SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN

RUTGERS, THE STATE UNIVERSITY OF UNIVERSITY

Rutgers Biological Health Sciences at Newark

Rutgers Environmental Health & Safety 74 Street 1603 Piscataway, NJ 08854

5/14/2019 Revision

TABLE OF CONTENTS

1.	GENERAL INFORMATION	1
1.1 1.2	· · · · · · · · · · · · · · · · · · ·	
2.	INTRODUCTION AND REGULATORY APPLICABILITY	3
3.	DESCRIPTION OF FACILITY (40 CFR 112.7(a))	3
4.	SPILL POTENTIAL (40 CFR 112.7(b))	4
5.	OIL STORAGE TANKS AND CONTAINMENT	5
5.1 5.2 5.3	. Underground Tanks	22
6.	INSPECTIONS AND RECORDKEEPING (40 CFR 112.7(e)	23
6.1 6.2 6.3	. Tank Testing	23
7.	PERSONNEL TRAINING (40 CFR 112.7(f))	25
8.	SITE SECURITY (40 CFR 112.7(g)	26
9.	TANK TRUCK UNLOADING (40 CFR 112.7(h))	26
10.	FACILITY DRAINAGE (40 CFR 112.8(b))	26
11.	BULK STORAGE TANKS (40 CFR 112.8(c))	27
12.	FACILITY TRANSFER OPERATIONS (40 CFR 112.8(d))	27
13.	EMERGENCY RESPONSE PLAN (40 CFR 120)	27
13.	 Spill Response Supplies & Equipment Spill Response Procedures Spill Notification & Reporting 	27
14. 15.	PLAN REVIEW AND AMENDMENT APPENDICES:	32
	APPENDIX A – Facility Site Diagram	
	APPENDIX B – Oil Unloading Procedures	
	APPENDIX C- Monthly Inspection Form	
	APPENDIX D – Spill Response Procedures	
	APPENDIX E – Applicability of the Substantial Harm Criteria	

Page i

DATE	BY	MODIFICATION	APPROVAL (INITIALS)
Jun- 2005	Delta Environmental Consultants, Inc.	Original	RHW
Nov- 2005	Delta Environmental Consultants, Inc.	Non-technical amendment	RHW
Jul-2007	EOHSS Dept	 Update facility information Update Applicable Oil Storage Tanks - Add Emergency Generators serving the Ambulatory Care Center, Cancer Center, Bergen Ave. Parking Deck and the Behavioral Science Health Building. Update the Appendices 	PM
Mar- 2010	STV Incorporated	Update Oil Applicable Storage Tanks – Delete three USTs and add three ASTs serving the Power Plant.	STV
Dec- 2010	EOHSS	 Update Facility Information (Spill Plan Coordinator) Re-arrange Table of Contents according to sections of applicable 40 CFR 112. Combine spill management, spill response, and spill notification & reporting to Move Table-1 and Oil significant locations to the Appendices. 	LN
Dec- 2011	EOHSS	Add three above ground storage tanks for #2 Oil and truck load pad. Closure and removal of 4 underground storage tanks at the Power Plant. The closure and removal is in process. Removed Littleton Garage because it is not inside the perimeter of UMDNJ Newark Campus	LN
September 2013	REHS	Update facility information for Rutgers University integration 9700 g EMS UST removed Medical Science Bldg removed from plan Littleton Avenue Maintenance Shop removed from plan Added Vivarium and Housing Generator Tanks	JS
1/15/14	REHS	Update Oil Applicable Storage Tanks – Delete one 30,000 AST serving the Stanley S. Bergen Bldg. Decommissioned on 1/9/14.	JS
1/20/16	REHS	Update Authorized Representative to Antonio Calcado, Senor VP Institutional Planning and Operations	JS
3/30/16	REHS	Replace ADMC 1000g UST with 1000g AST	JS
9/12/18	REHS	Plan review, update Michael Manchello's title	JS
5/14/19	REHS	Plan review, update Spill Plan Coordinator	JS

1. GENERAL INFORMATION

1.1. Facility Information

Name	Rutgers Health Sciences Campus at Newark
Туре	State University and Teaching Hospital
Location	65 Bergen Street University Heights Newark, New Jersey 07107
Facility Coordinator	Michael Manchello Associate VP Operations and Services (work) 973-972-3413 (cell) 856-261-1149
Spill Plan Coordinator (Primary)	Theodore Elonis Senior Director Plants and Distribution (work) 848-445-0299 (cell) 908-586-8665
Environmental Coordinator	James Simoni Health Safety Specialist (work) 848-445-2550 (cell) 848-565-0175
Facility Owner	Rutgers, The State University of New Jersey Old Queens 83 Somerset Street New Brunswick, NJ 08901-8036
Facility Operator	Rutgers, The State University of New Jersey

1.2. Certification and Approval

Facility Management

This SPCC Plan will be fully implemented as herein described. The designated Spill Plan Coordinator or designated alternate has the authority to commit the necessary resources and implement the response procedures necessary to fully implement this Plan and to prevent the release of oil to the environment.

Signature of Authorized Representative

Date

Senior Vice President Institutional Planning & Operations Title

Antonio M. Calcado Name of Authorized Representative

In addition, the facility certifies that it does not meet the substantial harm criteria under which a Facility Response Plan would be required per 40 CFR 112.20. This documentation and certification of the non-applicability of these criteria is provided in Appendix H.

Professional Engineer

I hereby certify that I or my agent have visited and examined the subject facility, and being familiar with the requirements of 40 CFR, Part 112, attest that this Plan complies with all applicable requirements and was prepared in accordance with good engineering practices, considerations of applicable industry standards, and state and local requirements. I also certify that procedures for required inspections and testing have been established and the Plan is adequate for the facility.

- Vilet Signature of Registered P.E.

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Name

127/2013

GE 33988

License Number

2. INTRODUCTION AND REGULATORY APPLICABILITY (40 CFR 112)

This Spill Prevention Control and Countermeasure (SPCC) Plan was developed for Rutgers Health Sciences (Rutgers). The Plan is to be used as a guideline for the prevention of oil and petroleum product spills and, in the event that an oil spill does occur, as a guide for controlling and ultimately cleaning up an oil or petroleum product spill.

This SPCC Plan has been developed in accordance with the regulatory requirements set forth by the United States Environmental Protection Agency (EPA) in Title 40 of the Code of Federal Regulations, Part 112 (40 CFR 112) - Oil Pollution Prevention. The Federal regulations were promulgated by the EPA under the authority of §311(j)(1)(C) of the Clean Water Act (CWA), as amended by the Oil Pollution Act of 1990. The Oil Pollution Prevention regulations were amended and reissued on July 17, 2002. The regulatory citations and requirements reflected in this Plan reflect the most recent regulatory changes.

The Oil Pollution Prevention regulations establish the requirements for Spill Prevention, Control, and Countermeasure (SPCC) Plan to prevent spills of oil by non-transportation-related on-shore facilities into waters of the United States or adjoining shorelines, including the criteria under which an SPCC Plan must be prepared, and the contents and sequence of the Plan.

As applicable to the facility, 40 CFR 112.1 (General Applicability), Rutgers must develop the SPCC Plan if the facility has the potential to discharge oil in harmful quantities to navigable waters, and if certain oil storage thresholds are exceeded. A "navigable waterway" has been broadly defined to encompass any continuous or intermittent watercourse that can empty into a navigable waterway, including storm drains. The applicable thresholds are 1,320 gallons of total aboveground storage in containers equal to or greater than 55 gallons and/or completely buried underground storage tanks in excess of 42,000 gallons, if they are not otherwise subject to the requirements of the Underground Storage Tank regulations in 40 CFR parts 280 and 281.

Rutgers stores fuel oil, used oil and related petroleum products in above-ground, below-ground (vaulted) and underground tanks in locations throughout the campus. Smaller quantities of lubricating oils are stored in drums in maintenance shops throughout campus. Total storage capacity at the site is approximately 129,516 gallons.

While there are no waterways in the immediate vicinity of the Rutgers campus, the storm drains at the site are part of the combined storm/sanitary system operated by the Passaic Valley Sewerage Commissioners (PVSC). Because PVSC ultimately discharges to Newark Bay, and because a "slug" discharge of oil could potentially pass through the PVSC system untreated, the storm drains and their ultimate discharge point meet the definition of a "navigable waterway."

Because both the storage quantity and discharge pathway criteria are met, Rutgers is subject to 40 CFR 112, and an SPCC Plan is required.

3. DESCRIPTION OF FACILITY (40 CFR 112.7(a))

The Rutgers campus is located in the University Heights section of Newark. The campus encompasses more than 30 major buildings and over 4.5 million square feet under roof. Most of the campus is bounded by Bergen Street to the west, South Orange Avenue to the south, Norfolk Street to the east, and West Market Street to the North. The Stanley S Bergen building is located on the west side of Bergen Street. A site plan of the campus can be found in Appendix A.

The facility operates a cogeneration Power Plant as well as numerous smaller boilers and emergency generators that use oil as a primary or backup fuel source. The Power Plant is normally manned 24 hours a day, 7 days a week; however, other areas where oil is stored are typically not under 24-hour observation. The facility property comprises approximately 63 acres.

The topography of the site slopes moderately from west to east, with the steepest grades occurring in the vicinity of the Stanley S Bergen building and the Power Plant. The Passaic River is approximately 1 mile east of the University.

Process water and sanitary wastewaters are collected in sanitary sewers and are discharged to the PVSC. Stormwater at the site flows to storm drains on or adjacent to the property. Since Newark is on a combined sanitary/storm sewer system, stormwater is also discharged to PVSC, and ultimately discharges to the Passaic River and/or Newark Bay.

See Appendix-A for Rutgers Newark Campus site plan.

4. SPILL POTENTIAL (40 CFR 112.7(b))

Potential spill scenarios at the Rutgers campus include the following.

- <u>Tank ruptures</u> Catastrophic failure of an above-ground oil storage tank presents the potential for a large volume, short duration discharge scenario. Secondary containment structures around the tanks will prevent oil from reaching a waterway. The risk of tank rupture is extremely low.
- <u>Tank overflows (UST or AST) Overflows can occur during filling operations, or as a result of product expansion from elevated temperatures.</u> Rutgers has instituted administrative controls limiting tank contents to 90% of total storage capacity which triggers the over-filled alarm.
- <u>Tank leakage (UST or AST) Tank leaks represent relatively low volume, long-duration discharges</u>. In addition to engineered controls and inventory management procedures, routine tank inspection will minimize the potential for leaks (and the total quantity of material released should a leak occur).
- Piping failure or leakage Discharges due to pipe leaks depend on a number of factors including: the severity of the leak or failure; the location of the break; the capacity of the supply and/or receiving vessel; the pumping rate; and the presence or absence of controls. The majority of oil piping at Rutgers is located within buildings, minimizing the potential for impacting waterways. The buried piping system from the oil tank farm to the Cogen Power Plant has double walls and any leak will trigger the alarm.
- Hose failure during storage tank filling/or waste oil loading Worst-case scenarios involve spills from hose disconnection or valve failure. Discharge quantities under the latter situation will be a function of pumping rate and personnel response time. Oil loading/unloading procedures are addressed in Section 9.
- Spills and leaks during drum management Improper drum handling or transport may result in loss of up to 55 gallons of material. Since these activities typically take place without secondary containment, employee training is critical to prevent discharges. Employee training is addressed in Section 7.

Section 5 describes the "worst case" and "more likely" spill scenarios for each major oil storage area at the Rutgers Health Sciences campus, including anticipated release volume and direction of flow.

5. OIL STORAGE TANKS AND CONTAINMENT (40 CFR 112.7c)

Oil and petroleum products are stored at numerous locations on the Rutgers campus, ranging from drums in maintenance shops to large underground and above ground tanks.

5.1 Oil Tanks and Location (see Appendix B)

Table -1 summarizes the locations and quantities of oil and related petroleum products that pose a reasonable potential for discharge due to handling, equipment and/or container failure, overflow or leakage, and that could be discharged to the environment in a spill event.

ID No.	Description	Container Inventory	Oil Storage Capacity (gallons)
1	Power Plant Emergency Generator Tank	1 AST (E16)	15,000
	Power Plant Fuel Tanks for Cogeneration Turbines (Tank Farm)	2 AST (E-17 & E-18)	100,000
2	Power Plant Compressor Oil Tank	1 AST 1 AST Used Oil	300 300
3	Power Plant Emergency Generator Set Tank	1 AST	500
4	Power Plant Day Tanks	2 ASTs (Emergency Generator)	550
5	Power Plant Maintenance Activities	2 ASTs (portable) Drum Storage	1,050 2,750
6	Doctor's Office Parking Deck Emergency Generator Set Tank in Parking Garage	1 AST	500
7	Stanley S Bergen Emergency Generator Tank	1 AST	1500
8	Administration Complex Emergency Generator Tank	1 AST	1,000
9	Oral Health Pavilion Building Emergency Generator Tank	1 AST	800
10	Cancer Center Emergency Generator Tank	1 AST	3000
11	Bergen St Parking Deck Emergency Generator Tank	1 AST	366
12	Behavioral Science Health Building Emergency Generator	1 AST	500
13	Vivarium Emergency Generator Tank	1 AST	750
14	Housing Emergency Generator Tank	1 AST	650

TABLE 1 – RUTGERS PRIMARY OIL STORAGE AREAS

Location ASTs E-16 through E-18 are inside a tank farm located outdoors within the fence at the south side of the Power Plant. The tank farm is located between the public parking area and the Power Plant parking area. Tanks are aboveground adjacent to their associated truck unload station, all in a common concrete containment. Container Type, E-16 – 15,000 gal #2 fuel oil AST Storage Capacity & **Material Stored** E-17 – 50,000 gal. #2 fuel oil AST E-18 – 50,000 gal. #2 fuel oil AST Aggregate storage capacity = 115,000 gallons Tank Farm containment capacity = greater than 75,000 gallons **Discharge Scenarios/** Worst-case: In the event of a catastrophic tanker truck failure, prior to **Estimated Quantity of** entering the containment area, an estimated maximum spill of 7,500 gallons Material Potentially could potentially be discharged to the storm drain system on the approach to Discharged the Power Plant truck unload station. More likely: Tanker truck hose rupture or tank overfills scenarios would result in spills on the order of 50 to 200 gallons, which would be contained within the concrete containment. Possible Spill Spill resulting from leaks or tanker failure will be contained within the tank **Pathways** and truck unload containment area. Spills or releases will enter a sump located in the containment area. Power Plant operators will monitor the sump for hydrocarbons. Accumulate oil will be identified and shipped offsite. Spills due to tank overfilling will be controlled and collected within the tank containment. Tanks and truck unload areas are controlled within a concrete containment Spill Prevention area. Measures Administrative procedures are in place to prevent tanks from being filled to more than 90% of capacity. Each tank is equipped with an overfill monitor with a visual alarm set at 90% of tank capacity. The visual alarm is mounted on the exterior of the Power Plant in the vicinity to the tanker unloading area. Each tank is equipped with an electronic tank gauging system to verify tank contents and identify leakage. The tanks are audited annually to evaluate potential leaks. **Spill Controls** Multiple spill kits including absorbent materials are stored in the Power Plant. See Sections 16 and 17 for spill notification & response procedures.

ID No. 1 – Power Plant New Fuel Oil Tanks (E16 to E18)

Location	Waste tank is located along the East wall of the Power Plant under a roof. Waste synthetic oil blow down from the compressors is gravity-fed into the waste tank. The tank is periodically emptied through a vacuum hose into a tanker truck. The 1 holding tank (horizontal) for the gas compressors are located outside of the building surrounded by a concrete burm.
Container Type, Storage Capacity & Material Stored	300-gallon used synthetic oil AST (double-walled plastic tank) 300-gallon holding tank (1) for compressor oil Aggregate storage capacity = 600 gallons
Discharge Scenarios/ Estimated Quantity of Material Potentially Discharged	Hose failure during tank pump out would result in spills on the order of 10 to 100 gallons, depending on personnel response time. Catastrophic failure of a waste tank could theoretically result in the release of up to 200 gallons of synthetic oil.
Possible Spill Pathways	Spills from leaks or failure of the systems in this area would pool in the vicinity of the compressor pad and possibility to the sewer drain inside the building housing the compressor.
Spill Prevention Measures	Double-walled tank Overfill monitor with audible/visual high level alarm set at 90% of tank capacity. The alarm is located in the Power Plant control room. Tank is audited annually to evaluate potential leaks.
Spill Controls	A Spill Kit including absorbent materials is stored inside the chiller room nearby the compressors to facilitate cleanup response if a spill occurs. See Section 13 for spill notification and response procedures.

ID No. 2 – Power Plant Compressor & Waste Compressor Oil Tanks

Location	Outdoors, on the west side of the Power Plant. Tank is part of a Caterpillar 3406 emergency generator set. The tank sits beneath the generator on a concrete slab. A switchgear vault is located to the north of the generator pad.
Container Type, Storage Capacity & Material Stored	A 500-gallon steel diesel fuel tank with integral secondary containment.
Discharge Scenario/ Estimated Quantity of Material Potentially Discharged	Worst-case: Catastrophic failure of a tanker truck compartment. An estimated maximum spill of 1,500 gallons could potentially be discharged.
	More likely: Tanker truck hose rupture. Estimated release volume would be on the order of 50 to 100 gallons.
Possible Spill Pathways	Spills resulting from hose failure or tanker truck compartment rupture would flow toward the west side of the Power Plant into the gravel area surrounding the generator.
	Leaks or overfills from the tank itself would likely on the gravel area surrounding the generator.
Spill Prevention Measures	Administrative procedures are in place to prevent tanks from being filled to more than 90% of capacity.
	Delivery driver remains with the truck during unloading and Rutgers personnel oversee tanker truck connections and disconnections.
	Liquid level indicators for visual indication of available tank capacity.
Spill Controls	A Spill Kit including absorbent materials is stored nearby to facilitate cleanup response if a spill occurs.
	See Section 13 for spill notification and response procedures.

ID No. 3 – Power Plant Emergency Generator Tank Serving A900 Labs

ID No. 4 – Power Plant Day Tanks and Piping Systems

	Indegration and double wells for piping system from the new ACT O
Location	Underground and double walls for piping system from the new AST Oil tanks to the Power plant.
	Indoor within Power Plant for other piping system.
	#2 Fuel Oil is pumped from Tank E18 to two day tanks which feed two 1400 HP Waukesha emergency generators located in the Power Plant Generator Room.
	#2 Fuel Oil is pumped from Tanks E16 and E17 to an elevated day tank which feeds the three cogeneration units
Container Type, Storage Capacity &	Generator day tanks – Two 275-gallons, single wall steel above- ground tanks on the wall of the Emergency Generator room.
Material Stored	Cogeneration day tank – One 250-gallon, single wall steel above- ground tank (on the south wall of the Cogen room.
	Aggregate storage capacity = 800 gallons
Discharge Scenarios/ Estimated Quantity of Material Potentially Discharged	Pipe rupture on discharge side of pump/transfer station inside the Power Plant could result in spills of up to 50 – 60 gallons per minute of oil inside the Power Plant. Assuming a response time of 10 minutes results in an estimated release of 500 to 600 gallons.
	Pipe rupture on discharge side of pump/transfer station in the buried piping system between the new AST oil tanks and the Power Plant will be contained within the double walls and alarmed.
	Catastrophic failure of a day tank could result in a release of up to 275 gallons of oil in the Generator Room or up to 250 gallons in the cogeneration area.
	Minor oil spills/leaks at transfer/filtration systems, along pipelines, or at generators may result in discharges on the order of 1 to 10 gallons.
Possible Spill Pathways	Spills or releases at the emergency generator day tanks would be contained in the generator room. However, there is a central floor drain into which oil could be released. The generators themselves are surrounded by a low concrete curb to contain minor releases.
	Spills or releases at the cogeneration day tank may enter a drain located almost immediately beneath the tank. This drain (and all others on this level) empties to a dual compartment sump pit which acts as an oil-water separator with a capacity of approximately 250 gallons. Accumulated oil is periodically shipped offsite, and water is pumped to a 8,000-gallon treatment tank where it is neutralized prior to being discharged to PVSC.
Spill Prevention Measures	Administrative procedures are in place to prevent the tanks from being filled to over 90% of capacity.

	Day tanks are equipped with float switch, low and high level alarms and feed cutoffs to prevent overfilling.
	Piping is located high above the Power Plant floor to minimize the possibility of damage due to material or vehicle impact.
	Power Plant is manned continuously. Although not all areas are continuously staffed, personnel make rounds at least every two hours to observe operations and detect abnormal conditions.
Spill Controls	Spill Kits including absorbent materials is stored nearby to facilitate cleanup response if a spill occurs.
	See Section 13 for spill notification and response procedures.

ID No. 5 – Power Plant Maintenance Activities

Location	Indoors, within Power Plant. Operations include maintenance activities on oil-filled equipment including refrigerant equipment. Waste oils are collected in portable tanks or 55-gallon drums prior to being collected and shipped off-site.
Container Type, Storage Capacity & Type of Material Stored	Waste synthetic oil tank – 525-gallon plastic portable tank Waste non-synthetic oil tank – 525-gallon plastic portable tank Drum storage of lubricating/hydraulic oils (approximately 50 drums)
	Aggregate storage capacity = 3,800 gallons (approx.)
Discharge Scenarios/ Estimated Quantity of Material Potentially	Worst-case: Catastrophic failure or accidental overturning of a portable tank. A maximum spill of 525 gallons could result from this scenario.
Discharged	More likely: Leaks/spills from drum mismanagement, resulting in releases of up to 55 gallons. Drum storages has containment.
Possible Spill Pathways	Minor drum and tank leaks would likely remain in the area and be cleaned up prior to reaching a drain or the outdoors.
	More significant indoor spills or releases may enter drains on this level. These drains empty to a dual compartment sump pit which acts as an oil- water separator with a capacity of approximately 250 gallons. Accumulated oil is periodically shipped offsite, and water is pumped to an 8,000-gallon treatment tank where it is neutralized prior to being discharged to PVSC.
Spill Prevention Measures	Employees receive training in proper management of drums and portable tanks to prevent spills and releases.
	Waste oil transfer operations are continuously manned.
	Tanks and drum storage areas are located indoors. A Spill Kit including absorbent materials is located near each storage area
Spill Controls	to facilitate cleanup response if a spill occurs.
	See Section 13 for spill notification and response procedures.

Location	Indoors in the electrical room on the lower level of the parking garage. The fill port for this tank is located on grade level along the south side of the parking garage, next to the DOC building.
Container Type, Storage Capacity & Material Stored	One 500-gallon single-wall steel diesel fuel AST with integral secondary containment.
Discharge Scenarios/ Estimated Quantity of Material Potentially	Worst-case: In the event of a catastrophic tanker truck failure, an estimated maximum of 1,500 gallons of diesel fuel could potentially be discharged to the storm drain system.
Discharged	More likely: Tanker truck hose rupture or inadvertent disconnection would result in spills on the order of 25 to 100 gallons, which could be discharged to the storm drain system or onto the ground in the vicinity of the fill pipe.
	Tank overfills or tank leaks would most likely be contained within the tank's secondary containment.
	Small leaks from piping to the generator could flow into a drain and into the electrical room sump.
Possible Spill Pathways	Outdoor spills would pool on the relatively flat surface or impact the unpaved areas adjacent to the parking garage, and could enter the storm drain located adjacent to the tanker unloading area.
	Indoor spills and leaks would likely be confined to the tank's secondary containment. Leaks from the transfer lines between the tank and generator could flow into the electrical room sump.
Spill Prevention Measures	Administrative procedures are in place to prevent tank from being filled to more than 90% of capacity.
	Day tank is "dipped" prior to and after filling to determine appropriate delivery volume.
	The tank is located below grade within the parking garage, at the lowest parking level.
Spill Controls	The tank is equipped with a concrete secondary containment with a volume large enough to hold the entire tank contents.
	A Spill Kit including absorbent materials is stored nearby to facilitate cleanup response if a spill occurs.
	See Section 13 for spill notification and response procedures.

ID No. 6 – Doctors Office Parking Deck Emergency Generator Tank

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10 NO. $7 - 3$ calley 3	S Bergen Building Emergency Generator Tank
Location	Located outdoors at parking lot 7, along the northeast corner of the Stanley S Bergen (SSB) building. The tank is part of a self- contained generator set serving the SSB building.
Container Type, Storage Capacity & Material Stored	One 1,500-gallon steel diesel AST with self contained secondary containment.
Discharge Scenarios/ Estimated Quantity of Material Potentially Discharged	Worst-case: Catastrophic failure of a tanker truck compartment. A maximum of approximately 1,500 gallons could be discharged. More likely: Tanker truck hose rupture. Estimated release volume would be on the order of 50 to 100 gallons.
Possible Spill Pathways	Spills resulting from tanker truck rupture or hose failure would flow east toward Bergen Street, to a storm drain approximately 125 feet from the generator.
Spill Prevention Measures	Administrative procedures are in place to prevent tanks from being filled to more than 90% of capacity. Delivery driver remains with the truck during unloading and Rutgers personnel oversee tanker truck connections and disconnections per Section 11 of this Plan. Liquid level indicators for visual indication of available tank capacity.
Spill Controls	Secondary containment: the base of the generator/tank unit serves as integral secondary containment able to hold the entire tank contents. A Spill Kit including absorbent materials is stored inside the generator housing to facilitate cleanup response if a spill occurs. See Section 13 for spill notification and response procedures.

ID No. 7 – Stanley S Bergen Building Emergency Generator Tank

Discharge Scenarios/ Estimated Quantity of Material Potentially Dischargedmaximum spill of 1,000 gallons could potentially be discharged to the storm drain system.More likely: Tanker truck hose rupture or inadvertent disconnection. could result in a discharge of approximately 50 to 100 gallons to the s drain system and/or onto the Parking Lot 9 area at the Administration Complex.Possible Spill PathwaysSpills resulting from leaks or tanker failure would flow on the paved surface of the driveway and could reach storm drains in the parking loSpill Prevention MeasuresAdministrative procedures are in place to prevent tanks from being fill more than 90% of capacity.		- Admin Complex Emergency Generator Tank
Container Type, Storage Capacity & Type of Material Storedintegrated secondary containment.Discharge Scenarios/ Estimated Quantity of Material Potentially DischargedWorst-case: In the event of a catastrophic tanker failure, an estimated maximum spill of 1,000 gallons could potentially be discharged to the storm drain system.DischargedWorst-case: In the event of a catastrophic tanker failure, an estimated maximum spill of 1,000 gallons could potentially be discharged to the storm drain system.DischargedWorst-case: In the event of a catastrophic tanker failure, an estimated maximum spill of 1,000 gallons could potentially be discharged to the storm drain system.Possible Spill PathwaysSpills: Tanker truck hose rupture or inadvertent disconnection. could result in a discharge of approximately 50 to 100 gallons to the s drain system and/or onto the Parking Lot 9 area at the Administration Complex.Possible Spill PathwaysSpills resulting from leaks or tanker failure would flow on the paved surface of the driveway and could reach storm drains in the parking low more than 90% of capacity.	ocation	Administration Complex. The tank serves an emergency
Discharge Scenarios/ Estimated Quantity of Material Potentially Dischargedmaximum spill of 1,000 gallons could potentially be discharged to the storm drain system.More likely: Tanker truck hose rupture or inadvertent disconnection. could result in a discharge of approximately 50 to 100 gallons to the s drain system and/or onto the Parking Lot 9 area at the Administration Complex.Possible Spill PathwaysSpills resulting from leaks or tanker failure would flow on the paved surface of the driveway and could reach storm drains in the parking loSpill Prevention MeasuresAdministrative procedures are in place to prevent tanks from being fill more than 90% of capacity.	torage Capacity & ype of Material	integrated secondary containment.
Possible Spill Pathwayssurface of the driveway and could reach storm drains in the parking locSpill Prevention MeasuresAdministrative procedures are in place to prevent tanks from being fill more than 90% of capacity.	stimated Quantity of aterial Potentially ischarged	Quantity of storm drain system. More likely: Tanker truck hose rupture or inadvertent disconnection. This could result in a discharge of approximately 50 to 100 gallons to the storn drain system and/or onto the Parking Lot 9 area at the Administration Complex.
Measures more than 90% of capacity.		pill Spills resulting from leaks or tanker failure would flow on the paved surface of the driveway and could reach storm drains in the parking lot.
capacity. A visual alarm is installed to detect product in the seconda containment unit. The tank is equipped with an automated tank gauging system to verif tank contents. The tank is audited monthly to evaluate potential leaks.	easures	The tank is equipped with an audibal overfill alarm set at 90% of tank capacity. A visual alarm is installed to detect product in the secondary containment unit. The tank is equipped with an automated tank gauging system to verify tank contents. The tank is audited monthly to evaluate potential leaks.
Spill ControlsA Spill Kit including absorbent materials is stored nearby to facilitate cleanup response if a spill occurs.See Section 13 for spill notification and response procedures.		cleanup response if a spill occurs.

ID No. 8 – Admin Complex Emergency Generator Tank

Location	The AST is located outdoors and is part of a self-contained generator set serving the Oral Health Pavilion. The tank sits beneath the generator on a concrete slab.
Container Type, Storage Capacity & Material Stored	1000 gallon steel diesel fuel tank with self contained secondary containment.
Discharge Scenario/ Estimated Quantity of Material Potentially Discharged	Worst-case: Catastrophic failure of a tanker truck compartment. An estimated maximum spill of 1500 gallons could potentially be discharged to 12 th Ave.
	More likely: Tanker truck hose rupture. Estimated release volume would be on the order of 50 to 100 gallons could be discharge to the storm drain at the entrance of the emergency generator.
Possible Spill Pathways	Spills resulting from hose failure or tanker truck compartment rupture could flow toward the storm drain on unpaved ground in front of the emergency generator.
	Leaks or overfills from the tank itself would likely be contained within the external tank housing.
Spill Prevention Measures	Administrative procedures are in place to prevent tanks from being filled to more than 90% of capacity. A drain cover will be placed on top of the storm drain on Bergen Ave eastward of the spill pathway.
	Delivery driver remains with the truck during unloading and Rutgers personnel oversee tanker truck connections and disconnections per Section 11 of this Plan.
	Liquid level indicators for visual indication of available tank capacity.
	A drain cover will be place on the storm drain in front of the generator during oil loading to prevent any spill from the hose to enter the storm drain.
Spill Controls	Secondary Containment: The base of the generator/tank unit serves as integral secondary containment able to hold the entire tank contents.
	A Spill Kit including absorbent materials is stored inside the generator housing to facilitate cleanup response if a spill occurs.
	See Section 13 for spill notification and response procedures.

ID No. 9 – Oral Health Pavilion Building Emergency Generator Tank

ID No. 10 – Cancer Center Emergency Generator Tank		
Location	The AST is located outdoors and is part of a self-contained generator set serving the Cancer Center. The tank sits beneath the generator on a concrete slab. The entire system is on a gravel bed and enclosed within a brick wall.	
Container Type, Storage Capacity & Material Stored	One 3000 gallon steel diesel fuel tank with self contained secondary containment.	
Discharge Scenario/ Estimated Quantity of Material Potentially Discharged	Worst-case: Catastrophic failure of a tanker truck compartment. An estimated maximum spill of 1500 gallons could potentially be discharged.	
Discharged	More likely: Tanker truck hose rupture. Estimated release volume would be on the order of 50 to 100 gallons on the gravel bed within the brick wall.	
Possible Spill Pathways	Spills resulting from hose failure spread on the unpaved area west of the Emergency Generator .	
	Leaks or overfills from the tank itself would likely be contained within the external tank housing.	
Spill Prevention Measures	Administrative procedures are in place to prevent tanks from being filled to more than 90% of capacity.	
	Delivery driver remains with the truck during unloading and Rutgers personnel oversee tanker truck connections and disconnections per Section 11 of this Plan.	
	Liquid level indicators for visual indication of available tank capacity.	
Spill Controls	Secondary Containment: The base of the generator/tank unit serves as integral secondary containment able to hold the entire tank contents.	
	A Spill Kit including absorbent materials is stored nearby to facilitate cleanup response if a spill occurs.	
	See Section 13 for spill notification and response procedures.	

Location	The AST is located inside room 115 at grade level. The tank sits beneath the generator on a concrete slab.
Container Type, Storage Capacity & Material Stored	One 366 gallon steel diesel fuel tank.
Discharge Scenario/ Estimated Quantity of Material Potentially Discharged	Worst-case: Catastrophic failure of a tanker truck compartment. An estimated maximum spill of 1500 gallons could potentially be discharged.
Disonalgeu	More likely: Tanker truck hose rupture. Estimated release volume would be on the order of 50 to 100 gallons on the indoor parking area for the Ambulance.
Possible Spill Pathways	Spills resulting from hose failure or tanker truck compartment rupture would be confined inside the Parking Garage.
	Leaks or overfills from the tank itself would likely be contained within the external tank housing.
Spill Prevention Measures	Administrative procedures are in place to prevent tanks from being filled to more than 90% of capacity.
	Delivery driver remains with the truck during unloading and Rutgers personnel oversee tanker truck connections and disconnections per Section 11 of this Plan.
	Liquid level indicators for visual indication of available tank capacity.
Spill Controls	Secondary Containment: The entire Room #115 serves as integral secondary containment which is able to hold the entire tank contents.
	A Spill Kit including absorbent materials is stored inside of Room #115 to facilitate cleanup response if a spill occurs.
	See Section 13 for spill notification and response procedures.

ID No. 11 – Bergen Avenue Parking Deck Emergency Generator Tank

Location	The Emergency Generator is located outdoors on the NW side of the Behavioral Science Health Building. The tank sits beneath the generator on a concrete slab.
Container Type, Storage Capacity & Material Stored	One 500 gallon steel diesel fuel tank.
Discharge Scenario/ Estimated Quantity of Material Potentially Discharged	Worst-case: Catastrophic failure of a tanker truck compartment. An estimated maximum spill of 1500 gallons could potentially be discharged.
	More likely: Tanker truck hose rupture. Estimated release volume would be on the order of 50 to 100 gallons.
Possible Spill Pathways	Spills resulting from hose failure or tanker truck compartment rupture could flow toward a catch basin on Orange Ave.
	Leaks or overfills from the tank itself would likely be on the gravel area surrounding the emergency generator
Spill Prevention Measures	Administrative procedures are in place to prevent tanks from being filled to more than 90% of capacity.
	Delivery driver remains with the truck during unloading and Rutgers personnel oversee tanker truck connections and disconnections per Section 11 of this Plan.
	Liquid level indicators for visual indication of available tank capacity.
Spill Controls	Secondary Containment: The gravel area around the Emergency Generator will serve as the secondary containment able to hold the entire tank contents.
	A Spill Kit including absorbent materials is stored nearby to facilitate cleanup response if a spill occurs.
	See Section 13 for spill notification and response procedures.

ID No. 12 – Behavioral Science Health Building Emergency Generator Tank

Location	The AST is located outdoors and is part of a self-contained generator set serving the Vivarium. The tank sits beneath the generator on a concrete slab.
Container Type, Storage Capacity & Material Stored	One 750 gallon steel diesel fuel tank with self contained secondary containment.
Discharge Scenario/ Estimated Quantity of Material Potentially Discharged	Worst-case: Catastrophic failure of a tanker truck compartment. An estimated maximum spill of 1500 gallons could potentially be discharged to the grassy area/parking lot adjacent to the generator. More likely: Tanker truck hose rupture. Estimated release volume would be on the order of 50 to 100 gallons.
Possible Spill Pathways	Spills resulting from hose failure or tanker truck compartment rupture could flow toward the trench at the loading dock. Leaks or overfills from the tank itself would likely be contained within the building basement.
Spill Prevention Measures	Administrative procedures are in place to prevent tanks from being filled to more than 90% of capacity. Delivery driver remains with the truck during unloading and Rutgers personnel oversee tanker truck connections and disconnections per Section 11 of this Plan. Liquid level indicators for visual indication of available tank capacity.
Spill Controls	Secondary Containment: The base of the generator/tank unit serves as integral secondary containment able to hold the entire tank contents. A Spill Kit including absorbent materials is stored nearby to facilitate cleanup response if a spill occurs. See Section 13 for spill notification and response procedures.

ID No. 14 – Housing Emergency Generator Tank		
Location	The AST is located outdoors and is part of a self-contained generator set serving the dormitory. The tank sits beneath the generator on a concrete slab. The tank is located on the northern portion of the property along 12 th Avenue.	
Container Type, Storage Capacity & Material Stored	One 650 gallon steel diesel fuel tank with self contained secondary containment.	
Discharge Scenario/ Estimated Quantity of Material Potentially Discharged	Worst-case: Catastrophic failure of a tanker truck compartment. An estimated maximum spill of 1500 gallons could potentially be discharged to the gravel area adjacent to the generator. More likely: Tanker truck hose rupture. Estimated release volume would be on the order of 50 to 100 gallons.	
Possible Spill Pathways	Spills resulting from hose failure or tanker truck compartment rupture could flow toward the trench at the loading dock. Leaks or overfills from the tank itself would likely be contained within the building basement.	
Spill Prevention Measures	Administrative procedures are in place to prevent tanks from being filled to more than 90% of capacity. Delivery driver remains with the truck during unloading and Rutgers personnel oversee tanker truck connections and disconnections per Section 11 of this Plan. Liquid level indicators for visual indication of available tank capacity.	
Spill Controls	Secondary Containment: The base of the generator/tank unit serves as integral secondary containment able to hold the entire tank contents. A Spill Kit including absorbent materials is stored nearby to facilitate cleanup response if a spill occurs. See Section 13 for spill notification and response procedures.	

5.1.1 Aboveground Storage Tanks (AST)

Rutgers operates a total of 18 fixed aboveground oil storage tanks ranging in size from 250 gallons to 50,000 gallons. The ASTs are mostly located at the Power Plant, either indoors or outdoors with containment. Most ASTs for the Emergency Generators have double walls and they are located beneath the generators on a concrete slab or a gravel bed.

Rutgers Power Plant operates a tank farm consisting of 3 above ground horizontal tanks located on the South Side of the Plant. The tank farm concrete containment size is 9360 cubic feet or 70,000 gallons which is 140% of the largest tank.

Rutgers Power Plant operators as part of their daily routine, perform daily visual inspections in various oil storage areas. Sufficient supplies of sorbent materials are kept nearby for rapid spill response when necessary.

5.1.2 Underground Storage Tanks (UST)

No underground storage are located on the RBHS Newark Campus.

5.1.3 Portable Tanks and Drums

Portable tanks and drum storage located in the maintenance area of the Power Plant, various mechanical equipment rooms and maintenance shops throughout the campus are equipped with adequate secondary containment (spill pallets). Rutgers maintains sufficient supplies of sorbent materials (pads, pigs, booms) and equipment to contain and clean up spills associated with these containers.

Oil-filled equipment in the Power Plant is equipped with drip pans or located within berms to contain minor spills and leaks. Significant releases on the main level of the Power Plant will enter a collection trench system that drains to a dual compartment sump pit, an oil-water separator with a capacity of approximately 250 gallons. Accumulated oil is periodically shipped offsite, and wastewater is pumped to an 8,000-gallon water treatment tank where it is neutralized prior to discharge to PVSC.

6. INSPECTIONS AND RECORDKEEPING (40 CFR 112.7(e))

6.1. Inspections

The facility is manned by personnel with job responsibilities requiring them to be in the vicinity of the oil and product storage areas on a daily basis. These employees observe the storage areas as a matter of routine and are trained to respond to leaks and recognize abnormal operating conditions.

All indoor oil tanks (day tanks) are small ranged from 300 to 500 gallons each. The plant operator does daily walk around the Power Plant, the Cogen Plant and the Chiller room. Underground oil storage tanks and above ground emergency generator tanks are inspected once a month during the load test. Inspection records of these tanks are kept with the weekly emergency testing records at ADMC, building 5.

If a deficiency is found, a work order is issued to correct the problem.

The following procedures should be used as guidelines when performing the monthly inspection:

- 1. Use Inspection Form for storage area identification and location.
- 2. Visually observe tanks, level sensors, pumps, lines and valves. Indicate leaks, seepage or other signs of deterioration.
- 3. Visually observe drums. Indicate leaks, missing bungs, swelling or other signs of deterioration. Indicate missing or unreadable labels.
- 4. Inspect spill response equipment. Indicate equipment in need of replacement or repair and document date of corrective action.

To ensure that tank systems are, as far as practicable, fail-safe, level indicators will be monitored as appropriate on an on-going basis while liquid transfer operations are occurring. The liquid level indicators are checked at least annually to assure proper operation. These inspections will be performed in accordance with the procedures provided in Appendix C.

6.2. Tank Testing

6.2.1. Underground Storage Tank

No underground storage are located on the RBHS Newark Campus.

6.2.2. Aboveground Storage Tank

Rutgers personnel constantly observe ASTs during operating hours. Formal inspections are conducted monthly to examine the exterior of the ASTs and containment areas. If substantial repairs are made to a tank, non-destructive shell testing such as hydrostatic testing, ultrasonic testing, or any other system of non-destructive shell testing shall be completed.

Tank Type	Tank Volume	Containment
Power Plant Oil tank for Cogen Turbines ASTs	(2) 50,000 – gallon	double wall
Power Plant Oil Tank for Emergency Generator AST	(1) 15,000 – gallon	double wall
Power Plant Compressor Oil AST	(1) 300-gallon	double wall
Power Plant Compressor Used Oil AST	(1) 300-gallon	double wall
Power Plant Emergency Generator Set AST (belly tank)	(1) 500-gallon	double wall
Power Plant Emergency Generator ASTs (day tanks)	(2) 275-gallon	double wall
Power Plant Maintenance Portable AST's	(2) 525-gallon	double wall
Doctor's Office Complex (DOC) Emergency Generator Set AST	(1) 500-gallon	double wall
Stanley S Bergen Bldg Emergency Generator Tank	(1) 1500-gallon	double wall
Oral Health Pavilion Emergency Generator Set AST	(1) 800-gallon	double wall
Bergen Ave Parking Emergency Generator Set AST	(1) 366-gallon	double wall
Cancer Center – Emergency Generator Set AST	(1) 3000-gallon	double wall
Behavioral Science – Emergency Generator Set AST	(1) 500-gallon	doublewall
Vivarium Emergency Generator	(1) 750-gallon	double wall
Housing Emergency Generator	(1) 650-gallon	double wall
Administrative Complex Emergency Generator	(1) 1000-gallon	double wall
	Power Plant Oil tank for Cogen Turbines ASTs Power Plant Oil Tank for Emergency Generator AST Power Plant Compressor Oil AST Power Plant Compressor Used Oil AST Power Plant Emergency Generator Set AST (belly tank) Power Plant Emergency Generator ASTs (day tanks) Power Plant Emergency Generator ASTs (day tanks) Power Plant Maintenance Portable AST's Doctor's Office Complex (DOC) Emergency Generator Set AST Stanley S Bergen Bldg Emergency Generator Tank Oral Health Pavilion Emergency Generator Set AST Bergen Ave Parking Emergency Generator Set AST Cancer Center – Emergency Generator Set AST Behavioral Science – Emergency Generator Set AST Vivarium Emergency Generator Housing Emergency Generator	Power Plant Oil tank for Cogen Turbines ASTs(2) 50,000 – gallonPower Plant Oil Tank for Emergency Generator AST(1) 15,000 – gallonPower Plant Compressor Oil AST(1) 300-gallonPower Plant Compressor Used Oil AST(1) 300-gallonPower Plant Emergency Generator Set AST (belly tank)(1) 500-gallonPower Plant Emergency Generator Set AST (belly tank)(1) 500-gallonPower Plant Emergency Generator ASTs (day tanks)(2) 275-gallonPower Plant Maintenance Portable AST's(2) 525-gallonDoctor's Office Complex (DOC) Emergency Generator Set AST(1) 500-gallonStanley S Bergen Bldg Emergency Generator Tank(1) 1500-gallonOral Health Pavilion Emergency Generator Set AST(1) 800-gallonBergen Ave Parking Emergency Generator Set AST(1) 300-gallonBehavioral Science – Emergency Generator Set AST(1) 500-gallonVivarium Emergency Generator(1) 750-gallonHousing Emergency Generator(1) 650-gallon

Additional tests will be performed whenever substantive material repairs are required. Tests may be conducted via hydrostatic, radiographic, ultrasonic, or other nondestructive means of tank shell testing or pipe pressure testing.

6.3. Recordkeeping

Rutgers will retain the following records for a minimum of three years.

- □ A copy of this SPCC Plan, with amendments.
- □ Monthly inspection records (see Section 8.1).
- Records of reportable spills and discharges, including reports filed with Federal or state agencies (if any; see Section 17).
- □ Training records (see Section 9).
- □ Records of level/overfill alarm testing and tank integrity testing.
- Documentation of agency inspections relative to 40 CFR 112, including notices of noncompliance and corrective actions undertaken (if any).

7. PERSONNEL TRAINING (40 CFR 112.7(f))

REHS Department conducts yearly SPCC training and retains the training records.

Spill prevention briefings are provided to staffs in engineering, maintenance, and operations. The training includes a review of this SPCC Plan, applicable laws and regulations. Its focuses on proper oil transfer/unloading procedures and spill response procedures.

The online SPCC training presentation is available at <u>www.myrehs.rutgers.edu</u>.

The Spill Plan Emergency Coordinator is responsible for managing spill response and coordinating work performed by outside contractors on an as needed basis.

REHS Environmental Coordinator is responsible for notifying appropriate state and federal agencies.

8. SITE SECURITY (40 CFR 112.7(g))

The Newark campus is staffed 24 hours per day, 7 days per week by operations and/or security personnel. The grounds are routinely patrolled by personnel trained to identify and report spills. Portions of the campus are fenced and building access is controlled through locks and security checkpoints.

Outdoor tanks and generators are locked and accessible only to authorized personnel. Principal oil storage areas have adequate lighting which helps to discover any leaks from above ground tank during darkness and to deter any vandalism.

9. TANK TRUCK UNLOADING (40 CFR 112.7(h))

Bulk oil shipments at the Rutgers campus are generally made by 1,500-gallon or 7,500-gallon tanker trucks. Only the Power Plant has a truck loading station. It is located at the South Side of the Plant serving the 3 new ASTs. There is no dedicated unloading area for truck oil loading to the emergency generator tanks located at other buildings throughout the Rutgers Campus. A truck generally parks on a side street or driveway in close proximity to the tank fill port. These areas are not equipped with containment structures. For this reason, oil deliveries must be closely monitored by the delivery driver and a Rutgers personnel trained to respond appropriately in an emergency. Areas not equipped with containment structures will utilize drain blockers placed on any nearby drains to prevent spills from entering the stormwater system.

See Appendix D for Oil Unloading Procedures

10. FACILITY DRAINAGE (40 CFR 112.8(b))

The Rutgers campus generally slopes from west to east. The central campus paved areas are relatively flat, while the Stanley S. Bergen building and the Power Plant exhibit the steepest east- to-west grades.

All drains on the central level of the Power Plant are collected into the oil-water separator system designed to handle oil leakage from plant systems should they occur. Effluent from the separator is treated prior to discharge to PVSC.

All storm drains in the vicinity of Rutgers are part of PVSC's combined sanitary/storm sewer system. While this in theory provides another level of containment, PVSC is not equipped to handle large oil discharges, and may at times be forced to discharge directly to a waterway. Discharge of

RBHS - Newark

SPCC Plan Revision (5/14/19)

oil into any storm sewer will be considered a violation of University environmental policy. Rutgers will make every effort to prevent oil spills from reaching the sewer drains, the stormdrains, and will under no circumstances treat the combined sewer-storm drain system as an acceptable means of spill control/containment.

11. BULK STORAGE TANKS (40 CFR 112.8(c))

All above-ground and underground storage tanks at Rutgers are constructed of steel, fiberglass, or plastic, which is compatible with the petroleum products they store under normal operating conditions.

Above-ground storage tanks are equipped with secondary containment or located indoors with little potential for outdoor oil release. Underground tanks at the campus have been upgraded to meet current regulations and have automatic leak detection system. Most of the tanks are also equipped with audible/visual high level alarms which are set at 90% of capacity.

Fail safe engineering methods are utilized to prevent tank overfilling. These include administrative procedures that prohibit the filling of a tank to more than 90 percent of its nameplate capacity.

12. FACILITY TRANSFER OPERATIONS (40 CFR 112.8(d))

All buried piping from underground tank systems at the Rutgers facility is double-walled fiberglass, which meets regulatory requirements for corrosion protection and leak prevention.

Above-ground piping is located away from the flow of traffic. In addition, all piping supports are designed to minimize abrasion and corrosion and allow for expansion and contraction. Virtually all above-ground piping is located indoors. Piping is inspected regularly. Pipelines which are not in service will be blank-flanged and marked as to origin.

Attachment – D details the Rutgers Oil unloading procedures at Newark campus.

13. EMERGENCY RESPONSE PLAN (40 CFR 112.20 and 40 CFR 112 Appendix F)

13.1 Spill Response Supplies and Equipment

Spill response supplies and/or kits including storm drain blockers, absorbent pigs (booms), mats, pads, oil dry floor absorbent bags and clean up materials are positioned at significant oil storage areas throughout the Rutgers facilities especially the emergency generators and the Power Plant to facilitate quick response to spills.

The spill response supplies and/or kits are inspected in conjunction with the monthly oil storage area inspections to ensure that they are adequately stocked, easily accessible and functional. The spill clean-up supplies also includes shovels, broom, dust pans and vinyl gloves.

13.2 Spill Response Procedures

13.2.1 Spill Response Contractors

The facility has made arrangements with the following organization for emergency services, spill response and waste oil removal:

Primary response contractor:

Contact Rutgers Environmental Health and Safety for current emergency response contractor. Phone: 848-445-2550

13.2.2 In-House Spill Response:

See SPCC Plan Appendix – F for Rutgers – Spill Response Procedures

Power Plant personnel are trained to respond to minor spills or leaks. In the event of a large oil spill, REHS will contact an emergency response contractor to clean up the spill, if required.

In the event of an oil release, the person discovering the release will:

- Immediately notify the shift Supervisor or Spill Plan Coordinator, then notify the REHS at 848-445-2550. During non-business hours contact Rutgers Newark Police at 973-353-5111.
- 2. Stop the source of the spill / leak if it is readily identifiable.
- 3. Contain the spill using absorbent materials, and/or block off the sewer or storm drains in the vicinity.

Steps 2 and 3 will be conducted ONLY by trained Rutgers personnel and ONLY if it is deemed safe to do so. Otherwise, the person will evacuate the area immediately.

The Spill Plan Emergency Coordinator is responsible for managing spill response, internal reporting (to REHS) and coordinating work performed by an outside contractor on an as needed basis.

Upon completion of cleanup, the Spill Plan Emergency Coordinator will be responsible for ensuring that:

- Spill response materials and equipment are restocked;
- □ Appropriate follow-up reports are prepared and distributed; and
- Any contaminated absorbent materials and/or soils are disposed of in accordance with applicable regulatory requirements.

REHS coordinator will be responsible to notify regulatory agencies if the spill enters the storm drains, the sewer system or on unpaved ground.

13.3 Spill Notification and Reporting

13.3.1 Internal Notification (Rutgers)

Any employee who discovers an oil spill will immediately report the spill/release to REHS at 848-445-2550. Spills inside the Power Plant should be reported to the Shift Supervisor for further notification.

If the spill is at the Power Plant, the Shift Supervisor or Spill Plan Emergency Coordinator will:

- 1. Take necessary steps to prevent injury to personnel, damage to equipment and fire hazards.
- 2. Initiate action to stop the spill and initiate defensive action to contain the spill and prevent run-off from exiting the building, reaching storm or sanitary sewers, or exiting plant property.
- 3. If the spill has entered the combined sanitary/stormwater system, or exited plant property, the Spill Plan Emergency Coordinator and the Environmental Coordinator will be immediately notified.

Spill Plan and Emergency Coordinator

Primary – Theodore Elonis Senior Director Plants and Distribution (work) 848-445-0299 (cell) 908-586-8665

- 4. When reporting a spill/release, notify your supervisor immediately with the following information in hand as much as possible :
 - Name and position of the reporting individual, phone number
 - Approximate time of the spill/release
 - Location of spill/release and/or equipment involved
 - Type of oil or product involved
 - Estimated amount of spill/release
 - Estimated amount of spill/release to reach sanitary or storm sewer
 - What steps have been taken to contain the spill/release

- 5. REHS will contact the response contractor should be it be needed.
- 6. The Environmental Coordinator will determine whether regulatory agency notifications must be made.

13.3.2 Regulatory Agency Notification

The Environmental Coordinator will determine if the spill/release is reportable. Verbal reports to the appropriate agencies shall be made immediately. All contacts shall be documented.

- A. Release Reporting Quantity to Regulatory Agencies:
 - Any amount of oil spilled to the sewer or storm drain
 - o 5 gallons or more of oil spilled on unpaved ground
 - o 1 gallon of gasoline spilled on unpaved ground

B. Notification to Passaic Valley Sewerage Commissioners (PVSC)

If the oil spill enters into a sewer drain or a stormwater catch basin, the notification must be made **immediately** (defined as within 15 minutes of the time the responsible individual knew or should have known of the discharge) to **PVSC at 973-344-1800.** UMDNJ must follow-up with a written report as required by PVSC.

C. Notification to State Agency (NJDEP)

New Jersey regulations require the reporting of any discharge at or above release reporting limit on unpaved ground or waters of the state. This notification must be made immediately.

If notification is required, Rutgers Environmental Health & Safety will use the following reporting procedure.

- 1. Call the **NJDEP at 1-877-927-6337**. If this number is not operational for any reason, contact the State Police at 1-609-882-2000.
- 2. Provide the following information:
 - Name, title, affiliation and phone number of the individual making the notification.
 - Location of the discharge.
 - The common name(s) of the material(s) discharged.
 - Estimated quantities of materials discharged.
 - Dates/times of the beginning, discovery, and (if applicable) end of the discharge.

- Actions proposed or underway to contain, clean up and remove the substances discharged.
- Name and address of the person responsible for the discharge.
- 3. Obtain the Case Number assigned to this notification. This number must be referenced on future correspondence regarding the release.

D. Notification to Federal Agencies

A discharge of oil must be reported to the National Response Center only if the discharge cause a film or sheen upon, or discoloration of the surface of the water in the vicinity of the campus include ponds, lakes, streams, creaks and wetlands.

National Response Center:	1-800-424-8802	
EPA Region II:	732-548-8730	

E. Written Reports

A written report must be submitted to EPA, and NJDEP within 60 days of an event in which facility has discharged the following quantity of Oil on unpaved ground or open water. A similar written report should be submitted to PVSC if the oil spill enters the sewer combination drainage system.

- o More than 1,000 U.S. gallons of oil in a single spill event or
- Two releases of more than 42 gallons each within a 12-month period.

This report must contain the following information:

- 1. name of the facility;
- 2. name(s) of the owner or operator of the facility;
- 3. location of the facility;
- 4. date and year of initial facility operation;
- 5. maximum storage or handling capacity of the facility and normal daily throughput;
- 6. description of the facility, including maps, flow diagrams, and topographical maps;
- 7. a complete copy of the SPCC Plan with any amendments;
- 8. the cause(s) of such spill, including a failure analysis of system or sub-system in which the failure occurred;
- 9. the corrective actions and/or countermeasures taken, including an adequate description of equipment repairs and/or replacements;
- 10. additional preventive measures taken or implemented to minimize the possibility of recurrence; and
- 11. such information as the Regional Administrator may reasonably require pertinent to the plan or spill event.

Addresses of Regulatory Agencies for written reporting:

U.S. Environmental Protection Agency Region II - Attn: Discharge Confirmation Report 290 Broadway New York, NY 10007

New Jersey Department of Environmental Protection Bureau of Discharge Prevention - Attn: Discharge Confirmation Report 401 East State Street, P.O. Box 424 Trenton, NJ 08625-0424

Passaic Valley Sewerage Commissioners 600 Wilson Avenue - Attn: Discharge Confirmation Report Newark, NJ 0710605

14. PLAN REVIEW AND AMENDMENT

This Plan will be reviewed, and revised accordingly, whenever there is a change in facility design, operation, maintenance or oil storage practices or additional installation of oil storage which could have an effect on oil discharge potential. At least once every five years, a comprehensive Plan review will be undertaken, and revisions/amendments will be made as appropriate.

In addition, Rutgers will review the Plan annually to check administrative details including names and phone numbers of designated response personnel and agencies. A log documenting annual review and amendment can be found on page ii of this Plan.

APPENDIX A FACILITY SITE DIAGRAM


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WARREN STREET	RBHS-E-GEN-0013	TRBHS-022	
Losse Construction of the second seco			

NEWARK RBHS GENERATORS									
NWK_E_GEN_ID	BLDG_NUM	CAMPUS	BLDG_NAME	ASSET_NUM	TANK_ID				
RBHS-E-GEN-0001	RBHS-E-GEN-0001 7259		CANCER CENTER		TRBHS-001				
RBHS-E-GEN-0002	7263	NWK RBHS	P2 PARKING DECK		TRBHS-002				
RBHS-E-GEN-0003	7258	NWK RBHS	BEHAVIORAL HEALTH AND SCIENCES		TRBHS-003				
RBHS-E-GEN-0004	7251	NWK RBHS	DOCTORS OFFICE		TRBHS-004				
RBHS-E-GEN-0005	7253	NWK RBHS	DENTAL MEDICINE		TRBHS-005				
RBHS-E-GEN-0006	7260	NWK RBHS	UNIVERSITY HOUSING		TRBHS-006				
RBHS-E-GEN-0007	7257	NWK RBHS	VIVARIUM		TRBHS-007				
RBHS-E-GEN-0008	7261	NWK RBHS	POWER PLANT		TRBHS-008				
RBHS-E-GEN-0009	7261	NWK RBHS	POWER PLANT		TRBHS-009				
RBHS-E-GEN-0010	7261	NWK RBHS	POWER PLANT		TRBHS-009				
RBHS-E-GEN-0011	7252	NWK RBHS	STANLEY BERGEN		TRBHS-019				
RBHS-E-GEN-0012	7270	NWK RBHS	ADMIN BLDGS		TRBHS-020				
RBHS-E-GEN-0013	7255	NWK RBHS	PUBLIC HEALTH		TRBHS-021				
RBHS-E-GEN-0014	7255	NWK RBHS	PUBLIC HEALTH		TRBHS-022				
RBHS-E-GEN-0015	7253	NWK RBHS	DENTAL MEDICINE		TRBHS-005				

NEWARK RBHS TANKS							
FUEL_TANK_ID	FUEL_CAPACITY	FUEL_TYPE	TANK_TYF				
TRBHS-001	3000 GAL	DIESEL	AST				
TRBHS-002	366 GAL	DIESEL	AST				
TRBHS-003	500 GAL	DIESEL	AST				
TRBHS-004	500 GAL	DIESEL	AST				
TRBHS-005	800 GAL	DIESEL	AST				
TRBHS-006	650 GAL	DIESEL	AST				
TRBHS-007	750 GAL	DIESEL	AST				
TRBHS-008	500 GAL	DIESEL	AST				
TRBHS-009	15000 GAL	DIESEL	AST				
TRBHS-010	50000 GAL	FUEL OIL	AST				
TRBHS-011	50000 GAL	FUEL OIL	AST				
TRBHS-012	525 GAL	DIESEL	AST				
TRBHS-013	525 GAL	DIESEL	AST				
TRBHS-014	300 GAL	COMPRESSOR OIL	AST				
TRBHS-015	300 GAL	USED COMPRESSOR OIL	AST				
TRBHS-016	275 GAL	DIESEL	AST				
TRBHS-017	275 GAL	DIESEL	AST				
TRBHS-018	2750 GAL	NEW/USED OIL	DRUMS				
TRBHS-019	1500 GAL	DIESEL	AST				
TRBHS-020	1000 GAL	DIESEL	AST				
TRBHS-021	3000 GAL	DIESEL	AST				
TRBHS-022	1500 GAL	DIESEL	AST				
TRBHS-023	165 GAL	DIESEL	AST				
TRBHS-024	165 GAL	DIESEL	AST				
TRBHS-025	10000 GAL	FUEL OIL	AST				

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APPENDIX B

OIL UNLOADING PROCEDURES

OIL UNLOADING PROCEDURES

The Power Plant operators and the maintenance staff should follow the following principal steps for any oil unloading are provided below.

Prior to delivery:

- □ Mark tank fill ports, including color coding for fuel type.
- Do not order oil which would bring tank levels above 90% of capacity.

Time of delivery:

- Confirm accuracy of paperwork.
- □ Identify the tank to receive the shipment.
- Gauge the tank contents (electronic or manual tank gauge, or stick small tanks without electronic gauging).
- □ Make sure the truck delivery driver chock truck wheels.
- □ Maker sure the delivery driver make proper hose connections, then verify connections.
- Give authorization to proceed ONLY after all of the above steps are completed.
- Remain in the vicinity throughout the transfer procedure.

At completion of delivery:

- □ Inspect the tank fill area for spills/leaks.
- □ Re-gauge the tank and compare volume increase with delivery receipt.
- Observe hose/coupling disconnections and verify no spills/leaks (disconnection should commence with the lowermost drain first).
- Allow the driver to remove wheel chocks only when the hose disconnection is complete.
- □ Sign off on paperwork as necessary.

Inventory reconciliation logs must also be completed monthly for underground tanks, to verify that no leaks are occurring.

APPENDIX C

MONTHLY INSPECTION FORM

MONTHLY FACILITY INSPECTION CHECKLIST

Location: Example - Generator Diesel AST (500 g)

Date:

Inspector:

ALL QUESTIONS ARE TO BE ANSWERED X = Satisfactory, N/A = Not Applicable, O = Repair or Adjustment Required Explain All "O" Answers in Comments / Remarks / Recommendations

Drainage (Out of Doors Areas)

Х	N/A	0		Х	N/A	0	
			Any noticeable oil sheen on runoff.				Tank surfaces checked for signs of leakage.
			Containment area drainage valves are closed and locked.				Tank condition good (no rusting, corrosion, pitting)
			Oil / Water separator systems working properly.				Bolts, rivets or seams are not damaged.
			Effluent from oil / water separator inspected.				Tank foundations intact.
			No visible oil sheen in containment area.				Level gauges and alarms working properly.
			No standing water in containment area.				Vents are not obstructed.
			Valves, flanges, and gaskets are free from leaks.				Containers properly labeled.
			Containment walls are intact.				Containment free of liquid (i.e. rain/product)

Truck Loading / Unloading Area

AST's

X	N/A	0		Х	N/A	0	
			No signs of corrosion damage to pipelines or supports.				Warning signs posted.
			Buried pipelines are not exposed.				No standing water in rack area.
			Out-of service pipes capped.				No leaks in hoses.
			Signs / barriers to protect pipelines from vehicles are in place				Drip pans not overflowing
			No leaks at valves, flanges or other fittings.				Catch basins free of contamination.
			Containment curbing or trenches are intact.				-
			Connections are capped or blank-flanged.				Drums/Containers & Oil Filled Equ
			-	X	N/A	0	

Security

Pipelines

X	N/A	0	_
			Fence and gates intact.
			Gates locked and secure.
			Entrance door secure.
			AST's locked when not in use.
			Starter controls for pumps locked when not in use.
			Lighting is working properly.

UST's

X	N/A	0	_
			Are sumps free of product/water/debris
			Are manways free of product/water/debris
			Are fill ports marked
			Have any alarms sounded in the last month
			Level gauges and alarms working properly.
			Vents are not obstructed.

uipment

1	U	
		Containers condition good (i.e. no bulging, no leaks)
		Containers properly labeled/identified (product or waste)
		Containers properly closed
		Proper containment
		Containment free of liquid (i.e. rain/product)
		Transformers in good condition

Spill Kit Supplies



Spill Kit on site / available

Comments / Remarks / Recommendations

APPENDIX D SPILL RESPONSE PROCEDURES

UMDNJ – NEWARK CAMPUS OIL SPILL RESPONSE PROCEDURES

A. Who is responsible for an oil spill response

Physical Plant staffs who discover the oil spill

B. <u>What is an oil spill response:</u>

- 1. Notification of an oil spill
- 2. Contain the spill and prevent it from entering the sewer or storm drainage.
- 3. Clean up or supervise the clean-up of an oil spill
- 4. Make sure the spill response kits are available for an oil response

C. An oil spill indoor on a paved area:

- 1. Immediately cover all nearby sewer sumps or sewer pits with oil spill pads to prevent oil from getting into the sewer system. No oil is allowed into the sewer system.
- 2. Call the Supervisor and REHS at 848-445-2550 to report the oil spill. The verbal reporting should include type of spill, location (building, room #), an estimated amount, any oil enters the sewer system, any injuries, and name and phone number for contact.
- 3. Supervisor should designate available staffs to contain the oil spill from spreading with speedy-dri, oil spill pads, pigs or booms.
- 4. Find the source of oil leak and stop the leak ASAP.
- 5. Wear proper PPE and use proper spill response materials to clean up the spill.
- 6. Oil waste and oil soaked debris (pad, pigs, booms, speedy-dry, gloves) should be put into an empty container, label it as "waste oil and debris", and date.
- 7. Supervisor must report the oil spill immediately to REHS if the spill is larger than 5 Gallons on an area which cannot be totally cleaned-up, or if any oil enters the sanitary or the storm water drains.

8. External Notification

If the oil spill has entered the sanitary sewer system, REHS or Emergency Spill Coordinator shall notify the oil spill immediately (within 15 minutes) to: - NJDEP at 877-927-6337

No external notification is required if the spill is less than 5 gallons on a paved area or if the spill was contained indoor and was completely cleaned-up.

- 9. If the spill is too large to handle, the Power Plant Emergency Coordinator or the REHS Environmental Coordinator will contact a contracted waste vendor to response to the spill.
- 10. Waste oil containers will be pick-up by designated vendor for recycling.
- 11. The Emergency Coordinator must send the REHS Environmental Coordinator a written report for any spill larger 5 gallons that impacts public health, environmental or safety.

The report must include:

- Date, time and duration of the oil spill
- Type of incident
- Materials involved
- Extent of injuries
- Assessment of potential hazards

- Disposition of recovered materials
- Steps to prevent similar incidents

D. Oil Spill outdoors during truck loading to storage tanks:

- 1. Immediately cover any storm drain on the ground with pads, pigs or booms. No oil is allowed into the storm drain or catch basin.
- 2. Contain the oil spill from spreading with speedy-dri, oil spill pads, pigs or booms.
- 3. Find the source of leak and stop it immediately.
- 4. Supervisor should report to REHS if the spill is greater than 5 gallons.
- 5. Report the spill to Supervisor.
- 6. Clean up the spill including removal of contaminated soil.
- 7. Oil waste and oil soaked debris (pad, pigs, booms, speedy-dry, gloves) should be put into an empty container, label it as "waste oil", and date.
- 8. If the spill is larger than 5 Gallons on unpaved area, or if oil enters the stormwater drainage or catch basin, Supervisor must report the oil spill immediately to REHS.
- 9. External Notification:

If oil enters the storm drain or catch basin, REHS or the Emergency Coordinator at the campus shall notify the following regulatory agencies immediately (within 15 minutes):

- o NJDEP 877-927-6337
- o 24-hrs National Response Center 800-424-8802
- 10. Contact a waste vendor to clean up the spill if it is too large.
- 11. Send the oil waste container off-site for recycling
- 12. Notify the REHS Environmental Coordinator in writing for any spill larger than 5 gallons or any spill that impacts public health, environment or safety.

Field Spill Report Form

1.	Date of spill	T	ime		a.m.	/p.m.
2.	Report From:			Title:		
3.	Location of spill:					
4.	Material spilled:			Quan	ntity:	
5.	Any injuries or property of	damaged?	Yes	or	No	If yes, explain:
6.	Cause of spill? (Explain	in detail.)				
	rface spilled on, and was	spill containe	ed)	-		
8.	Describe clean-up action	n taken in de	tail. Hov	v much r	naterial v	vas not recovered?
9.	Person involved in incide	ent:				
10	List any emergency age	encies at scer	ne			
11	. Are there any homes or	businesses	nearby?	Yes	or	No Distance?
12	. Notification:					
Da	ate/time:					
Сс	ontact Name:					
Сс	omments rec'd:					

	r:		
13. Action take	n to prevent recurrence.		
(Use back of f	orm if additional space is nee	ded for any item).	

After completing this form, file copy one in the Spill Report file maintained by the Spill Plan Coordinator.

Date Received by Spill Plan Coordinator:

APPENDIX E CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA

Certification of the Applicability of the Substantial Harm Criteria

(40 CFR Part 112.20(e) – Appendix C to Part 112)

Facility Name: Rutgers Health Sciences at Newark 65 Bergen Street University Heights Newark, New Jersey 07107

- Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons? Yes___No___X_
- Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard. This will allow for the accumulation of precipitation within any aboveground oil storage tank area? Yes____No___X_
- Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? Yes No X
- 4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility would shut down a public drinking water intake? Yes No X
- Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil discharge in an amount greater than or equal to 10,000 gallons within the last 5 years? Yes____No___X__

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information. I believe that the submitted information is true, accurate, and complete.

Signature		VV.	\mathcal{V}	
	' / '	•		

Name (please type or print) Antonio M. Calcado

Title Senior Vice President Institutional Planning & Operations

Date	J	18	Ι	16	
		/			