



# SPILL PREVENTION, CONTROL, AND COUNTERMEASURE (SPCC) PLAN

Northern Illinois University

*Environmental Health and Safety Department  
July 2016 Version*

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# INTRODUCTION

## Purpose

The purpose of this Spill Prevention, Control, and Countermeasure (SPCC) Plan is to describe measures implemented by *Northern Illinois University* (NIU or University) to ensure the safe handling and storage of oil, to prevent oil discharges from occurring, and to prepare NIU to respond in a safe, effective, and timely manner to mitigate the impacts of any oil discharge that may occur.

This Plan has been prepared to meet the requirements of the United States Environmental Protection Agency (USEPA) regulations contained in Title 40 of the *Code of Federal Regulations* Part 112 (40 CFR Part 112). In addition to fulfilling the requirements of 40 CFR Part 112, this SPCC Plan is used as a reference for oil storage information and testing records, as a tool to communicate practices on preventing and responding to discharges with employees, as a guide to facility inspections, and as a resource during emergency response. The NIU facility location and drawings showing pertinent features of the campus are included in **Appendix A**.

*Northern Illinois University* management has determined that this facility does not pose a risk of substantial harm under 40 CFR Part 112, as demonstrated and recorded in the *Substantial Harm Determination* included in **Appendix B** of this Plan.

This Plan provides guidance on key actions that NIU should perform to comply with the SPCC rule:

- Complete monthly and annual site inspections as outlined in the *Inspection, Tests, and Records* section of this Plan (**Section 3.7**) using the inspection checklists included in **Appendix C**.
- Perform preventative maintenance of equipment, secondary containment systems, and discharge prevention systems described in this Plan as needed to keep them in proper operating conditions.
- Conduct annual employee training as outlined in the Personnel, Training, and Discharge Prevention Procedures section of this Plan (**Section 3.8**) and document them on the log included in **Appendix D**.
- Submit the SPCC Plan to the EPA Region 5 Regional Administrator (RA) and the Illinois Emergency Management Agency (IEMA), along with other information as detailed in **Section 5.3** of the Plan, if either of the following occurs:
  1. The University discharges more than 1,000 gallons of oil into or upon the navigable waters of the United States or adjoining shorelines in a single spill event; or

2. The University discharges petroleum products in harmful quantities in two spill events within a twelve month period. A harmful quantity is defined as any quantity that:
  - a. Violates applicable water quality standards;
  - b. Causes a film or sheen upon or discoloration of the surface of the water or adjoining shorelines; or,
  - c. Causes a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.
- Amend the SPCC plan within six (6) months whenever there is a change in facility design, construction, operation or maintenance that materially affects the facility's spill potential.
- Review the SPCC Plan at least once every five (5) years and amend it to include more effective prevention and control technology, if such technology will significantly reduce the likelihood of a spill event, and has been proven effective in the field at the time of the review.

## Part 1: Plan Administration

### 1.1 Management Approval and Designated Person (40 CFR 112.7)



**Northern Illinois  
University**

**Environmental Health and Safety Department  
Dorland Building  
180 Stadium Drive  
DeKalb, Illinois 60115  
Phone: (815) 753-0404**

**Contact:**

**Scott Mooberry, Director, Environmental Health and Safety Department**

**Date of Completion:** \_\_\_\_\_

Northern Illinois University (NIU) is committed to preventing discharges of oil to navigable waters and the environment, and to maintaining the highest standards for spill prevention control and countermeasures through the implementation and regular review and amendment to the Plan. This Spill Prevention, Control, and Countermeasure (SPCC) Plan has the full approval of NIU officials and management. The Director of the Environmental Health and Safety Department is the Designated Person (Facility Response Coordinator) accountable for Oil Spill Prevention at NIU and has the authority to commit the necessary resources to implement this Plan.

Name: Scott Mooberry

Title: Director, Environmental Health and Safety Department

\_\_\_\_\_  
*Signature*

\_\_\_\_\_  
*Date*

### 1.2 Professional Engineer Certification (40 CFR 112.3(d))

A facility that stores less than 10,000 gallons in aggregate aboveground oil storage capacity and meets the oil discharge history criteria may self-certify their SPCC Plan. Since NIU stores less than 10,000 gallons of oil, this option is available. However, NIU has elected to have the Plan certified by a Professional Engineer as required under Title 40 of the *Code of Federal Regulations* Part 112 (40 CFR Part 112), rather than self-certify the SPCC Plan.

The undersigned Registered Professional Engineer is familiar with the requirements of 40 CFR Part 112 and has visited and examined the facility, or has supervised examination of the facility by appropriately qualified personnel. The undersigned Registered Professional Engineer attests that this Spill Prevention, Control, and Countermeasure Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards and the requirements of 40 CFR Part 112; that procedures for required inspections and testing have been established; and, that this Plan is adequate for the facility.

This certification in no way relieves the owner or operator of the facility of his/her duty to prepare and fully implement this SPCC Plan in accordance with the requirements of 40 CFR Part 112. This Plan is valid only to the extent that the facility owner or operator maintains, tests, and inspects equipment, containment, and other devices as prescribed in this Plan.

Engineer:

*Stephen J. Ryan*  
Signature

062-066023  
Registration Number

State:

6/28/16  
Date

11/30/2017  
License Expiration Date



### 1.3 Location of SPCC Plan (40 CFR 112.3(e))

In accordance with 40 CFR 112.3(e), a complete copy of this SPCC Plan, along with associated reports and logs, is maintained at the facility in the NIU Environmental Health and Safety Office located in the Dorland Building at 180 Stadium Drive, DeKalb, Illinois.

### 1.4 Plan Review (40 CFR 112.3 and 112.5)

#### 1.4.1 Changes in Facility Configuration

In accordance with 40 CFR 112.5(a), NIU periodically reviews and evaluates this SPCC Plan for any change in the facility design, construction, operation, or maintenance that materially affects the facility's potential for an oil discharge, including, but not limited to:

- Commissioning of containers or tanks;
- Reconstruction, replacement, or installation of piping systems;
- Construction or demolition that might alter secondary containment structures; or
- Changes of product or service, revisions to standard operation, modification of testing/inspection procedures; and
- Use of new or modified industry standards or maintenance procedures.

Amendments to the Plan made to address changes of this nature are referred to as technical amendments, and must be certified by a Professional Engineer. Non-technical, or administrative, amendments can be accomplished (but must be documented in this section) by the facility owner and/or operator. Non-technical amendments are administrative in nature and include items such as the following:

- Change in the name or contact information (i.e., telephone numbers) of individuals responsible for the implementation of this Plan; or
- Change in the name or contact information of spill response or cleanup contractors.

Northern Illinois University must make the needed revisions to the SPCC Plan as soon as possible, but no later than six months after the change occurs. The Plan must be implemented as soon as possible following any technical amendment, but *no later than six months* from the date of the amendment. The NIU EHS Environmental Specialist is responsible for initiating and coordinating revisions to the SPCC Plan.

#### 1.4.2 Scheduled Plan Reviews

In accordance with 40 CFR 112.5(b), NIU reviews this SPCC Plan at least once every five years. Revisions to the Plan, if needed, are made within six months of the five-year review. A registered Professional Engineer certifies any technical amendment to the Plan, as described above, in accordance with 40 CFR 112.3(d). This Plan is dated *June 2016*. The next plan review is therefore scheduled to take place on or prior to *June 2021*.

## 1.5 Cross-Reference with SPCC Provisions (40 CFR 112.7(a)(2))

This SPCC Plan does not follow the exact order of the requirements as presented in 40 CFR Part 112. Therefore, and as allowed under the subject regulations, **Table 1-1** provides a cross reference for the requirements of 40 CFR Part 112 with the respective sections of the SPCC Plan where the requirement has been addressed.

**Table 1-1: SPCC Cross-Reference**

Provision	Plan Section	Page
112.3(d)	Professional Engineer Certification	4
112.3(e)	Location of SPCC Plan	5
112.5(a)(b)	Plan Review	5
112.7	Management Approval	3
112.7(a)(2)	Cross-Reference with SPCC Provisions	6, Table 1-1
112.7(a)(3)	Part 2: General Facility Information Appendix A: Site Plan and Facility Diagrams	7, Appendix A
112.7(a)(3)(i)	Oil Storage and Handling Summary	9, Tables 2-1 to 2-4
112.7(a)(3)(iv)	Part 5: Spill Response Procedures	37
112.7(a)(3)(v)	Waste Disposal	40
112.7(a)(3)(vi)	Part 5: Spill Response Procedures; Emergency Contact List; Discharge Notification Form	37, Appendix F, Appendix G
112.7(a)(4)	Spill Reporting; Discharge Notification	22, 39, Appendix G
112.7(a)(5)	Part 5: Spill Response Procedures	37
112.7(b)	Potential Discharge Volumes and Directions of Flow	22, Table 3-1
112.7(c)	Containment and Diversionary Structures	27
112.7(d)	Practicability of Secondary Containment	27
112.7(e)	Inspections, Tests, and Records	28, Appendix C
112.7(f)	Personnel, Training and Discharge Prevention Procedures	29
112.7(g)	Security	29
112.7(h)	Oil Transfer Procedures	30
112.7(i)	Brittle Fracture Evaluation	31
112.7(j)	Conformance with Applicable State and Local Requirements	31
112.8(b)	Facility Drainage	33
112.8(c)	Bulk Storage Containers	33
112.8(c)(1)	Construction	33
112.8(c)(2)	Secondary Containment	34
112.8(c)(3)	Drainage of Diked Areas	34
112.8(c)(4)	Corrosion Protection	34
112.8(c)(5)	Partially Buried and Bunkered Tanks	34
112.8(c)(6)	Inspections and Tests	34
112.8(c)(8)	Overfill Prevention Systems	35
112.8(c)(9)	Effluent Treatment Facilities	35
112.8(c)(10)	Visible Discharges	35
112.8(c)(11)	Mobile and Portable Containers	35
112.8(d)	Transfer Operation, Pumping, and In-Plant Processes	36
112.20(e)	Certification of Substantial Harm Determination	Appendix B

Note: Only selected excerpts of relevant rule text are provided. For a complete list of SPCC requirements, refer to the full text of 40 CFR Part 112.

## Part 2: General Facility Information

**Facility Name:** Northern Illinois University

**Address:** Environmental Health and Safety Department  
Dorland Building  
180 Stadium Drive  
DeKalb, Illinois 60115

**Type:** Post-Secondary Education (University)

**Owner:** State of Illinois

**Emergency Coordination:** Scott Mooberry - Primary Contact  
Director, Environmental Health & Safety  
Work (815) 753-6250 or 753-0404  
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### 2.1 Facility Description (40 CFR 112.7(a)(3))

#### 2.1.1 Location and Activities

Northern Illinois University (NIU) is a public research university located in DeKalb, Illinois, a midsized Midwestern city of approximately 44,000 residents located approximately 66 miles west of Chicago. The main campus of the university covers approximately 756 acres on the northwest side of DeKalb with a total of 64 major buildings including academic, housing, and support structures. NIU is bordered on the south by Illinois Route 38 (Lincoln Highway), on the west by John Huber Parkway, on the north by Hillcrest Avenue, and on the east by the Kishwaukee River (see maps in **Appendix A**). This SPCC Plan also includes three off-campus facilities: the Broadcast Center located at 801 North First Street, DeKalb, Illinois; the School of Nursing located at 1240 Normal Road, DeKalb, Illinois; and, the Wellness and Literacy Center (Monsanto Building) located at 3100 Sycamore Road, DeKalb, Illinois. Approximately 22,000

undergraduate and graduate students enroll each year in diverse academic programs on and off campus. An additional 4,600 faculty and staff are employed at the university.

### 2.1.2 Oil Storage and Handling Summary (40 CFR 112.7(a)(3)(i))

The following summarizes the various types of oil storage and handling at the university:

- Above Ground Storage Tanks (ASTs)
- Underground Storage Tanks (USTs)
- Emergency Generator Day Tanks
- Used Oil
- Oil-filled Operational Equipment
- Portable Containers

Oil storage at the university (including used oil) occurs at numerous locations throughout the campus. The capacities of oil tanks and containers present at NIU are listed in **Tables 2-1** through **2-4**. The potential volume of all containers with a capacity of 55 gallons or more are included, although the numbers of 30 gallon drums, 5 gallon containers, pails, or cans stored in several areas are variable and not specifically itemized. Regardless, the total oil quantities listed for each area can be considered the maximum.

The University also handles, stores, and uses a variety of other petroleum products in the form of hydraulic oil, elevator oil, gear oil, lubricating oil, way oils, and similar petroleum compounds for lubricating, hydraulic operations, and maintenance purposes. These are normally stored in containers of 55 gallon capacity or less. Northern Illinois University receives bulk oil products by common carrier tanker truck and drums by truck or trailer. No rail service is involved in oil deliveries to the facility.

The University is open year round and emergency occurrences, including oil releases, are to be reported 24 hours per day through the Northern Illinois University Police Department (NIUPD) at 753-1212 or 911. The NIUPD perform regular patrols on campus and note any problems around tanks or waste storage facilities. The appropriate NIU maintenance or emergency response personnel will then be notified for response. Outside emergency response authorities (DeKalb Fire Department, Illinois Emergency Management Agency, private contractors, etc.) will be contacted for assistance when necessary.

The Site Plan included in **Appendix A (Figure A-2)** of this Plan, shows the location and layout of the University and structures. The Facility Diagrams (**Figures A-3** through **A-6**) show the locations of the facilities, appurtenances, tanks, container storage areas, or equipment subject to this SPCC Plan through the use of the included building key. Any minor or incidental oil storage or handling locations that are not included in the tables and figures would normally involve the use of small quantities of oil in containers of less than 55 gallon capacity, or similar to containers common for residential use. However, any spillage of oil, regardless of the source, will be addressed through the response procedures established in this SPCC Plan. Similarly, outside contractors, when working on NIU grounds, are to notify NIU of their oil storage and handling practices to ensure they are consistent with the protections afforded by this SPCC Plan.

**Table 2-1: Summary Table of Bulk Oil Tanks, Containers, and Equipment**

<b>Oil Storage Area or OSFM Facility Number</b>	<b>Total Storage Capacity (Gallons)</b>	<b>Contents (Oil Type)</b>	<b>Description of Oil Storage Unit</b>
<b>Bulk Storage Containers</b>			
Diesel Fuel AST Music Building (Generator)	253	Diesel Fuel	One 253-gallon steel, double-walled tank.
Diesel Fuel AST Founders Library (Generator Day Tank)	25	Diesel Fuel	One 25-gallon steel, double-walled tank.
Diesel Fuel AST Grant Building (Generator Day Tank)	75	Diesel Fuel	One 75-gallon steel, double-walled tank.
Diesel Fuel AST Health Services (Generator Day Tank)	75	Diesel Fuel	One 75-gallon steel, double-walled tank.
Diesel Fuel AST Psychology/Mathematics (Generator Day Tank)	25	Diesel Fuel	One 25-gallon steel, double-walled tank.
Diesel Fuel AST Stevenson - North (Generator Day Tank)	75	Diesel Fuel	One 75-gallon steel, double-walled tank.
Diesel Fuel AST Stevenson - South (Generator Day Tank)	200	Diesel Fuel	One 200-gallon steel, double-walled tank.
Diesel Fuel AST New Residence Hall (Fire Pump)	115	Diesel Fuel	One 115-gallon steel, double-walled tank.
Diesel Fuel AST Holmes Student Center (Inactive)	550	Diesel Fuel	Two 275-gallon steel, single-walled tanks.
Gasoline UST Transportation (Facility #1002702)	15,000	Unleaded Gasoline	One 15,000-gallon double-walled fiberglass UST with interstitial leak detection, electronic tank gauging (ATG), catchment basin, and overfill alarm.

<b>Oil Storage Area or OSFM Facility Number</b>	<b>Total Storage Capacity (Gallons)</b>	<b>Contents (Oil Type)</b>	<b>Description of Oil Storage Unit</b>
Diesel Fuel UST Transportation (Facility #1002702)	4,000	Diesel Fuel	One 4,000-gallon double-walled fiberglass UST with interstitial leak detection, electronic tank gauging (ATG), catchment basin, and overfill alarm.
Used Oil UST Transportation (Facility #1002702)	550	Used Oil	One 550-gallon double-walled fiberglass UST with interstitial leak detection, electronic tank gauging (ATG), catchment basin, and overfill alarm.
Diesel Fuel UST Stevenson Building (Facility #1002693)	5,000	Diesel Fuel	Two 2,500-gallon double-walled fiberglass UST with interstitial leak detection, electronic tank gauging (ATG), catchment basin, and overfill alarm.
Diesel Fuel UST Grant Building (Facility #1002694)	2,500	Diesel Fuel	One 2,500-gallon double-walled fiberglass UST with interstitial leak detection, electronic tank gauging (ATG), catchment basin, and overfill alarm.
Diesel Fuel UST Founders Library (Facility #1002691)	1,000	Diesel Fuel	One 1,000-gallon double-walled fiberglass UST with interstitial leak detection, electronic tank gauging (ATG), catchment basin, and overfill alarm.
Diesel Fuel UST Grounds (Facility #1002703)	1,000	Diesel Fuel	One 1,000-gallon double-walled fiberglass UST with interstitial leak detection, electronic tank gauging (ATG), catchment basin, and overfill alarm.
Diesel Fuel UST Health Services (Facility #10027689)	1,000	Diesel Fuel	One 1,000-gallon double-walled fiberglass UST with interstitial leak detection, electronic tank gauging (ATG), catchment basin, and overfill alarm.

Oil Storage Area or OSFM Facility Number	Total Storage Capacity (Gallons)	Contents (Oil Type)	Description of Oil Storage Unit
Diesel Fuel UST Psychology/Mathematics (Facility #1002690)	1,000	Diesel Fuel	One 1,000-gallon double-walled fiberglass UST with interstitial leak detection, electronic tank gauging (ATG), catchment basin, and overfill alarm.
<b>Container Storage</b>			
Faraday Hall Storage Rooms and Loading Docks	2,750	Chemicals, Oils	5-gallon to 55-gallon containers of various chemicals which may contain "oils".
Transportation North Storage Area	1,500	Oils, Lubricants, Fluids	55-gallon containers (drums) of oils, lubricants and fluids for vehicle maintenance.
Hazardous Waste Storage Building	1,100	Hazardous Waste	8-ounce to 55-gallon containers in segregated hazardous waste compartments.
East Chiller Plant	550	Oil	55-gallon containers of oil.
East Heating Plant	550	Oil	55-gallon containers of oil.
West Heating Plant	550	Oil	55-gallon containers of oil.
Physical Plant Storage Building	550	Oil, Solvent	55-gallon containers of oil inside and outside of building.

Oil Storage Area or OSFM Facility Number	Total Storage Capacity (Gallons)	Contents (Oil Type)	Description of Oil Storage Unit
<b>Emergency Generators (With Diesel Fuel Storage)</b>			
Gensets (19 units)	7,394	Gasoline, Diesel Fuel	See <b>Table 2-3</b> for locations and information on the liquid fueled generators.
<b>Electrical Transformers (Oil-filled Operational Equipment)</b>			
Transformers (37 units)	10,314	Dielectric, mineral, or other oil types	See <b>Table 2-2</b> for locations and information on the “wet” transformers.
<b>Elevators (Oil-filled Operational Equipment)</b>			
Elevators with hydraulic systems (84 units)	9,240	Hydraulic Fluid	Elevator hydraulic fluid in vessels, hydraulic lines, and valves. See <b>Table 2-4</b> for locations.
<b>Total Oil Storage : 66,941 gallons (maximum capacity)</b>			

**Table 2-2: Oil-Filled Electric Transformers**

Building Location	Manufacturer	Gallons	Fluid Type	KVA	Inside	Number
Altgeld	GE	365	Mineral Oil	1,000		1.
Alumni Visitor Center	Siemens	176	Mineral Oil	300		2.
Barsema Hall	Alstom	411	Mineral Oil	2,000		3.
Chessick Center	Sunbelt	290	Mineral Oil	750		4.
Chick Evans Field House	T&R Electric	315	Mineral Oil	750		5.
Convocation Center	General Electric	693	Mineral Oil	2,000	X	6.
Dusable	Cooper	236	FR3	750		7.
East Chiller Plant	Cooper	565	Mineral Oil	3,000		8.
East Stadium Stands	General Electric	245	Mineral Oil	750		9.
Family Violence	General Electric	245	Mineral Oil	300		10.
Far West Lighting	Cooper	104	FR3	75		11.
Far West Lighting	Cooper	104	FR3	75		12.
New Residence Hall	Cooper	353	FR3	750		13.
New Residence Hall	Cooper	353	FR3	750		14.
New Residence Hall	Cooper	353	FR3	750		15.
Northern View	Cooper	158	Mineral Oil	250		16.
Northern View	Cooper	158	Mineral Oil	250		17.
Northern View	Cooper	158	Mineral Oil	250		18.
Northern View	Cooper	158	Mineral Oil	250		19.
Northern View	Cooper	158	Mineral Oil	250		20.
Northern View	Cooper	158	Mineral Oil	250		21.
Outdoor Rec. Center	Cooper	300	FR3	750		22.
Reavis	Square D	278	R-Temp Fluid	500		23.
Softball Field	Cooper	150	Mineral Oil	150		24.
Stadium Event Power	T&R Electric	175	Mineral Oil	300		25.
Stevens	Cooper	780	FR3	750		26.
Still Gym	Westinghouse	405	Mineral Oil	750		27.
Still Gym - Vault	GE	89	Mineral Oil	167	X	28.
Still Gym - Vault	GE	89	Mineral Oil	167	X	29.
Still Gym - Vault	GE	89	Mineral Oil	167	X	30.
Swen Parson	Cooper	340	Mineral Oil	750		31.
Swen Parson - Switch	G&W	150	Mineral Oil	NA	X	32.
Television Center	Cooper	278	Mineral Oil	500		33.
Track-Soccer Field	Cooper	340	FR3	750		34.
Williston	Westinghouse	387	Mineral Oil	750		35.
Wirtz - Gilbert	Cooper	462	FR3	1,000		36.
Wirtz - Gilbert	Cooper	246	FR3	500		37.

**Table 2-3: Emergency Generators with Oil Storage Tanks**

Building	Size (kW)	Engine Manufacturer	Generator Manufacturer	Location	Fuel Storage Capacity (gallons)	Tank Material	Release Protection
Convocation Center	300	Detroit Diesel	Spectrum	Outside	612	S	DW
East Heating Plant	500	Cummins	Onan	Inside Building	600	S	SC
Faraday	30	John Deere	Kohler	Outside	67	S	DW
Founders Library	200	Detroit Diesel	Fairbanks Morse	Outside	1,000	UST - F	DW - ATG
				Inside Building	25	AST - S	DW - FCM
Grant	450	Caterpillar	Electric Machinery	Outside	2,500	UST - F	DW - ATG
				Inside Building	75	AST - S	DW - FCM
Health Services	350	John Deere	Baldor	Outside	1,000	UST - F	DW - ATG
				Inside Building	25	AST - S	DW - FCM
Holmes Center	200	Cummins	Stamford	Outside	366	S	DW
Holmes Center (deactivated)	N/A	Caterpillar	Caterpillar	Inside Building	550	AST - S	None
Monsanto	600	Mitsubishi	Kohler	Outside	1,621	S	DW
Music Building	50	Ford	Onan	Inside Building	253	AST - S	DW
New Residence Hall	350	Iveco	Generac	Outside	1,200	S	DW
Psychology/Mathematics	200	Scania Vabis	Lima	Outside	1,000	UST - F	DW - ATG
				Inside Building	25	AST - S	DW - FCM
Stevenson Building - North	560	Waukesha	Kato	Outside	2,500	UST - F	DW - ATG
				Inside Building	75	AST - S	DW - FCM
Stevenson Building - South	575	Waukesha	Kato	Outside	2,500	UST - F	DW - ATG
				Inside Building	200	AST - S	DW - FCM
Swen Parson Computer	600	Mitsubishi	Baldor	Outside	1,250	S	DW
NIU Electric Shop Mobile	25	Yanmar	Atlas Copco	Inside	50	S	DW
NIU Electric Shop Mobile	75	Komatsu	MQ Power Corp	Inside	100	S	None
NIU Electric Shop Mobile	250	Komatsu	MQ Power Corp	Inside	300	S	DW
NIU Electric Shop Mobile	400	Caterpillar	Caterpillar	Inside	400	S	DW
NIU Electric Shop Portable	2	Honda	Honda	Inside	1	P	None
NIU Electric Shop Portable	2	Honda	Honda	Inside	1	P	None
NIU Electric Shop Portable	6	Porter Cable	Porter Cable	Inside	7	P	None
NIU Electric Shop Portable	6	Porter Cable	Porter Cable	Inside	7	P	None
NIU Electric Shop Portable	7.5	Titan	Titan	Inside	3.5	S	None
NIU Electric Shop Portable	7	Honda	Honda	Inside	5	S	None

**Notes:** DW (Double Walled Tank); F (Fiberglass); S (Steel); P (Plastic)  
 AST (Aboveground Storage Tank); UST (Underground Storage Tank);  
 ATG (Automatic Tank Gauging); FCM (Fuel Control and Monitoring System); SC (Secondary Containment)

**Table 2-4: NIU Hydraulic Elevators  
(Cross-referenced by Building to NIU Campus Map Key)**

<b>Building</b>	<b>Map Key</b>	<b>Type</b>	<b>Plate Number</b>	<b>Number</b>
Adams Hall	2	Passenger	T005630	1.
Adams Hall	2	Freight	H016406	2.
Altgeld Hall	1	Passenger	H016437	3.
Altgeld Hall	1	Freight	H016404	4.
Alumni Visitor Center	103	Passenger	H016423	5.
Anderson Hall	42	Passenger	H016426	6.
Barsema Hall	94	Passenger	H016427	7.
Broadcast Center	077	Passenger	H016415	8.
Campus Life	84	Passenger	H016417	9.
Chilled Water Plant	109	Passenger	H022101	10.
Cole Hall	356	Passenger	H016428	11.
Convocation Center	100	Passenger	H016430	12.
Convocation Center	100	Freight	H016429	13.
Davis Hall	7	Passenger	T005414	14.
DuSable Hall	156	Passenger	H016434	15.
Engineering Building	75	Passenger	H016420	16.
Engineering Building	75	Passenger	H016421	17.
Family Violence	96	Passenger	H016431	18.
Faraday Hall	43	Passenger	H016435	19.
Faraday Hall	43	Passenger	H016413	20.
Founders Library - North	63	Passenger	T005641	21.
Founders Library - South	63	Passenger	T005642	22.
Founders Library	63	Passenger	T005643	23.
Gable Hall	32	Passenger	H016425	24.
Gilbert Hall	21	Passenger	H016402	25.
Graham Hall	44	Passenger	T005640	26.
Grant "A" Tower - North	048/050	Passenger	T005658	27.
Grant "A" Tower - South	048/050	Passenger	T005659	28.
Grant "B" Tower - North	048/050	Passenger	T005660	29.
Grant "B" Tower - South	048/050	Passenger	T005661	30.
Grant "C" Tower - North	048/050	Passenger	T005654	31.
Grant "C" Tower - South	048/050	Passenger	T005655	32.
Grant "D" Tower - North	048/050	Passenger	T005656	33.
Grant "D" Tower - South	048/050	Passenger	T005657	34.
Grant Food	048/050	Freight	T005637	35.
Health Service Center	55	Passenger	T005648	36.
Health Services #11	55	Passenger	T005649	37.
Holmes Book Store	54	Passenger	T005632	38.

<b>Building</b>	<b>Map Key</b>	<b>Type</b>	<b>Plate Number</b>	<b>Number</b>
Holmes Kitchen	54	Freight	T005633	39.
Holmes Student Center	54	Passenger	T005651	40.
Holmes Student Center	54	Passenger	T005652	41.
Holmes Student Center	54	Passenger	T005653	42.
Holmes Student Center	54	Freight	HL16407	43.
IASBO	90	Passenger	H021640	44.
Lincoln Hall	39	Food	T005636	45.
Lowden Hall	047	Passenger	T005629	46.
McMurray Hall	6	Passenger	H016418	47.
Montgomery Hall	157	Passenger	H016412	48.
Montgomery Hall	157	Freight	H016411	49.
Music Building - North	60	Passenger	H016399	50.
Music Building - South	60	Passenger	H016400	51.
Music Building	60	Stage Lift	HL016401	52.
Neptune	29	Passenger	H016433	53.
Neptune	29	Freight	T005634	54.
Neptune Bakery	29	Freight	H016408	55.
New Residence Hall	098	Passenger	T007427	56.
New Residence Hall	098	Passenger	T007428	57.
New Residence Hall	098	Passenger	T007429	58.
New Residence Hall	098	Passenger	T007430	59.
Parking Structure - East	82	Passenger	H016414	60.
Parking Structure - West	82	Passenger	H016416	61.
Psychology/CS - East	59	Passenger	T005645	62.
Psychology/CS - West	59	Passenger	T005646	63.
Reavis Hall	31	Passenger	H016419	64.
Stevenson "A" Tower - North	052/053	Passenger	T005666	65.
Stevenson "A" Tower - South	052/053	Passenger	T005667	66.
Stevenson "B" Tower - North	052/053	Passenger	T005668	67.
Stevenson "B" Tower - South	052/053	Passenger	T005669	68.
Stevenson "C" Tower - North	052/053	Passenger	T005662	69.
Stevenson "C" Tower - South	052/053	Passenger	T005663	70.
Stevenson "D" Tower - North	052/053	Passenger	T005664	71.
Stevenson "D" Tower - South	052/053	Passenger	T005665	72.
Stevenson Food	052/053	Freight	T005638	73.
Swen Parson - North	20	Passenger	H016410	74.
Swen Parson - South	20	Passenger	H016409	75.
Swen Parson	20	Freight	T005644	76.
Visual Arts Building	58	Passenger	H016398	77.
Wellness and Literacy	101	Passenger	H016432	78.

Building	Map Key	Type	Plate Number	Number
West Huskie Stadium	49	Passenger	T005639	79.
Williston Hall	8	Passenger	H016405	80.
Wirtz Hall	46	Passenger	H016403	81.
Yordon Center	108	Passenger	H016438	82.
Zulauf Hall	256	Passenger	T005415	83.
Zulauf Hall	256	Passenger	T005416	84.

**Total Hydraulic Fluid Capacity (84 X 110-gallon average)**

**9,240 gallons**

## 2.2 Evaluation of Discharge Potential

### 2.2.1 Distance to Navigable Waters and Adjoining Shorelines and Flow Paths

#### Surface Waters

Northern Illinois University is located within the Kishwaukee River Watershed that covers a total of 779,747 acres in north central Illinois. The largest cities in the watershed are DeKalb and Belvidere. The Kishwaukee River Watershed includes three lakes covering 216 acres and a total of 469 stream miles along the Kishwaukee River and its tributaries. The surface topography of the NIU campus is relatively flat. The South Branch Kishwaukee River flows through DeKalb County and serves as the eastern border of the NIU Campus.

Local surface water drainage on the main NIU Campus is largely accommodated by Watson Creek which traverses much of the campus. The Creek starts as an intermittent stream that impounds, or ponds, into the Lorusso Lagoon on the northwest side of the NIU property. The lagoon overflow is channeled underground approximately 300-feet east and then maintains a surface flow until reaching Annie Glidden Road. It is then conveyed subsurface through a culvert box heading to the southeast, which is joined on its route by catch basin drains serving the paved areas and other structures. The Creek surfaces on the south side of Lucinda Avenue, just east of the Field House parking lot, and continues southeast until reaching University Circle Drive South. The Creek is again channeled subsurface to the east until reemerging on the east side of Normal Road. The Creek continues approximately 950-feet and discharges into the East Lagoon. This impoundment serves as a reservoir for other surface and subsurface drainage from the campus. The East Lagoon overflow is discharged into the South Branch Kishwaukee River. Numerous storm water catch basins, curbside drain gates, and drainage swales on the NIU property direct precipitation to the Watson Creek surface water drainage system throughout its course across the campus.

The Northern Illinois University campus, as well as the general vicinity of DeKalb, is also served by sanitary and storm sewers. Surface water drainage is predominately to the east/southeast via overland flow. The subsurface storm water collection and drainage system conveys surface water to the Kishwaukee River.

Accordingly, the possibility of oil reaching a surface waterway from a release or spill, either directly or through storm sewers, is present. The threat of an oil release accessing a sanitary or combined sewer, being transported to the DeKalb POTW, and passing through the treatment works to the Kishwaukee River discharge point is also a possibility.

### Subsurface Waters

The NIU campus is described in accordance with the Federal Township and Range System as Township 40 North, Range 4 East, Sections 15, 16, 21, and 22, DeKalb County, Illinois. The surficial deposits in the vicinity of the campus are described as Cahokia Alluvium less than 6 meters (19.7 feet), overlying loamy and sandy diamictons, greater than 6 meters (19.7 feet), of the Wedron Formation. The topographic elevation of the main NIU campus varies from 880 feet mean sea level (MSL) to 850 feet MSL.

According to the Illinois State Geological Survey (ISGS) Circular 532 entitled, “Potential for Contamination of Shallow Aquifers in Illinois”, the NIU campus is in an area designated as “AX” and “E”.

Regions having an “AX” classification are described as modern river alluvium, a mixture of gravel, sand, silt, and clay along streams, variable in composition and thickness. Modern alluvium occurs along major rivers and streams throughout Illinois. The potential for contaminating both surface water and groundwater is high.

Regions having an “E” classification are described as uniform, relatively impermeable silty or clayey till or other fine-grained material more than 50 feet thick with no evidence of interbedded sand and gravel. The potential for contamination is low because of low hydraulic conductivity,  $1 \times 10^{-9}$  to  $1 \times 10^{-7}$  cm/sec, and good attenuation capacities.

### **2.2.2 Discharge History**

The facility’s history of reportable oil discharges is summarized in **Table 2-5**.

**Table 2-5: Reportable Oil Discharge History**

<b>Description of Discharge</b>	<b>Corrective Actions Taken</b>	<b>Plan for Preventing Recurrence</b>
<p><i>June 1999:</i> Small release of diesel fuel into Watson Creek from a leaky fuel filter gasket on an emergency generator in the basement of Founders Library. Less than 20 gallons of diesel fuel was released.</p>	<p>Notified IEMA and hired a private contractor to assist with the remediation activities. IEMA incident number 991450 was assigned to the release.</p>	<p>Generators are inspected weekly and recurrence a low probability event.</p>

Description of Discharge	Corrective Actions Taken	Plan for Preventing Recurrence
<p><i>September 2002:</i> Small release of fuel oil in an area where an old heating oil UST had been removed in the 1960s or 1970s, and the contents dumped into the hole and covered.</p>	<p>Notified IEMA and enrolled in the SRP through the IEPA. Excavated and disposed of contaminated soils. IEMA incident number H2002-1322 was assigned to the release. A No Further Remediation (NFR) letter was filed on 03/18/2005.</p>	<p>Should not recur with the complete removal of petroleum contaminated soils.</p>
<p><i>April 2014:</i> Release of hydraulic oil into the Kishwaukee River from a hydraulic line break within the elevator unit of the NIU Broadcast Center. Less than 25 gallons of hydraulic oil was released.</p>	<p>Notified IEMA and contracted Trans Environmental, Ltd. to assist with remediation activities. IEMA incident number H2014-0496 was assigned to the release.</p>	<p>Secondary containment placed around hydraulic cylinder to prevent hydraulic oil from migrating to sump pump in the event of a release.</p>
<p><i>April 2015:</i> Release of used cooking oil into a storm water catch basin due to an overflow of a grease dumpster at Neptune Central. Approximately 10-15 gallons of used cooking oil was released.</p>	<p>Notified IEMA and contracted Trans Environmental, Ltd. to assist with remediation activities. IEMA incident number H2015-0457 was assigned to the release.</p>	<p>Grease dumpster relocated so that it is not directly in line with the storm water catch basin.</p>

## **Part 3: General Requirements for SPCC Plans (40 CFR 112.7)**

The following equipment is provided, or measures implemented, to prevent oil discharges during the handling, use, or transfer of oil products at NIU. Employees involved in the storage, use, or handling of oil have received training in the proper implementation of these measures.

### **3.1 Oil Storage Inventory**

#### **3.1.1 Aboveground Storage Tanks (ASTs)**

The majority of aboveground storage tanks (ASTs) currently in use have double-wall construction and are inspected following a regular schedule in accordance with the Steel Tank Institute (STI) SP-001 tank inspection standards. Any leakage from the primary container would be detected through the continuous monitoring of the interstitial space through observation of the clear site-tube gauges or with associated leak detection alarms. Leakage from the secondary shell, piping, or valves would be detected visually during scheduled visual inspections by facility personnel.

#### **3.1.2 Underground Storage Tanks (USTs)**

The underground storage tanks (USTs) are operated in accordance with the Environmental Protection Agency's (EPA) UST regulations (40 CFR 280) and the Office of the State Fire Marshall (OSFM) Illinois register Title 41, Chapter 1 of the Illinois Administrative Code (41 Ill. Adm. Code 172 and 174-177). All USTs are of double-walled fiberglass construction with spill buckets and overfill alarms. Each UST is monitored by a Veeder Root tank monitoring system which features automatic tank gauging, in-tank leak detection and electronic line leak detection. The USTs are inspected by a Class A/B operator on a monthly basis, and functionality tests of all tanks, fuel lines, sensors and emergency shut-offs are conducted on an annual basis. A copy of the Veeder Root Operations Manual is included in **Appendix E**.

#### **3.1.3 Emergency Generator Day Tanks**

The emergency generator day tanks (**Table 2-3**) are equipped with secondary containment of some means (double walled tank or containment vault). Further, in most cases, the tanks are integral components of the emergency generators themselves and are not free-standing bulk storage tanks. Rather, they comprise a generator set or "genset". NIU electricians perform test runs weekly on the generators. At that time, they also check the fuel levels and check for any fuel leakage around the gensets. These inspections are recorded on a log sheet kept in the generator enclosure. A contracted fuel vendor is notified if the genset fuel tanks need replenishing. The fuel supplier is to follow the NIU fuel delivery procedures outlined in **Section 3.10** of this Plan.

### 3.1.4 Animal Fats and Vegetable Oils (AFVOs)

The food service facilities on campus utilize grease canisters to temporarily store non-petroleum based waste oil associated with cooking processes. There are seven portable containers, each with a 260-gallon capacity, used to accumulate fats, grease, and cooking oils. These containers are typically staged under a roof at the rear loading dock of the NIU food service buildings, in the building basements, or in storage rooms pending off-site reclamation by a private vendor.

### 3.1.5 Oil-Filled Operating Equipment

The numerous electric transformers serving the campus (**Table 2-2**) are not provided with physical secondary containment. Secondary containment is not a practical means of spill control due to the electrical hazards presented by impounding oils and water around live transformers and switching equipment. Electrical transformers are “oil-filled operating equipment” under 40 CFR 112 and are not required to have full secondary containment. In most cases, however, the transformers are installed on concrete pads allowing observation for any leakage. Active secondary containment would be employed in the event of any weepage, leakage, or significant release from the transformers. A significant fluid release would result in the overheating and failure of the transformer resulting in a power loss that would be quickly reported. The NIU electrical department staff thoroughly inspects each transformer on an annual basis for operation, thermal condition, dielectric oil level, and any leakage or damage. The inspections are recorded on inspection logs and maintained by the electrical department.

The hydraulically operated passenger and freight elevators (**Table 2-4**) are installed with sub-grade concrete slab shafts (vaults) that serve as secondary containment in the event of a hydraulic line or valve leak. Hydraulic elevator reservoirs are generally located in rooms separate from the elevator shaft. Oil reservoirs sometimes have the potential to leak into floor drains leading to ejector pumps and henceforth to sewers. The elevator shafts that contain ejector pumps have been equipped with oil/water separators and alarms. However, the hydraulic elevators are “oil-filled operating equipment” under 40 CFR Part 112 and are not, therefore, required to have full secondary containment.

However, as all of the university’s oil storage containers, tanks, or oil handling areas are not provided with passive secondary containment for either: (1) the fuel filling/dispensing areas; or, (2) the tanks or containers themselves, provisions are made for active containment measures at the university. While NIU is not making any “impracticability determinations” for secondary containment for bulk or general oil storage devices or areas, “active secondary containment” is provided for specified container storage, dispensing areas, and small “day” tanks. Those tanks or dispensing areas are subject to the NIU *Spill Response Plan*, as summarized in **Section 5** of this Plan, that includes the means for the active and timely containment and response to any incidental or catastrophic releases of oil (or other substances) that may occur on the NIU campus.

### **3.2 Facility Layout Diagram (40 CFR 112.7(a)(3))**

The NIU facility location and drawings showing pertinent features of the campus are included in **Appendix A**. As required under 40 CFR 112.7(a)(3), the facility diagram, in conjunction with the tables within this SPCC Plan indicates the proximate location of ASTs, USTs, oil container storage areas, and fuel dispenser locations on the campus. The large number of genset tanks, transformers, and hydraulically operated equipment prevents indicating their precise location on a map or facility layout. Accordingly, the units are located by building name or number. The building locations, capacities, and contents of the various oil containers or tanks were provided in **Table 2-1** through **Table 2-4** included in **Section 2** of this SPCC Plan.

### **3.3 Spill Reporting (40 CFR 112.7(a)(4))**

The discharge notification form included in **Appendix G** will be completed, at least in part, upon detection of a discharge and prior to reporting a spill to the proper notification contacts. However, full completion of the form should not delay the required reporting to regulatory or response agencies. Spill incidents may first be reported through the University Police Department, to NIU Facilities Planning and Management, or to the NIU EHS Office. Regardless, the NIU Environmental Specialist will ensure that any required reporting to regulatory agencies or response entities is completed when required or advisable.

### **3.4 Potential Discharge Volumes and Direction of Flow (40 CFR 112.7(b))**

The expected volume, discharge rate, general direction of flow in the event of equipment failure, and means of secondary containment for different vessels or areas at the University where oil is stored, used, or handled is presented in **Table 3-1**. Where each tank or container is not discussed separately (e.g., transformers, emergency generators, hydraulic elevators) a representative or worst-case scenario is presented for that category of oil containing equipment or bulk storage vessel.

**Table(s) 3-1: Potential Discharge Volumes and Direction of Flow**

<b>Tank Storage: Gasoline UST at Transportation Garage</b>				
<b>Containment and Diversionary Structures: Double walled fiberglass, ATG, interstitial leak detection, overfill protection</b>				
<b>Potential Release Volumes, Rates, and Pathways (40 CFR 112.7(b))</b>				
<b>Type of Failure</b>	<b>Potential Spill Volume (Gallons)</b>	<b>Rate of Flow (GPM)</b>	<b>Pathway of Flow (Distance to Nearest Drain)</b>	<b>Remarks</b>
<i>Complete failure of full tank</i>	15,000	Instantaneous	Contained in secondary tank shell.	Low probability event.
<i>Partial failure of full tank</i>	1 - 15,000	Gradual to instantaneous	Contained in secondary tank shell.	Low probability event.
<i>Pipe failure</i>	1 - 20	5	Drain to tank or dispenser pit.	Low probability event.
<i>Tank overfill</i>	1 - 40	150	Drain across asphalt surface and possibly reach adjacent storm sewer (approximately 177 feet south).	Low probability event. Tank equipped with audible overfill alarm.
<i>Spillage from dispenser while fueling vehicles</i>	1 - 3	6	Drain across asphalt surface and possibly reach adjacent storm sewer (approximately 177 feet south).	Probable. Spill kits are available near dispensing area.

<b>Tank Storage: Diesel Fuel UST at Transportation Garage</b>				
<b>Containment and Diversionary Structures: Double walled fiberglass, ATG, interstitial leak detection, overfill protection</b>				
<b>Potential Release Volumes, Rates, and Pathways (40 CFR 112.7(b))</b>				
<b>Type of Failure</b>	<b>Potential Spill Volume (Gallons)</b>	<b>Rate of Flow (GPM)</b>	<b>Pathway of Flow (Distance to Nearest Drain)</b>	<b>Remarks</b>
<i>Complete failure of full tank</i>	4,000	Instantaneous	Contained in secondary tank shell.	Low probability event.
<i>Partial failure of full tank</i>	1 - 4,000	Gradual to instantaneous	Contained in secondary tank shell.	Low probability event.
<i>Pipe failure</i>	1 - 20	5	Drain to tank or dispenser pit.	Low probability event.
<i>Tank overfill</i>	1 - 40	150	Drain across asphalt surface and possibly reach adjacent storm sewer (approximately 27 feet west).	Low probability event. Tank equipped with audible overfill alarm.
<i>Spillage from dispenser while fueling vehicles</i>	1 - 3	6	Drain across asphalt surface and possibly reach adjacent storm sewer (approximately 27 feet west).	Probable. Spill kits are available near dispensing area.

<b>Tank Storage: Used Oil UST at Transportation Garage</b>				
<i>Containment and Diversionary Structures: Double walled fiberglass, ATG, interstitial leak detection, overfill protection</i>				
<b>Potential Release Volumes, Rates, and Pathways (40 CFR 112.7(b))</b>				
<i>Type of Failure</i>	<i>Potential Spill Volume (Gallons)</i>	<i>Rate of Flow (GPM)</i>	<i>Pathway of Flow (Distance to Nearest Drain)</i>	<i>Remarks</i>
<i>Complete failure of full tank</i>	550	Instantaneous	Contained in secondary tank shell.	Low probability event.
<i>Partial failure of full tank</i>	1 - 550	Gradual to instantaneous	Contained in secondary tank shell.	Low probability event.
<i>Pipe failure</i>	N/A	N/A	N/A	N/A
<i>Tank overfill</i>	1 - 5	1	Drain across asphalt surface and possibly reach adjacent storm sewer (approximately 110 feet southwest).	Low probability event. Tank equipped with audible overfill alarm.
<i>Spillage at fill port while filling tank</i>	1 - 5	1	Drain across asphalt surface and possibly reach adjacent storm sewer (approximately 110 feet southwest).	Probable. Spill kits are available near dispensing area.

<b>Tank Storage: Diesel Fuel UST at Grounds Department</b>				
<i>Containment and Diversionary Structures: Double walled fiberglass, ATG, interstitial leak detection, overfill protection</i>				
<b>Potential Release Volumes, Rates, and Pathways (40 CFR 112.7(b))</b>				
<i>Type of Failure</i>	<i>Potential Spill Volume (Gallons)</i>	<i>Rate of Flow (GPM)</i>	<i>Pathway of Flow (Distance to Nearest Drain)</i>	<i>Remarks</i>
<i>Complete failure of full tank</i>	1,000	Instantaneous	Contained in secondary tank shell.	Low probability event.
<i>Partial failure of full tank</i>	1 - 1,000	Gradual to instantaneous	Contained in secondary tank shell.	Low probability event.
<i>Pipe failure</i>	1 - 20	5	Drain to tank or dispenser pit.	Low probability event.
<i>Tank overfill</i>	1 - 40	150	Drain across gravel surface and possibly reach adjacent storm sewer (approximately 116 feet east).	Low probability event. Tank equipped with audible overfill alarm.
<i>Spillage from dispenser while fueling vehicles</i>	1 - 3	6	Drain across gravel surface and possibly reach adjacent storm sewer (approximately 116 feet east).	Probable event. Spill kits are available near dispensing area.

<b>Tank Storage: Diesel Fuel USTs for Emergency Generators</b>				
<b>Containment and Diversionary Structures: Double walled fiberglass, ATG, interstitial leak detection, overfill protection</b>				
<b>Potential Release Volumes, Rates, and Pathways (40 CFR 112.7(b))</b>				
<i>Type of Failure</i>	<i>Potential Spill Volume (Gallons)</i>	<i>Rate of Flow (GPM)</i>	<i>Pathway of Flow</i>	<i>Remarks</i>
<i>Complete failure of full tank</i>	1,000 - 2,500	Instantaneous	Contained in secondary tank shell.	Low probability event.
<i>Partial failure of full tank</i>	1 - 1,000	Gradual to instantaneous	Contained in secondary tank shell.	Low probability event.
<i>Pipe failure</i>	1 - 20	5	Drain to tank or dispenser pit.	Low probability event. Double walled
<i>Tank overfill</i>	1 - 40	150	Drain to concrete/soil surface and possibly reach storm sewer or waterway.	Low probability event. Tanks equipped with overfill alarms.
<i>Spillage while fueling vehicles</i>	N/A	N/A	N/A	USTs only used to deliver fuel to emergency generators.

<b>Emergency Generators (19 units): 7,394 gallon capacity in total</b>				
<b>Containment and Diversionary Structures: Variety of double wall tanks and secondary containment. Generators and fuel tanks are normally integral as a single unit (Genset).</b>				
<b>Potential Release Volumes, Rates, and Pathways (40 CFR 112.7(b))</b>				
<i>Type of Failure</i>	<i>Potential Spill Volume (Gallons)</i>	<i>Rate of Flow (GPM)</i>	<i>Pathway of Flow</i>	<i>Remarks</i>
<i>Complete failure of full container</i>	25 - 1,650	Instantaneous	Contained in secondary tank shell.	Low probability event.
<i>Partial failure of full container</i>	1 - 1,650	Gradual to instantaneous	Contained in secondary tank shell.	Low probability event.
<i>Pipe failure</i>	Up to 20 gallons	5	Reasonably expected to drain to storm sewer, ditch, or waterway.	Low probability event.
<i>Leaking pipe or valve packing</i>	1 - 1,650 (max)	Gradual to instantaneous	Reasonably expected to drain to storm sewer, ditch, or waterway.	Low probability event. Personnel would be onsite during prolonged usage of generator.
<i>Drain plug removed from containment and tank fails or leaks</i>	1 - 1,650	Gradual to instantaneous	Reasonably expected to drain to storm sewer, ditch, or waterway.	Low probability event. Generators are inspected weekly.
<i>Overfill or spillage while filling tank</i>	1 - 55	Gradual to instantaneous	Reasonably expected to drain to storm sewer, ditch, or waterway.	Low probability event.

<b>Container Storage Area: Hazardous Material Storage Building</b>				
<b>Containment and Diversionary Structures: 1,780 gallon capacity HDPE lined sump compartment</b>				
<b>Potential Release Volumes, Rates, and Pathways (40 CFR 112.7(b))</b>				
<b>Type of Failure</b>	<b>Potential Spill Volume (Gallons)</b>	<b>Rate of Flow (GPM)</b>	<b>Pathway of Flow</b>	<b>Remarks</b>
<i>Complete failure of full container</i>	55	Instantaneous	Contained in sump area.	Low probability event.
<i>Partial failure of full container</i>	1 - 55	Gradual to instantaneous	Contained in sump area.	Low probability event.
<i>Pipe failure</i>	N/A	N/A	N/A	N/A
<i>Overfill</i>	1 - 5	Gradual to instantaneous	Contained in sump area.	Probable event. Spill kits are stored in building.
<i>Spillage while removing or during bulking activities</i>	1 - 55	Gradual to instantaneous	Contained in sump area; or, reasonably expected to drain to gravel surface and not reach drain or waterway.	Probable event. Spill kits are stored in building.

<b>Elevator Hydraulic Fluid Systems (84 units): 9,240 gallon capacity in total</b>				
<b>Containment and Diversionary Structures: Hydraulic fluid leakage would be contained in concrete elevator shaft. Ejector pumps fitted with oil/water separators and alarms.</b>				
<b>Potential Release Volumes, Rates, and Pathways (40 CFR 112.7(b))</b>				
<b>Type of Failure</b>	<b>Potential Spill Volume (Gallons)</b>	<b>Rate of Flow (GPM)</b>	<b>Pathway of Flow</b>	<b>Remarks</b>
<i>Complete failure of full tank</i>	110	Instantaneous	Contained in concrete elevator shaft.	Low probability event.
<i>Partial failure of full container</i>	1 - 110	Gradual to instantaneous	Contained in concrete elevator shaft.	Low probability event.
<i>Pipe failure</i>	Up to 20 gallons	5	Contained in concrete elevator shaft.	Low probability event.
<i>Leaking pipe or valve packing</i>	1 - 20	Gradual to instantaneous	Contained in concrete elevator shaft.	Low probability event.
<i>Drain plug removed from containment and tank fails or leaks</i>	1 - 110	Gradual to instantaneous	Contained in concrete elevator shaft.	Low probability event.
<i>Overfill or spillage while filling tank</i>	1 - 10	Gradual to instantaneous	Contained in concrete elevator shaft.	Low probability event.

<b>Electric Transformers (37): 10,314 gallon capacity of dielectric fluid (non-PCB)</b>				
<b>Containment and Diversionary Structures: Normally none.</b>				
<b>Potential Release Volumes, Rates, and Pathways (40 CFR 112.7(b))</b>				
<i>Type of Failure</i>	<i>Potential Spill Volume (Gallons)</i>	<i>Rate of Flow (GPM)</i>	<i>Pathway of Flow</i>	<i>Remarks</i>
<i>Complete failure of full tank</i>	89 - 780	Instantaneous	Reasonably expected to drain to storm sewer, ditch, or waterway.	Low probability event.
<i>Partial failure of full container</i>	1 - 780	Gradual to instantaneous	Reasonably expected to drain to storm sewer, ditch, or waterway.	Low probability event.
<i>Leaking pipe or valve packing</i>	1 - 20	Gradual to instantaneous	Reasonably expected to drain only to concrete surface or surrounding gravel/soil surface.	Low probability event.
<i>Drain plug removed from containment or external damage</i>	1 - 780	Gradual to instantaneous	Reasonably expected to drain only to concrete surface or surrounding gravel/soil surface.	Probable event.
<i>Tank overfill</i>	1 - 5	Gradual to instantaneous	Reasonably expected to drain only to concrete surface or surrounding gravel/soil surface.	Low probability event.

### 3.5 Containment and Diversionary Structures (40 CFR 112.7(c))

Spill containment and diversionary structures for particular bulk storage tanks, containers and equipment are described in **Section 3.1**. Methods of secondary containment at the University include a combination of passive physical structures (e.g., double-walled tanks, built-in secondary containment, sub-grade storage rooms, oil/water separators, concrete vaults, concrete docks) and active containment and land-based spill response (e.g., drain covers, sorbents) to prevent any oil releases from reaching the sanitary sewage system, storm water sewers, surface drainage ways, or any surface or ground waters.

### 3.6 Practicability of Secondary Containment (40 CFR 112.7(d))

Northern Illinois University has determined that the use of oil storage vessels with integral secondary containment, active and passive secondary containment devices and protocols, preparedness and response training and inspection procedures, along with readily available equipment to prevent discharge of oil from reaching navigable waters, is practical and effective at this facility.

### **3.7 Inspections, Tests, and Records (40 CFR 112.7(e))**

Northern Illinois University performs the inspections, tests, and evaluations as required by the SPCC rule. The inspections and tests are described later in this section, and in the respective sections that describe different parts of the facility. The inspection forms to be utilized may be found in **Appendix C**.

#### **3.7.1 Monthly Inspection**

Visual inspections of all bulk storage tanks at the University are conducted monthly as required by federal regulations 40 CFR 112.7(e). The monthly inspections are designed to incorporate all applicable elements and cover the following key features:

- Observing the exterior of the aboveground storage tanks, pipes, dispensers, hoses, and other equipment for signs of deterioration, leaks, corrosion, and maintenance deficiencies;
- Observing the tank foundations and supports for signs of instability or excessive settlement;
- Observing the tank fill and discharge pipes for signs of poor connection that could cause a discharge, and tank vent for obstructions and proper operation;
- Verifying the proper functioning of overfill prevention and interstitial space monitoring systems;
- Observing the exterior of portable containers for signs of deterioration or leaks; and,
- Checking the inventory of discharge response equipment and restocking as needed.

Any deficiencies identified during the visual inspection program are promptly repaired. Documentation of adequate response measures for all deficiencies identified during the visual inspection is maintained together with the completed inspection logs.

In addition to response measures provided as a result of the monthly inspection program, discharges that result in a loss of liquid from tank walls, piping, or any other component must be repaired as soon as possible to prevent a larger spill or a discharge to the sanitary or storm sewer system. Pooled oil, contained liquids with an oil sheen, or stained soil must immediately be reported to the NIU Environmental Protection Specialist.

Written monthly inspection records are signed by the Environmental Protection Specialist, or the NIU designee, and maintained with this SPCC Plan for a period of three years.

#### **3.7.2 Annual Inspection**

NIU personnel perform a more thorough inspection of facility equipment on an annual basis. This annual inspection complements the monthly inspection described above using the checklist provided in **Appendix C** of this Plan.

The annual inspection is preferably performed after a large storm event in order to verify the imperviousness and/or proper functioning of drainage control systems and to verify the direction and fate of the site drainage that may serve to transport any oil spills or releases.

Written annual inspection records are signed by the Environmental Protection Specialist, or the NIU designee, and maintained with this SPCC Plan for a period of three years.

### **3.7.3 Periodic Integrity Testing**

NIU does not deviate from the integrity testing provision of 40 CFR 112.8(c)(6) for above ground storage tanks and drums. All of the ASTs on campus are made of steel, have continuous release detection methods (CRDM), and have spill prevention measures. This puts the storage containers in SP001 Category 1, and the prescribed inspection requirements are only monthly visual inspections.

## **3.8 Personnel, Training, and Discharge Prevention Procedures (40 CFR 112.7(f))**

The primary method of spill management at NIU is prevention. Prevention of spills has been emphasized through the training of personnel. All University personnel involved in the handling of oil and chemicals are properly trained in general facility operations, operation and maintenance of equipment to prevent discharges, discharge response procedures, applicable pollution control laws, rules and regulations, and the contents and requirements of this SPCC Plan.

Annual safety and spill prevention briefings are held for all supervisors and personnel involved in oil storage and handling operations. The briefings are aimed at ensuring continued understanding and adherence to the discharge prevention procedures presented in this SPCC Plan. The briefings serve as refresher training and include a review of known discharge events, failures or malfunctions of equipment, and recently developed safety protocols and best management practices. Facility operators and other personnel will have the opportunity during the briefings to share recommendations concerning health, safety, and environmental issues encountered during facility operations.

Records of the briefings and discharge prevention training are kept on the form shown in **Appendix D**, and are maintained with this SPCC Plan for a period of at least three years.

## **3.9 Security (40 CFR 112.7(g))**

For the NIU Campus facility as a whole, security is the full-time responsibility of University Public Safety Department (University Police). Public Safety maintains a round the clock vigil of the campus, using squad cars and walking patrolmen. The campus is well lit for illumination after dark. Area lighting is located in such positions as to illuminate the storage tank, container, transformer, generator, and other oil handling areas. Consideration and instruction was given to the University Police and maintenance supervisors regarding awareness of spills and discouraging fuel theft or possible sabotage. The University Police are provided with access to this SPCC Plan.

### 3.10 Oil Transfer Procedures (40 CFR 112.7(g)(2) and (3))

All of the University's loading and unloading procedures meet the minimum requirements and regulations established by the United States Department of Transportation (USDOT). Bulk storage tank filling operations are performed in such a way to ensure that a tank is not overfilled. Drums and other containers are handled and unloaded carefully to prevent damage. Additional spill prevention procedures that are not noted below may be used per the carrier's standard practices.

The NIU campus does not maintain a loading/unloading rack as defined or intended by the EPA under section 112.7(h) of the regulations. Oil transfer on campus is either from a tanker truck to a bulk storage tank, or the unloading of drums of oil. Regardless, the potential for discharges during transfer operations is of concern at this facility. NIU management is committed to ensuring the safe transfer of material to and from all oil storage tanks.

All suppliers must comply with USDOT regulations in 49 CFR 177 and University standard operating procedures. The vendor must ensure that the driver understands the site layout, knows the protocol for entering the facility and unloading product, and has the necessary equipment to respond to a discharge from the vehicle or fuel delivery hose. Similar precautions are undertaken during the removal of used oils from the facility.

The AST and UST filling operations are performed by qualified vendors trained in proper discharge prevention procedures. ***All transfers must be attended by trained NIU personnel, and personnel from the fueling vendor, so that spills from the fill port or the delivery truck would be discontinued quickly and contained before impacting the environment.*** Transfer operations are performed in accordance with the following minimum procedures, with more specific protocols outlined in **Table 3-2**:

- All oil transfer operations occur above ground and in plain sight;
- All facility oil transfer operations occur during daylight hours, or under sufficient illumination to be capable of observing any spillage;
- At least one trained NIU representative is present and observes the transfer of oil during the transfer process;
- Where oil transfer is to occur near a surface drain or waterway, adequate spill containment, diversion, or absorption equipment must be readily available at the location to prevent any spillage from reaching the drainage way;
- The driver and/or University representative are to immediately report any size release of oil to the NIU Police Department and the EHS Department;
- Any release of oil must be prevented from reaching a storm sewer, sanitary sewer or waterway, and mitigation activities initiated as soon as practicable;
- Drivers are not to leave the location where the spillage occurred until approved for departure by the University Police or EHS Department.

Although NIU implements preventative maintenance programs and site-specific unloading procedures that are designed to minimize the potential for spills, it is possible that a release from

tank vents, fill ports or from the tank truck could occur. In the event of a spill as a result of transfer operations, the oil supplier and the University representative overseeing the unloading event will immediately implement oil spill response procedures outlined in **Section 5** of this Plan.

*If a release occurs during transfer operations and it is found that trained NIU personnel were not onsite to observe the transfer, the department responsible for ordering the fuel may be held accountable for the costs associated with the remediation of the release.*

### **3.11 Brittle Fracture Evaluation (40 CFR 112.7(i))**

Brittle fracture evaluation does not apply to this facility because no field-constructed oil storage tanks are present at the University. All oil storage tanks were shop-built.

### **3.12 Conformance with Applicable State and Local Requirements (40 CFR 112.7(j))**

All bulk storage tanks at this facility are registered with the state and local authorities, if required, and have any necessary current certificates of registration and special use permits required by the local fire code. A complete copy of this SPCC Plan, along with associated certificates, permits, reports and logs, is maintained at the facility in the NIU Environmental Health and Safety Office located in the Dorland Building at 180 Stadium Drive, DeKalb, Illinois.

**Table 3-2: General Fuel Transfer Procedures**

Stage	Tasks
Prior to loading/unloading	<ul style="list-style-type: none"> <li><input type="checkbox"/> Visually check all hoses for leaks and wet spots.</li> <li><input type="checkbox"/> Verify that sufficient volume (ullage) is available in the storage tank.</li> <li><input type="checkbox"/> Verify that nearby down gradient storm drains or waterways are protected in the event of a release (e.g., drain covers and/or sorbent supply).</li> <li><input type="checkbox"/> Secure the tank vehicle with wheel chocks and interlocks.</li> <li><input type="checkbox"/> Ensure that the vehicle's parking brakes are set.</li> <li><input type="checkbox"/> Verify proper alignment of valves and proper functioning of the pumping system.</li> <li><input type="checkbox"/> Verify that the tank vents are open for proper operation.</li> <li><input type="checkbox"/> Park the tanker truck as close as safely possible to the storage tank to minimize the length of exposed flexible piping.</li> <li><input type="checkbox"/> Establish adequate bonding/grounding prior to connecting to the fuel transfer point.</li> <li><input type="checkbox"/> No smoking or any open flames are allowed during transfer operations</li> <li><input type="checkbox"/> Turn off any cell phones, radios, or other non-essential electronic devices.</li> </ul>
During loading/unloading	<ul style="list-style-type: none"> <li><input type="checkbox"/> Driver must stay with the vehicle at all times during loading/unloading activities to observe the process.</li> <li><input type="checkbox"/> Periodically inspect all systems, hoses and connections.</li> <li><input type="checkbox"/> Prior to making a connection, shut off the vehicle engine. When transferring Class 3 materials (flashpoint <math>\leq 141^{\circ}\text{F}</math>), shut off the vehicle engine unless it is used to operate a pump.</li> <li><input type="checkbox"/> Maintain visual communication with the pumping and receiving stations.</li> <li><input type="checkbox"/> Monitor the liquid level in the receiving tank to prevent overflow.</li> <li><input type="checkbox"/> When topping off the tank, reduce flow rate to prevent overflow.</li> </ul>
After loading/unloading	<ul style="list-style-type: none"> <li><input type="checkbox"/> Make sure the transfer operation is completed.</li> <li><input type="checkbox"/> Close all tank and loading valves before disconnecting.</li> <li><input type="checkbox"/> Securely close all vehicle internal, external, and dome cover valves before disconnecting.</li> <li><input type="checkbox"/> Disconnect grounding/bonding wires.</li> <li><input type="checkbox"/> Make sure the hoses are drained to remove the remaining oil before moving them away from the connection. Use a drip pan.</li> <li><input type="checkbox"/> Cap the end of the hose and other connecting devices before moving them to prevent uncontrolled leakage.</li> <li><input type="checkbox"/> Remove wheel chocks and interlocks.</li> <li><input type="checkbox"/> Inspect the lowermost drain and all outlets on tank truck prior to departure. If necessary, tighten, adjust, or replace caps, valves, or other equipment to prevent oil leaking while in transit.</li> <li><input type="checkbox"/> Verify that no spillage has occurred. If a release has occurred, notify the NIU Police Department and the EHS Department, commence cleanup, and do not depart from the location.</li> </ul>

## **Part 4: Discharge Prevention – SPCC Provisions for Onshore Facilities, Excluding Production Facilities (40 CFR 112.8)**

### **4.1 Facility Drainage (40 CFR 112.8(b))**

As noted previously in **Section 2.2.1**, all surface water drainage across the NIU campus is directed either overland or through a network of catch basins, storm sewers, and box culverts to one of several surface water impoundments (ponds) and the interconnecting Watson Creek, which flows subsurface for part of its southeasterly route, to the East Lagoon and ultimately the Kishwaukee River. The NIU SPCC Plan is designed to prevent the release of oil to the waters of the State either overland or through the storm drainage network.

### **4.2 Bulk Storage Containers (40 CFR 112.8(c))**

The construction, volume, and content of the regulated bulk storage containers at NIU is summarized in **Section 2.1.2**. The gasoline and diesel fuel USTs are operated in compliance with federal (40 CFR 280) and state (41 Ill. Adm. Code 172 and 174-177) UST regulations, and are therefore not covered by these requirements under 40 CFR 112. Oil containing vessels that are integral to operational equipment (electric transformers, elevator hydraulic systems) would not be considered “bulk storage” under the regulations at the University, but are also listed and described in **Section 2** and the associated **Tables**. Oil-filled operational equipment and other oil storage areas are subject to only the general secondary containment requirements under the SPCC standards, which is intended to address the most likely oil discharge and allows for both active and passive secondary containment.

#### **Passive (Physical) Containment**

The bulk fuel storage tanks that are subject to the specific secondary containment provisions under this section of the SPCC requirements were identified in **Section 2** of this SPCC Plan. All bulk storage tanks and containers of 55-gallon or greater capacity are provided with secondary containment through one or more means including double-walls, containment vaults or spill containment pallets or platforms.

#### **Active (Response) Containment**

Each of the bulk storage tanks for fueling vehicles identified in **Section 2** are also provisioned with spill response equipment for deployment and use by trained NIU personnel. At least one fuel spill response equipment container is provided immediately adjacent to each of the underground storage tanks. The spill response supplies are itemized in **Appendix H** and their locations are illustrated in **Appendix A (Figure A-6)**.

#### **4.2.1 Construction (40 CFR 112.8(c)(1))**

All above-ground bulk oil tanks used at this facility are shop-constructed of steel, in accordance with industry specifications (UL-142). All oil storage portable containers are constructed of steel

or plastic and meet USDOT requirements for shipping containers. All steel tanks and containers are inspected in accordance with STI SP001, including containers as small as 55 gallons. The design and construction of all bulk storage containers are compatible with the characteristics of the oil product they contain, and with temperature and pressure conditions. The underground gasoline and diesel fuel tanks are all of double-walled, fiberglass construction in compliance with current design and installation standards under 40 CFR 280 and 41 Ill. Adm. Code 172 and 174-177 requirements.

#### **4.2.2 Secondary Containment (40 CFR 112.8(c)(2))**

This section of the SPCC regulations relates to only the “bulk oil storage” facilities at NIU and therefore includes only the AST, UST, and container storage areas where “bulk storage” of oils may occur. The USTs storing gasoline, diesel fuel and used oil are all double-walled and of fiberglass construction with automatic tank gauging for leak detection. All above ground tanks have integral secondary containment in the form of a double-walled tank. Other portable and 55 gallon containers are in locations with concrete containment or prefabricated, polyethylene containment pallets or platforms. The tank systems and the areas surrounding the tanks and container locations are visually inspected during the monthly facility inspections to detect any cracks, signs of heaving or settlement, or other structural damage that could affect the ability of the tank to contain oil. Any damage is promptly corrected to prevent migration of oil into the ground, or out of the tanks to the ground surface.

#### **4.2.3 Drainage of Diked Areas (40 CFR 112.8(c)(3))**

This section does not apply to this facility since there are no diked areas at the University.

#### **4.2.4 Corrosion Protection (40 CFR 112.8(c)(4))**

All underground storage tanks on campus are of fiberglass construction, and the above-ground bulk fuel storage tanks are not in contact with the ground surface. Any portable containers, if stored on the ground surface, are not at such locations for more than 90 days which limits the progress of any potential corrosion.

#### **4.2.5 Partially Buried and Bunkered Storage Tanks (40 CFR 112.8(c)(5))**

This section does not apply to this facility since there are no partially buried or bunkered storage tanks at the University.

#### **4.2.6 Inspections and Tests (40 CFR 112.8(c)(6))**

Facility personnel perform visual inspections of the ASTs according to the procedures described in **Section 3.1** of this SPCC Plan. Leaks from tank valves, dispensers, seams, gaskets, rivets, and bolts are promptly corrected. Records of inspections and tests are signed by the inspector and kept at the facility for at least three years. The scope and schedule of certified inspections and tests performed on the AST are specified in STI Standard SP-001.

The underground storage tanks are inspected in accordance with 41 IAC 172 and 174-177. All USTs at the University are of double-walled fiberglass construction and continuously monitored by the Veeder-Root tank monitoring system which features automatic tank gauging, overflow, and leak detection systems. The USTs are inspected by a Class A/B operator on a monthly basis. Functionality tests of all tanks, fuel lines, sensors and emergency shut-offs are conducted on an annual basis. Records of certified tank and liquid sensor inspections will be kept at the facility for at least two years.

#### **4.2.7 Heating Coils (40 CFR 112.8(c)(7))**

There are no internal heating coils installed in any of the oil tanks or containers and there are no external heat sources associated with any of the vessels.

#### **4.2.8 Overfill Prevention Systems (40 CFR 112.8(c)(8))**

Facility personnel are present during the filling operations of bulk storage tanks to monitor the product level in the tanks and to ensure that no leakage occurs from flexible hoses or fixed piping, couplings, or valves at the tank, or the delivery vehicle. All the bulk USTs for vehicle fuel storage and dispensing are provided with catchment basins or spill buckets. Additionally, each UST is monitored by the Veeder-Root tank monitoring system which features a built in audible alarm and warning lights to warn of an impending overflow. The other bulk storage tanks are of small capacity and visually gauged and observed during the addition of fuel to prevent overfills.

#### **4.2.9 Effluent Treatment Facilities (40 CFR 112.8(c)(9))**

This section does not apply to this facility since there are no effluent treatment facilities at the University.

#### **4.2.10 Visible Discharges (40 CFR 112.8(c)(10))**

Visible discharges observed during regular inspections or maintenance activities from any tank, container, equipment or appurtenances are quickly corrected upon discovery, or the oil is transferred to another container. Contained precipitation and any incidental oil spillage is promptly removed from the area of any tanks or containers and disposed of according to the waste disposal method described in **Section 5** of this Plan. Similarly, any spillage or contents are routinely disposed if revealed during inspections of the spill containment pallets or sumps provided in the container storage areas in order to maintain adequate secondary containment capacity for those units.

#### **4.2.11 Mobile and Portable Containers (40 CFR 112.8(c)(11))**

Fuel delivery trucks serving Northern Illinois University generally depart the facility immediately upon completing the fuel delivery and after ensuring that all valves are properly closed and capped and the hoses secured. They do not remain at the facility while full (or empty) overnight or for an extended period of time.

Portable oil containers of 55-gallon capacity or greater must meet DOT requirements for shipping containers and be stored closed except when adding or removing oil. Portable unit containment devices are described in **Section 4.4.2**.

### **4.3 Transfer Operation, Pumping, and In-Plant Processes (40 CFR 112.8(d))**

Subsurface service piping is limited to the dispenser lines serving the USTs on the campus. All the dispenser lines are constructed of fiberglass and consist of short run, European Suction type construction. All USTs, service piping and fittings are visually inspected during the monthly inspections. Brightly painted bollards or barriers are placed where needed to prevent vehicular collisions with the dispensers or ancillary equipment.

## Part 5: Spill Response Procedures (40 CFR 112.7(a)(5))

This section describes the response and cleanup procedures in the event of an oil discharge. The uncontrolled release of oil to groundwater, surface water or soil is prohibited by state and federal laws or regulations. Immediate action must be taken to control, contain, and recover any released or spilled petroleum product or used oil.

In general, the following steps are taken:

- Eliminate potential spark sources;
- If possible and safe to do so, identify and shut down the source of the release or discharge to stop the flow;
- Contain the discharge with sorbents, berms, trenches, sandbags or other material;
- Obstruct the discharge from accessing surface waterways, storm sewers or sanitary sewers by covering catch basins and/or curb drains by trenching or creating diversion ditches with sorbents or soil;
- Notify University Police to contact the Facility Response Coordinator or the NIU Environmental Specialist;
- Contact regulatory authorities and the appropriate response organization (if required or necessary – See **Appendix G**);
- Collect and dispose of recovered product and contaminated debris according to applicable regulations;
- Restock any expended spill control equipment; and,
- Make any necessary follow-up reports, and evaluate the incident and response to determine if any changes or improvements are needed to personnel training, response procedures or equipment.

For the purpose of establishing appropriate response procedures, this SPCC Plan classifies discharges as either “minor” or “major,” depending on the volume and characteristics of the material released.

A list of *Emergency Contacts* is provided in **Appendix F**. The list is also posted at prominent locations throughout the facility. A list of spill response materials at the facility is included in **Appendix H** and their locations are shown in **Appendix A (Figure A-6)** to this Plan.

### 5.1 Response to a Minor Discharge

A “minor” discharge is defined as one that poses no significant harm (or threat) to human health and safety or to the environment. Minor discharges are generally those where the release is contained within or adjacent to the secondary containment device or structure and the quantities are relatively small. Characteristics of a *minor* discharge include the following:

- The quantity of product discharged outside of the secondary containment is small (e.g., less than 25 gallons of oil released, and oil does not reach or threaten to reach a waterway, drain or sewer inlet);
- Spilled material is easily stopped, contained, and controlled at the time of the discharge;

- The spill is localized near the source;
- Discharged material is not likely to reach water (or sewer drains) or migrate off University property;
- There is little risk to human health or safety; and,
- There is little risk of fire or explosion.

Minor discharges can usually be cleaned up by NIU personnel, and normally reporting to the IEPA, City authorities or the EPA is not required or necessary. The following guidelines apply:

- Immediately notify your supervisor, the Facility Response Coordinator or Environmental Protection Specialist through the EHS Department, or if in doubt as to the severity of the release, contact the University Police at 753-1212 or 911. The University Police serve as the central notification point for these, and other emergencies and they will notify the necessary parties;
- Determine whether available response personnel have received training under the University Hazard Communication program, and this SPCC Plan, for the response;
- Don any necessary personal protective equipment and retrieve the necessary spill control materials or devices;
- Under the direction of the supervisor, Facility Response Coordinator or Environmental Protection Specialist, locate and stop the source of the release;
- Contain the discharge with the appropriate discharge response materials and equipment;
- Place discharge debris in properly labeled waste containers. The material disposal arrangements will be made by the NIU Environmental Protection Specialist and determine the needs for post-cleanup environmental assessment of the location; and,
- The Environmental Protection Specialist, or his designee, will complete the *Discharge Notification Form (Appendix G)*, or an incident report, and attach a copy to this SPCC Plan or place it in an associated office file.

## 5.2 Response to a Major Discharge

A “major” discharge is defined as one that cannot be safely controlled or cleaned up by facility personnel, or when reporting to regulatory agencies is required, such as when:

- The release quantity is large enough to spread beyond the immediate discharge area and cannot be rapidly or safely controlled;
- The quantity discharged may discharge or flow beyond the NIU property boundary;
- The quantity released exceeds 25 gallons, or results in a release to the environment that equals or exceeds its reportable quantity (RQ);
- The discharged material enters or will enter a surface waterway, drain or sewer;
- The discharge requires special equipment or training to clean up;
- The discharged material poses a hazard to human health or safety; or
- There has been, or is a danger of, a fire or explosion.

In the event of a *major* discharge, the following guidelines apply:

- All persons, other than response personnel, must immediately vacate the discharge location via the established exit routes and move to designated staging areas at a safe distance from the discharge;
- The supervisor, senior staff or faculty, or any other party, should contact the University Police (911) and the EHS Department (753-1414) for notification of the appropriate response parties;
- The Facility Response Coordinator, a designee, or the Environmental Protection Specialist has authority to initiate notification and response. Certain notifications are dependent on the circumstances and type of discharge;
- The Facility Response Coordinator (or senior on-site person) will call the spill response and cleanup contractor listed in the *Emergency Contacts* list in **Appendix F** if their assistance will be needed;
- The Facility Response Coordinator (or senior on-site person) must immediately contact the National Response Center (NRC) and the Illinois Emergency Management Agency (IEMA) listed in the *Emergency Contacts* list in **Appendix F** when necessary;
- The Facility Response Coordinator, Environmental Protection Specialist (or senior on-site person) coordinates cleanup with assistance from a cleanup contractor or other response organization as necessary; and,
- The Environmental Protection Specialist (or senior on-site person) will record the incident on the *Discharge Notification Form* in **Appendix G** and attach a copy to this SPCC Plan.

If the Facility Response Coordinator, his designee, or the Environmental Protection Specialist is not available at the time of the discharge, then the next highest person in seniority assumes responsibility for coordinating response activities. University Police maintain the necessary call lists in order to contact the appropriate person(s) to evaluate and address the release.

### **5.3 Discharge Notification (40 CFR 112.7(a)(4))**

Any size discharge of oil that may be harmful to public health or welfare of the environment must be reported immediately to the National Response Center (NRC) and the Illinois Emergency Management Agency (IEMA). Discharges of oil in quantities that may be harmful include those that:

1. Violate applicable water quality standards;
2. Causes a film or sheen upon, or discoloration of the surface of the water or adjoining shorelines;
3. Causes a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines; or,
4. Result in a release to the environment that exceeds 25-gallons.

Immediate telephone notification is also required if an incident or accident involving a hazardous material occurs which results in:

1. A release equal to or exceeding the reportable quantity (RQ) of a hazardous substance;
2. A member of the general public is killed;

3. A member of the general public receives injuries requiring hospitalization;
4. An authorized official of an emergency agency recommends an evacuation of an area by the general public;
5. A motor vehicle has overturned on a public highway; or,
6. Fire, breakage, release, or suspected contamination occurs involving an etiologic agent;

A separate notification must be made immediately to the Normal Drainage District, the City of DeKalb and DeKalb County MS4 coordinators, and/or the DeKalb Sanitary District in the event of a release reaching any waterway, storm or sanitary sewer.

A summary sheet is included in **Appendix F** to facilitate reporting. The person reporting the discharge must provide the following information and should try to obtain this information during initial assessment of the spill. However, any required reporting of the spill to government entities should not be delayed while attempting to accurately obtain all of this information:

- Name, location, organization, and telephone number
- Name and address of the party responsible for the incident
- Date and time of the incident
- Location of the incident
- Source and cause of the release or discharge
- Types of material(s) released or discharged
- Quantity of material(s) released or discharged
- Danger or threat posed by the release or discharge
- Number and types of injuries (if any)
- Media affected or threatened by the discharge (i.e., water, land, air)
- Weather conditions at the incident location
- Any other information that may help emergency personnel respond to the incident

Contact information for reporting a discharge to the appropriate authorities is listed in **Appendix G**.

#### **5.4 Waste Disposal (40 CFR 112.7(a)(3)(v))**

As a major research institution, NIU has a chemical waste disposal program and is listed with the IEPA as a Large Quantity Generator (LQG). Wastes resulting from a discharge response, including used absorbents, will be containerized in impervious bags, drums, buckets or covered roll-off containers. The Environmental Specialist, or his designee, will characterize the waste for proper disposal and ensure that it is removed from the facility for off-site treatment, disposal or recycling at an approved facility. In the interim, the wastes should be stored in a secure location that is afforded secondary containment or controls.

## 5.5 Cleanup Contractors and Equipment Suppliers (40 CFR 112.7(a)(3)(vi))

Contact information for specialized spill response and cleanup contractors is provided in **Appendix F**. These contractors have the necessary equipment to respond to a discharge of oil that may affect a waterway through a release to the storm or sanitary sewers in the vicinity, or for other major spills.

Spill kits are also available at the following locations:

- Dorland Building (40) Transportation garage
- Grounds Building (016B) garage
- Faraday Hall (43) loading dock
- Montgomery Hall (157) loading dock
- Hazardous waste storage facility
- UST supplied generator rooms

An inventory of response supplies and equipment at each of the above locations is provided in **Appendix H** of this Plan. The locations of the spill kits are illustrated in **Appendix A (Figure A-6)**. A ready supply of spill response equipment and absorbents is also maintained in the NIU Environmental Specialist's University vehicle to allow quick response.

**APPENDIX A**

**APPENDIX B**

**APPENDIX C**

**APPENDIX D**

**APPENDIX E**

**APPENDIX F**

**APPENDIX G**

**APPENDIX H**