place during storm events, in order to assess the system under adverse conditions, and also under dry weather conditions where no precipitation (rain, snow or snowmelt) has occurred for at least 3 days to verify the absence of non-storm water discharges. These visual inspections are meant to complement the annual site compliance report and inspection.

The frequency of inspections is at your discretion, based on the types and amounts of materials handled at the facility, existing BMPs at the facility, degree of pollutant exposure to storm water, and any other factors that may be relevant (i.e., the age of the facility, etc.). However, a good practice is to always look at the general condition of the storm water system as part of a daily routine, such as while driving or walking around the depot.

Remember, you are the key!

If you notice a potential problem, take the steps to fix it! Keep the lines of communication open. At your monthly safety meetings address any concerns you may have about the current status of your SWPPP. If you see a situation that requires immediate action, act responsibly. Fix the problem or contact personnel who can.

2. COMPLETION OF THE ANNUAL SITE COMPLIANCE REPORT

Information for the report should be collected during the third quarter of each year (April through June). The completed form should be submitted to Chief Environmental Management Division by June 30 each year.

The following items are keyed to the numbers listed on the report form:

1. The evaluator should be the Pollution Prevention Team leader (see Table 3-1)

2. Describe any significant changes in depot commodity storage or operations that may have occurred during the previous 12-month period, or the last annual site compliance report.

3. List any incident that may have affected the quality of storm water runoff. Include issues from neighboring non-DNSC properties that may influence the storm water drainage system, if known.

4. Complete an inspection form covering each Area of Concern. The intent is to document that the existing conditions and best management practices are still in place, and to document any changes over the past year. More than one AOC is included on an inspection form.

5. Mention any other issues or recommendations relating to storm water runoff. Include knowledge of any issues relating to contamination of storm water runoff from non-DNSC property that may affect the depot's drainage system.

CAUTION
Hard copies of this document may not be the current version. Refer to the "I Am The Key" link on DNSC's Home Page to verify the current version, using the "version" date found on the document.

ANNUAL SITE COMPLIANCE REPORT

DLA / DNSC NEW HAVEN DEPOT

Due annually by June 30. Use additional sheets if necessary.

1.Evaluator:_____**Date:** _____

2. SITE CHANGES: Summary of changes in materials, storm water management, personnel, spills, etc. Note changes in the amount of pollutants discharged into storm water system from activities such as: outdoor storage activities, significant dust or particulate generating processes, loading/unloading operations, on-site waste disposal practices, vehicle and building maintenance, new construction and land disturbances, roadway and other maintenance.

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3. INCIDENTS: Address compliance with the SWPPP, including normally allowed non-storm water discharges into the storm water system, such as water line flushing or air conditioning condensation; and any non-compliance issues, such as any spills, illicit connections or pollutants entering the system.

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4. ADEQUACY OF BEST MANAGEMENT PRACTICES: Evaluate measures to reduce storm water runoff pollution and determine if measures are adequately and properly implemented, or if additional measures are deemed necessary. Are additional controls needed? Use the Evaluation Forms included for each Area of Concern to document adequacy of BMPs.

5. OTHER ISSUES AND RECOMMENDATIONS:

_____

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_____

Completed copies of this report, the evaluation form for each area of concern and the Spills and Leaks Form must be kept with the SWPPP. Copies must also be furnished to Chief Environmental Management Division.

EVALUATION FORM FOR THE ANNUAL SITE COMPLIANCE REPORT

Areas of Concern A-1, A-2 and A-3

ASTs at Vehicle Fueling Station, Building T-304 and Water Tower

DNSC New Haven Depot

The purpose of this form is to document annually the pre-existing conditions at this area of concern and to document whether or not those conditions have changed.

Physical Characteristics	***Existing Status***	***Current Status the Same?***	**If "No", Add Comments, Explanations** (additional space on page 2)
Pollutants of Concern	Fuel products (gasoline and diesel fuel)	❑ Yes ❑ No	_____ _____
Storage Type and Location	Two (2) ASTs at Vehicle Fueling Station (Building T-111), one AST at T-304, one AST at Water Tower. Each tank is located on a concrete pad.	❑ Yes ❑ No	_____ _____ _____ _____
Existing Storm Water Management Controls	ASTs have secondary containment and interstitial monitoring; spill kit is inside nearest building.	❑ Yes ❑ No	_____ _____ _____
Material Exposed to Storm Water Runoff?	Potentially	❑ Yes ❑ No	_____ _____ _____
Visual Observations of Site Drainage	Runoff infiltrates ground or flows into storm water drainage ditches.	❑ Yes ❑ No	_____ _____ _____
Contamination Potential	Low to Medium	❑ Yes ❑ No	_____ _____
Best Management Practices In Place			
Good Housekeeping	A clean, well-maintained area.	❑ Yes ❑ No	_____ _____
Spill Prevention and Proper Fluid Disposal	No spills to the storm water system have occurred, and waste fluids are not disposed in the storm water system.	❑ Yes ❑ No	_____ _____ _____
Storm Drain Inlet Marking or Stenciling	(Not Applicable)		_____ _____

EVALUATION FORM FOR THE ANNUAL SITE COMPLIANCE REPORT

Areas of Concern A-1, A-2 and A-3: Vehicle Fueling Station, Building T-304, and Water Tower - DNSC New Haven Depot. *Page 2 of 2*

Physical Characteristics	***Existing Status***	***Current Status the Same?***	**If "No", Add Comments, Explanations** (additional space at bottom)
Proper Herbicide and Pesticide Use	Applications are in compliance with DNSC Pest Management Plan.	❑ Yes ❑ No	_____ _____
Illicit Discharge Connections	There are no illicit discharge connections to the storm water system.	❑ Yes ❑ No	_____ _____
Street and Parking Lot Sweeping	Area is kept swept and free of debris.	❑ Yes ❑ No	_____ _____
Catch Basin and Ditch Cleaning	Catch basins and ditches are free of debris and proper flow is maintained in ditches.	❑ Yes ❑ No	_____ _____ _____
Road Salting and Sanding	Use of salt around storm water drainage pathways is minimized. Areas of sand application are kept clear of major accumulations.	❑ Yes ❑ No	_____ _____ _____ _____
Snow Removal	Snow from around the vicinity should be removed to an area where it can melt and infiltrate into the ground.	❑ Yes ❑ No	_____ _____ _____ _____

Additional Comments:_____

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This form completed by: _____

Signature: _____ Date: _____

Completed copies of this report, the Annual Site Compliance Report and the evaluation form for each area of concern must be kept with the SWPPP. Copies must also be furnished to Chief Environmental Management Division.

EVALUATION FORM FOR THE ANNUAL SITE COMPLIANCE REPORT

Area of Concern B

Former Vehicle Maintenance and Cleaning Areas

DNSC New Haven Depot

The purpose of this form is to document annually the pre-existing conditions at this area of concern and to document whether or not those conditions have changed.

Physical Characteristics	***Existing Status***	***Current Status the Same?***	**If "No", Add Comments, Explanations** (additional space on page 2)
Pollutants of Concern	Vehicle maintenance activities and products are no longer present (oil, anti-freeze, cleaners, etc.)	❑ Yes ❑ No	
Storage Type and Location	No materials are stored inside Building T-111, in drums or other containers. No maintenance is done inside building.	❑ Yes ❑ No	
Existing Storm Water Management Controls	No activities are performed activities inside building.	❑ Yes ❑ No	
Material Exposed to Storm Water Runoff?	No potential exists	❑ Yes ❑ No	
Visual Observations of Site Drainage	Garage and driveway areas are kept clean. Runoff flows into storm water drainage ditches or infiltrates ground.	❑ Yes ❑ No	
Contamination Potential	Low	❑ Yes ❑ No	
Best Management Practices In Place			
Good Housekeeping	Stored in a clean, well-maintained area.	❑ Yes ❑ No	
Spill Prevention and Proper Fluid Disposal	No spills to the storm water system have occurred, and waste fluids are not disposed in the storm water system.	❑ Yes ❑ No	

EVALUATION FORM FOR THE ANNUAL SITE COMPLIANCE REPORT

Area of Concern B – Former Vehicle Maintenance - DNSC New Haven Depot.

Page 2 of 2

Physical Characteristics	***Existing Status***	***Current Status the Same?***	**If "No", Add Comments, Explanations** (additional space at bottom)
Proper Herbicide and Pesticide Use	Any applications are in compliance with DNSC Pest Management Plan.	❑ Yes ❑ No	
Illicit Discharge Connections	There are no illicit discharge connections to the storm water system.	❑ Yes ❑ No	
Street and Parking Lot Sweeping	Area is kept swept and free of debris.	❑ Yes ❑ No	
Catch Basin and Ditch Cleaning	Catch basins and ditches are free of debris and proper flow is maintained in ditches.	❑ Yes ❑ No	
Road Salting and Sanding	Use of salt around storm water drainage pathways is minimized. Areas of sand application are kept clear of major accumulations.	❑ Yes ❑ No	
Snow Removal	Snow from around the vicinity should be removed to an area where it can melt and infiltrate into the ground.	❑ Yes ❑ No	

Additional Comments:_____

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This form completed by: _____

Signature: _____ Date: _____

Completed copies of this report, the Annual Site Compliance Report and the evaluation form for each area of concern must be kept with the SWPPP. Copies must also be furnished to Chief Environmental Management Division.

EVALUATION FORM FOR THE ANNUAL SITE COMPLIANCE REPORT

Area of Concern C

Solid Waste Bins (Dumpsters)

DNSC New Haven Depot

The purpose of this form is to document annually the pre-existing conditions at this area of concern and to document whether or not those conditions have changed.

Physical Characteristics	***Existing Status***	***Current Status the Same?***	**If "No", Add Comments, Explanations** (additional space on page 2)
Pollutants of Concern	Solid waste (standard office and kitchen refuse)	❑ Yes ❑ No	
Storage Type and Location	Solid waste bins (dumpsters) located near guard shack.	❑ Yes ❑ No	
Existing Storm Water Management Controls	No hazardous waste or chemicals of any kind to be placed in bins; lids to be closed at all times.	❑ Yes ❑ No	
Material Exposed to Storm Water Runoff?	Yes	❑ Yes ❑ No	
Visual Observations of Site Drainage	Area around dumpsters is kept clean. Runoff infiltrates into the ground, or flows into storm water drainage ditches.	❑ Yes ❑ No	
Contamination Potential	Low to Medium	❑ Yes ❑ No	
Best Management Practices In Place			
Good Housekeeping	Stored in a clean, well-maintained area.	❑ Yes ❑ No	
Spill Prevention and Proper Fluid Disposal	No spills to the storm water system have occurred, and waste fluids are not disposed in the storm water system.	❑ Yes ❑ No	
Proper Herbicide and Pesticide Use	Any applications are in compliance with DNSC Pest Management Plan.	❑ Yes ❑ No	

EVALUATION FORM FOR THE ANNUAL SITE COMPLIANCE REPORT

Area of Concern C - Solid Waste Bins (Dumpsters) - DNSC New Haven Depot.

Page 2 of 2

Physical Characteristics	***Existing Status***	***Current Status the Same?***	**If "No", Add Comments, Explanations** (additional space at bottom)
Illicit Discharge Connections	There are no illicit discharge connections to the storm water system.	❑ Yes ❑ No	
Street and Parking Lot Sweeping	Area is kept swept and free of debris.	❑ Yes ❑ No	
Catch basin and Ditch Cleaning	Catch basins and ditches are free of debris and proper flow is maintained in ditches.	❑ Yes ❑ No	
Road Salting and Sanding	Use of salt around storm water drainage pathways is minimized. Areas of sand application are kept clear of major accumulations.	❑ Yes ❑ No	
Snow Removal	Snow from around the vicinity should be removed to an area where it can melt and infiltrate into the ground.	❑ Yes ❑ No	

Additional Comments:_____

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This form completed by: _____

Signature: _____ Date: _____

Completed copies of this report, the Annual Site Compliance Report and the evaluation form for each area of concern must be kept with the SWPPP. Copies must also be furnished to Chief Environmental Management Division.

EVALUATION FORM FOR THE ANNUAL SITE COMPLIANCE REPORT

Areas of Concern D – L

Former Material Stockpiles - DNSC New Haven Depot

The purpose of this form is to document annually the existing conditions at these AOCs, and to document whether or not conditions have changed. Compare the data for each stockpile listed on Table 3.2 and Figures 3.3 to 3.5, and note any changes or discrepancies on this form. Note any new potential pollutant source (i.e., portable ASTs, dumpsters, etc.)

Physical Characteristics	***Existing Status***	***Current Status the Same?***	**If "No", Add Comments, Explanations** (use page 2 or extra sheet if needed)
Pollutants of Concern	Fluorspar, ferrochrome, ferromanganese stockpiles.	❑ Yes ❑ No	
Storage Type and Location	56 former stockpiles stored on various surfaces in designated Open Areas, as detailed on Table 3.2.	❑ Yes ❑ No	
Existing Storm Water Management Controls	Piles are gone but residuals remain on ground surface. No signs of erosion in former storage areas.	❑ Yes ❑ No	
Material Exposed to Storm Water Runoff?	Yes (residuals on ground surface)	❑ Yes ❑ No	
Visual Observations of Site Drainage	Runoff infiltrates into the ground, or flows into storm water drainage ditches.	❑ Yes ❑ No	
Contamination Potential	Medium to low	❑ Yes ❑ No	
Best Management Practices In Place			
Good Housekeeping	Former storage areas are free of debris.	❑ Yes ❑ No	
Spill Prevention and Proper Fluid Disposal	No spills to the storm water system have occurred, and waste fluids are not disposed in the storm water system.	❑ Yes ❑ No	
Proper Herbicide and Pesticide Use	Any applications comply with DNSC Pest Man. Plan.	❑ Yes ❑ No	

EVALUATION FORM FOR THE ANNUAL SITE COMPLIANCE REPORT

Area of Concern D - L - Former Material Stockpiles - DNSC New Haven Depot. *Page 2 of 2*

Physical Characteristics	***Existing Status***	***Current Status the Same?***	**If "No", Add Comments, Explanations** (additional space at bottom)
Illicit Discharge Connections	There are no illicit discharge connections to the storm water system.	❑ Yes ❑ No	
Street and Parking Lot Sweeping	Area is kept swept and free of debris.	❑ Yes ❑ No	
Catch Basin and Ditch Cleaning	Catch basins and ditches are free of debris and proper flow is maintained in ditches.	❑ Yes ❑ No	
Road Salting and Sanding	Use of salt around storm water drainage pathways is minimized. Areas of sand application are kept clear of major accumulations.	❑ Yes ❑ No	
Snow Removal	Snow from around the commodities should be removed to an area where it can melt and infiltrate into the ground.	❑ Yes ❑ No	

Additional Comments:_____

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This form completed by: _____

Signature: _____ Date: _____

Completed copies of this report, the Annual Site Compliance Report and the evaluation form for each area of concern must be kept with the SWPPP. Copies must also be furnished to Chief Environmental Management Division.

EVALUATION FORM FOR THE ANNUAL SITE COMPLIANCE REPORT

Areas of Concern M - Q

Materials Formerly Stored Outdoors (Not in Stockpiles) - DNSC New Haven Depot

The purpose of this form is to document annually the pre-existing conditions at these AOCs, and to document whether or not the conditions have changed. Compare the data for each material listed on Table 3.3, and note any changes or discrepancies on this form. Note any new potential pollutant source (i.e., portable ASTs, dumpsters, etc.)

Page 1 of 2

Physical Characteristics	***Existing Status***	***Current Status the Same?***	**If "No", Add Comments, Explanations** (use page 2 or extra sheet if needed)
Pollutants of Concern	Lead, aluminum oxide, tin, zinc.	❑ Yes ❑ No	
Storage Type and Location	Materials formerly stored in Open Areas. Type, location & quantities as on Table 3.3.	❑ Yes ❑ No	
Existing Storm Water Management Controls	Materials have been removed – residual footprints may remain on ground surface	❑ Yes ❑ No	
Material Exposed to Storm Water Runoff?	Residuals on ground surface are exposed	❑ Yes ❑ No	
Visual Observations of Site Drainage	Runoff infiltrates into the ground, or flows into storm water drainage ditches.	❑ Yes ❑ No	
Contamination Potential	Low to Medium	❑ Yes ❑ No	
Best Management Practices In Place			
Good Housekeeping	Former storage areas are free of debris.	❑ Yes ❑ No	
Spill Prevention and Proper Fluid Disposal	No spills to the storm water system have occurred, and waste fluids are not disposed in the storm water system.	❑ Yes ❑ No	
Storm Drain Inlet Marking or Stenciling	Storm drains are clearly marked	❑ Yes ❑ No	
Proper Herbicide and Pesticide Use	Any applications are in compliance with DNSC Pest Management Plan.	❑ Yes ❑ No	

EVALUATION FORM FOR THE ANNUAL SITE COMPLIANCE REPORT

Area of Concern M - Q – Former Material Stored Outdoors - DNSC New Haven. *Page 2 of 2*

Physical Characteristics	***Existing Status***	***Current Status the Same?***	**If "No", Add Comments, Explanations** (additional space at bottom)
Illicit Discharge Connections	There are no illicit discharge connections to the storm water system.	❑ Yes ❑ No	
Street and Parking Lot Sweeping	Area is kept swept and free of debris.	❑ Yes ❑ No	
Catch Basin and Ditch Cleaning	Catch basins and ditches are free of debris and proper flow is maintained in ditches.	❑ Yes ❑ No	
Road Salting and Sanding	Use of salt around storm water drainage pathways is minimized. Areas of sand application are kept clear of major accumulations.	❑ Yes ❑ No	
Snow Removal	Snow from around the commodities should be removed to an area where it can melt and infiltrate into the ground.	❑ Yes ❑ No	

Additional Comments:_____

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This form completed by: _____

Signature: _____ Date: _____

Completed copies of this report, the Annual Site Compliance Report and the evaluation form for each area of concern must be kept with the SWPPP. Copies must also be furnished to Chief Environmental Management Division.