

**SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN
FOR
RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY**

**Fruit Research and Extension Center
Cream Ridge, New Jersey**

Original Date of Plan: September 2001
Date of Last Plan Amendment/P.E. Certification: February 2005
Date of Last Plan Review: September 18, 2019


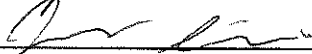
CERTIFICATION

I hereby certify that I have examined the facility, and being familiar with the provisions of 40 CFR part 112, and have visited this facility, attest that this SPCC Plan has been prepared in accordance with good engineering practices, including consideration of applicable industry standards, and that procedures for inspection and testing have been established, and that the plan is adequate for this facility.

Engineer: Glenn Vliet
Registration Number: GE03398800
State: New Jersey
Signature: Glenn Vliet
Date: 2/3/05

**SPILL PREVENTION CONTROL AND COUNTERMEASURE
COMPLIANCE INSPECTION PLAN
REVIEW PAGE**

In accordance with the amendments to the Oil Pollution Prevention Act promulgated under the authority of the Clean Water Act, effective August 16, 2002, and codified under 40 CFR 112, a review and evaluation of this Spill Prevention Control and Countermeasure (SPCC) Plan has been conducted. This plan must be reviewed and updated every five years from the date of the implementation of this plan (February 16, 2003). As a result of this review and evaluation, Rutgers, The State University of New Jersey (Rutgers) will amend the SPCC Plan within six months of the review (August 18, 2003) to include more effective prevention and control technology if: (1) such technology will significantly reduce the likelihood of a spill event from the facility, and (2) if such technology has been field-proven at the time of review. Any amendment to the SPCC Plan shall be certified by a Professional Engineer within six months after a change in the facility design, construction, operation, or maintenance occurs which materially affects the facility's potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines.

Review Dates	Signature
1. 1/6/2016	
2. 9/18/19	
3.	
4.	

MANAGEMENT APPROVAL

Rutgers is committed to the prevention of discharges of oil to navigable waters and the environment, and maintains the highest standards for spill prevention control and countermeasures through regular review, updating, and implementation of this SPCC Plan for the Rutgers Fruit Research and Extension Center.

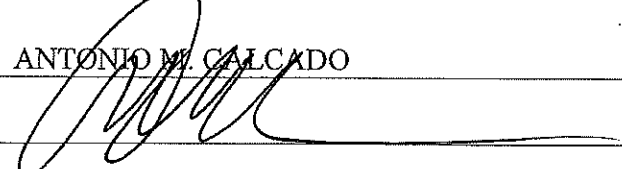
Authorized
 Facility Representative: ANTONIO M. CALCADO
 Signature: 
 SENIOR VICE PRESIDENT
 Title: INSTITUTIONAL PLANNING & OPERATIONS

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- Attachment B: Monthly Facility Inspection Checklist
- Attachment C: Standard Operating Procedure - Tanker Truck Unloading

1. FACILITY OWNER AND OPERATOR

1.1. Facility Owner and Address

Rutgers, The State University of New Jersey
Old Queens
83 Somerset Street
New Brunswick, NJ 08901-1281

1.2. Facility Operator, Address and Telephone

Fruit Research and Extension Center
Rutgers, The State University of New Jersey
283 Route 539
Cream Ridge, NJ 08514
(609)758-7311

2. FACILITY CONTACT(S)

Table 1 Facility Contacts

Name	Title	Telephone
Joseph C. Goffreda	Director	(609) 758-7311
REHS Representative	Environmental Health and Safety Office	(848) 445-2550

3. FACILITY DESCRIPTION

3.1. Facility Operations

112.7(a)(3) Describe in your Plan the physical layout of the facility and include a facility diagram, which must mark the location and contents of each container. The facility diagram must include completely buried tanks that are otherwise exempted from the requirements of this part under 112.7(d)(4). The facility diagram must also include all transfer stations and connecting pipes

The Rutgers Fruit Research and Extension Center (facility) in Cream Ridge (Monmouth County) conducts and disperses research applicable to the production of high quality trees and small fruits (Figure No. 1).

There are a total of 9 areas at the facility where oil is stored. Of these areas, 8 are aboveground storage tanks (ASTs) and 1 is drum/container storage (Figure No.2). Various types of oil products are stored including No. 2 fuel oil, diesel fuel and unleaded gasoline. The No. 2 fuel oil is used in oil-fired boilers to heat the buildings at the site. Diesel fuel is used to power motors

for irrigation and to fuel vehicles and equipment. The unleaded gasoline is used to fuel vehicles and equipment. The 55-gallon drums in the maintenance area contain motor and hydraulic oil.

These petroleum products are received by a common carrier via tanker truck. Typically, product is delivered by a 2,800-gallon tanker truck. The tanker truck pumps product into storage tanks at a maximum rate of approximately 80 gallons per minute.

The facility is generally open from 7:00 to 5:00, Monday through Friday. Rutgers personnel at the facility and at Rutgers Environmental Health and Safety can be reached at all times to respond to an incident regarding product storage areas.

3.2. Facility Oil Storage

112.7(a)(3)(i) The type of oil in each container and its storage capacity

Table No. 2 summarizes the location, size and type of oil storage areas. Appendix E contains photographs of each oil storage location.

Table 2 Summary of Locations of Oil Storage

Building No.		Volume (G)	Contents
Aboveground Storage Tanks			
6177	Farm Barn No. 1	1,000	Diesel fuel
6177	Farm Barn No. 1	1,000	Unleaded Gasoline
6176	House	300	No. 2 fuel oil
6252	Packing House	300	No. 2 fuel oil
6177	Farm Barn No.1	300	No.2 Fuel Oil
6312	Greenhouse	300	No. 2 Fuel Oil
6317	Office and Laboratories	300	No. 2 fuel Oil
6985	Greenhouse	300	No. 2 Fuel Oil
Drums/Containers			
6177	Farm Barn No.1	<220	Motor and Hydraulic Oil & Used Oil
Total Storage		4,020	

3.3. Drainage Pathways and Distance to Navigable Waters

Description of facility's proximity to bays, rivers, streams (perennial or intermittent), creeks, ditches, flood control channels, storm drains, and other waterways. Hydrological systems are described.

The facility is located primarily to the north of Long Bog Run. Long Bog Run is a perennial stream that flows from east to west where it converges with Lahaway Creek approximately 2,000 feet downgradient of the facility. The converged creeks flow into Crosswicks Creek approximately 1,000 feet from their convergence.

The northernmost reach of Long Bog Run flows from the north to south across the eastern section of the facility. A small wetlands area buffers this reach near Route 539. The eastern reach of Long Bog Run flows across the southern section of the facility.

4. SPILL HISTORY

Table No. 3 indicates that no spill events have occurred at this facility.

Table 3 Spill History

Location/Date /Time of Spill	Type & Amount Spilled	Cause	Affected Watercourses	Damages & Cost of Damages	Cleanup Cost	Corrective Action
None	-----	-----	-----	-----	-----	-----

5. POTENTIAL SPILL PREDICTIONS

112.7(b) Where experience indicates a reasonable potential for equipment failure (such as loading and unloading equipment, tank overflow, rupture, or leakage, or any other equipment known to be a source of a discharge), include in your Plan a prediction of the direction, rate of flow, and total quantity of oil which could be discharged from the facility as a result of each type of major equipment failure.

Table 4 summarizes the direction, rate and total quantity of oil that would be discharged at storage areas where there is a reasonable potential for equipment failure.

**Table 4
Summary of Potential Spill Predictions and Prevention Measures**

Building Number Size & Contents	Type of Failure	Total Volume (gallons)	Flow Rate (gpm)	Predicted Direction	Spill Prevention Measures	Prevention Measure Adequate or Corrective Action	Notes
Aboveground Storage Tanks							
6177 1,000-G Diesel Fuel	Overfill	OP	-	East to grass	Metered delivery	Adequate	1
	Rupture, leakage	SC	-		ConVault double-walled tank	Adequate	
	Unloading pipe rupture	160	80		None	Adequate	2,3
6177 1,000-G Unleaded Gasoline	Overfill	OP	-	East to grass	Metered delivery	Adequate	1
	Rupture, leakage	SC	-		ConVault double-walled tank	Adequate	
	Unloading pipe rupture	160	80		None	Adequate	2,3
6176 300-G Fuel Oil	Overfill	OP	-	East to grass	Metered delivery	Adequate	1
	Rupture, leakage	300	-		None	Adequate	
	Unloading pipe rupture	130	65		None	Adequate	2,3
6252 300-G fuel Oil	Overfill	OP	-	East to grass	Metered delivery	Adequate	1
	Rupture, leakage	300	-		None	Adequate	
	Unloading pipe rupture	130	65		None	Adequate	2,3
6177 300-G Fuel Oil	Overfill	OP	-	East to grass	Metered delivery	Adequate	1
		300	-		None	Adequate	
	Unloading pipe rupture	130	65		None	Adequate	2,3
6312 300-G Fuel Oil	Overfill	OP	-	East to grass	Metered delivery	Adequate	1
	Rupture, leakage	300	-		None	Adequate	
	Unloading pipe rupture	130	65		None	Adequate	2,3
6317 300-G Fuel Oil	Overfill	OP	-	East to grass	Metered delivery	Adequate	1
	Rupture, leakage	300	-		None	Adequate	
	Unloading pipe rupture	130	65		None	Adequate	2,3
6985 300-G Fuel Oil	Overfill	OP	-	East to grass	Metered delivery	Adequate	1
	Rupture, leakage	300	-		None	Adequate	
	Unloading pipe rupture	130	65		None	Adequate	2,3
Drums/Containers							
6177 Motor, Hydraulic and Used Oils	Drum Rupture	<220	-	N/A	Inside Bldg on Secondary Containment	Adequate	

CP Tank is equipped with corrosion protection.

SC Tank is equipped with secondary containment.

PT Tank and piping is pressure tested every 36 months.

AST Aboveground Storage Tank.

UST Underground Storage Tank.

GPM Gallons per minute.

Table 4
Summary of Potential Spill Predictions and Prevention Measures

Notes:

1. The delivery tanker truck uses a metered delivery system. The delivery person programs the number of gallons to be pumped into the tank. The delivery system automatically shuts off when the programmed volume is attained.
2. The volume of the worst-case overfill was estimated by calculating the estimated delivery flow rate (a maximum of 65 gallons per minute) by the maximum time in which it would take the delivery person to notice the overfill (assumed to be 2 minutes).
3. Due to the nature of the facility and reliance of the cranberry bogs on surface water infiltration and runoff, the construction of impervious surfaces (i.e., pavement, concrete) and/or facility drainage systems is not feasible. In the event of a pipe rupture, it is predicted that the oil will spread laterally while infiltrating into underlying sandy soil. Since none of the tanks are located immediately adjacent to any surface water bodies, there is a low potential for a spill to affect a waterway. Rutgers will take immediate action to remediate the affected soil.

6. PREVENTION MEASURES PROVIDED

6.1. Summary of Spill Prevention and Control Measures

112.7(c) Provide appropriate containment and/or diversionary structures or equipment to prevent a discharge as described in 112.1(b). The entire containment system, including walls and floor, must be capable of containing oil and must be constructed so that any discharge from a primary containment system, such as a tank or pipe, will not escape the containment system before clean up occurs. At a minimum, you must use one of the following prevention systems or its equivalent: (1) for onshore facilities: (i) Dikes, berms or retaining walls sufficiently impervious to contain oil; (ii) Curbing; (iii) Culverting, gutters or other drainage systems; (iv) Weirs, booms or other barriers; (v) Spill diversion ponds; (vi) Retention ponds, or; (vii) Sorbent materials. (2) Offshore facilities: (i) Curbing, drip pans, or; (ii) Sumps and collection systems.

There is a low potential for a discharge of oil to occur and reach a navigable water course at the facility; Table 4 summarizes the spill prevention and control measures that are in-place at the facility. All ASTs are equipped with overfill protection and secondary containment and neither are located adjacent to a navigable water course.

6.2. Facility Drainage

6.2.1. Drainage from diked storage areas

112.8(b) (1) Facility drainage. Restrain drainage from diked storage areas by valves to prevent discharge into the drainage system or facility treatment system, except where facility systems are designed to control such discharge. You may empty diked areas by pumps or ejectors; however, you must manually activate these pumps or ejectors and must inspect the condition of the accumulation before starting, to ensure no oil will be discharged.

This section is not applicable to the facility since there are no diked storage areas.

6.2.2. Valves used on diked area storage

112.8(b) (2) Use valves of manual, open-and-closed design, for the drainage of diked areas. You may not use flapper-type drain valves to drain diked areas. If your facility drainage drains directly into a watercourse and not into an on-site wastewater treatment plant, you must inspect and may drain uncontaminated retained stormwater, as provided in paragraphs (c) (3)(ii), (iii), and (iv) of this section

This section is not applicable to the facility since there are no diked storage areas.

6.2.3. Drainage systems from undiked areas

112.8(b)(3) Design facility drainage systems from undiked areas with a potential for a discharge such as where piping is located outside containment walls or where tank truck

discharges may occur outside the loading area) to flow into ponds, lagoons or catchment basins, designed to retain oil or return it to the facility. You must not locate catchment basins in areas subject to periodic flooding.

None of the oil storage areas at the facility are located immediately adjacent to any surface water bodies; therefore, a facility drainage system is not warranted. The entire facility is unpaved and has no storm water sewer system. Therefore, there is a low potential of a discharge from an oil storage area immediately reaching a navigable water course.

Therefore, in the event of a spill, Rutgers will take immediate action to remediate the affected area. Rutgers maintains spill control equipment at the facility (see Section 6.9) and has a contract with a local emergency response contractor. The contractor would be contacted immediately following the discovery of the spill to conduct remediation.

6.2.4. Final discharge of drainage

112.8(b) (4) If facility drainage is not engineered as in paragraph (b)(3), of this section, equip the final discharge of all ditches inside the facility a diversion system that would, in the event of an uncontrolled discharge, retain oil in the facility.

As discussed in Section 6.2.3, there is no facility drainage system.

6.2.5. Facility Drainage Systems and Equipment

112.8(b)(5) Where drainage waters are treated in more than one treatment unit and such treatment is continuous, and pump transfer is needed, provide two “lift” pumps and permanently install at least one of these pumps. Whatever techniques are used, you must engineer facility drainage systems to prevent a discharge as described in paragraph 112.1(b) in case there is an equipment failure or human error at the facility.

As discussed in Section 6.2.3, there is no facility drainage system.

6.3. Bulk Storage Tanks and Secondary Containment

6.3.1. Tank compatibility with its contents

112.8(c) (1) Bulk storage containers. Not use a container for the storage of oil unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature.

The material and construction of all ASTs is compatible with both type of oil and the conditions of oil storage as summarized in Table 5.

Table 3 Summary of AST Compatibility with Contents

Building No. Size & Type	Construction	Date Installed	Contents	Contents Compatible
6177 1,000-G AST	Steel	1996	Diesel Fuel	Yes
6177 1,000-G AST	Steel	1996	Unleaded Gasoline	Yes
6177 300-G AST	Steel	2003	No. 2 Fuel Oil	Yes
6312 300-G AST	Steel	2003	No. 2 Fuel Oil	Yes
6317 300-G AST	Steel	2003	No. 2 Fuel Oil	Yes
6176 300-G AST	Steel	2003	No. 2 Fuel Oil	Yes
6252 300-G AST	Steel	2003	No. 2 Fuel Oil	Yes
6985 300-G AST	Steel	2003	No. 2 Fuel Oil	Yes

6.3.2. Diked area construction and containment volume for storage tanks

112.8(c)(2) Construct all bulk storage tank installations so that you provide a secondary means of containment for the entire contents of the largest single tank plus sufficient freeboard to allow for precipitation. You must ensure diked areas are sufficiently impervious to contain discharges oil. Dikes, containment curbs, and pits are commonly employed for this purpose. You may use an alternative system consisting of a drainage trench enclosure that must be arranged so that a discharge will be safely confined in an in facility catchment basin or holding pond.

Secondary containment is provided for all ASTs at the facility. Secondary containment consists of a ConVault® storage tank or a double walled aboveground steel tank. ConVault® steel tanks are made of 1/8" or 3/16" thick steel. The steel tank contains and holds the liquid fuel, which is the primary function of the tank. The second stage of manufacturing consists of wrapping the steel tank with a minimum of 1/4" thick Styrofoam (foam) insulation and an impervious barrier of 30 Mil high density polyethylene membrane. The 30 Mil membrane provides containment in the event of a fuel leak. A leak detector pipe is installed in the secondary containment to evaluate if a leak has occurred. The tank is also encased in a six-inch thick reinforced concrete

vault. The aboveground steel tanks at Buildings 6176, 6252, 6177, 6312, 6317 and 6985 are constructed of two sheets of steel with an interstitial space.

6.3.3. Diked area, inspection and drainage of rainwater

112.8(c)(3) Not allow drainage of uncontaminated rainwater from the diked area into a storm drain or discharge of an effluent into an open water course, lake, or pond, or bypassing the treatment facility system unless you:

(i) Normally keep the bypass valve sealed closed.

(ii) Inspect the retained rainwater to ensure its presence will not cause a discharge as described in paragraph 112.1(b).

(iii) Open the bypass valve and reseal it following drainage under responsible supervision.

(iv) Keep adequate records of such events, for example, any records required under permits issued in accordance with paragraph 122.41(j)(2) and 122.41(m)(3) of this chapter.

This section is not applicable to this facility since there are no diked areas.

6.3.4. Corrosion protection of buried metallic storage tanks

112.8(c)(4) Protect any completely buried metallic storage tanks installed after January 10, 1974 from corrosion by coatings or cathodic protection compatible with local soil conditions. You must regularly leak test such completely buried metallic storage tanks.

This section is not applicable, there are no USTs.

6.3.5. Corrosion protection of partially buried metallic tanks

112.8(c)(5) Not use partially buried metallic tanks for the storage of oil, unless you protect the buried section of the tank from corrosion. You must protect the partially buried and bunkered tanks from corrosion by coatings or cathodic protection compatible with local soil conditions

This section is not applicable to the facility since there are no partially buried tanks.

6.3.6. Aboveground tank periodic integrity testing

112.8(c)(6) Test each aboveground container for integrity on a regular schedule, and whenever you make material repair. The frequency of and type of testing must take into account container size and design (such as floating roof, skid mounted, elevated, or partially buried). You must combine visual inspection with another testing technique such as hydrostatic testing, radiographic testing, ultrasonic testing, acoustical emissions testing, or another system of non-destructive shell testing. You must keep comparison records and you must also inspect the container's supports and foundations. In addition, you must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas. Records of inspections and test

kept under usual and customary business practices will suffice for purposes of this paragraph

ASTs are constantly observed by Rutgers personnel during operating hours. Formal inspections are conducted monthly to examine the exterior of the ASTs and the containment areas.

6.3.7. Control of leakage through internal heating coils

112.87(c)(7) Control leakage through defective internal heating coils by monitoring the steam return and exhaust lines for contamination from internal heating coils that discharge into an open watercourse, or pass the steam return or exhaust lines through a settling tank, skimmer, or other separation or retention system.

This section is not applicable to the facility since none of the bulk storage tanks are equipped with internal heating coils.

6.3.8 Tank installation fail-safe engineered

112.8(c)(8) Engineer or update each container installation in accordance with good engineering practice to avoid discharges. You must provide at least one of the following devices:

- (i) High liquid level alarms with an audible or visual signal at a constantly attended operation or surveillance station. In smaller facilities an audible air vent may suffice.*
- (ii) High liquid level pump cutoff devices set to stop flow at a predetermined container content level.*
- (iii) Direct audible or code signal communication between the tank gauger and the pumping station.*
- (iv) A fast response system for determining the liquid level of each bulk storage container such as digital computers, telepulse, or direct vision gauges. If you use this alternative, a person must be present to monitor gauges and the overall filling of bulk storage containers.*
- (v) You must regularly test liquid level sensing devices to ensure proper operation.*

A fail-safe engineering system is employed for all tanks at the facility. Tanker trucks are positioned immediately adjacent to tanks during unloading. The position of the tanker truck allows the operator to observe the tank from tanker truck controls. In the event of a hose rupture or an overflow, the tanker truck operator can respond quickly to shut off the tanker truck pump.

Additionally, tanker trucks utilize an electronic metering system that is programmed to deliver a set quantity of fuel to the tank. When that amount is reached, the pump for the tanker truck is automatically shut off.

6.3.9 Observation of disposal facilities for effluent discharge

112.8(c)(9) Observe effluent treatment facilities frequently enough to detect possible system upsets that could cause a discharge as described in paragraph 112.1(b).

This section is not applicable to the facility since there are no disposal facilities.

6.3.10 *Visible oil leak corrections from tank seams and gaskets*

112.8(c)(10) Promptly correct visible oil leaks which result in a loss of oil from the container, including but not limited to seams, gaskets, piping, pumps, valves, and bolts. You must promptly remove any accumulations of oil in diked areas.

Visible oil leaks are reported to the Research Farm Supervisor (see Section 2). Subsequent to reporting, a work order is written and the tank is repaired prior to being reused

6.3.11 *Appropriate position of mobile or portable oil storage tanks*

112.8(c)(11) Position or locate mobile or portable oil storage containers to prevent a discharge as describe in paragraph 112.1(b). You must furnish secondary means of containment, such as dikes or catchment basins, should be furnish a secondary means of containment, sufficient to contain the capacity of the largest single compartment or container with sufficient freeboard to contain precipitation.

This section is not applicable to this facility since there are no mobile or portable oil storage tanks.

6.4 Bulk Storage Piping

6.4.1 *Underground Piping*

112.8(d)(1) Provide buried piping that is installed after August 16, 2002 with a protective wrapping and coating. You must also cathodically protect such buried piping installations or otherwise satisfy the corrosion protection standards for piping in part 280 of this chapter or a state program approved under part 281 of this chapter. If a section of buried line is exposed for any reason, it should be carefully inspect it for deterioration. If you find corrosion damage, you must undertake, additional examination and corrective action as indicated by the magnitude of the damage.

This section is not applicable.

6.4.2 *Provisions for piping not in service*

112.8(d)(2) Cap or blank flange the terminal connection at the transfer point and mark it as to origin when piping is not in service for an extended period of time.

When aboveground piping at the storage tanks is not in use, the terminal connection at the transfer point, where applicable, is capped. All aboveground piping is labeled with product content, origin and direction of flow.

6.4.3 Aboveground Piping Support

112.8(d)(3) properly design pipe supports to minimize abrasion and corrosion and allow for expansion and contraction.

All aboveground piping is properly supported. The aboveground piping at both ASTs is supported by the tank system and fuel dispenser.

6.4.4 Aboveground valve and pipeline examination

112.8(d)(4) Regularly inspect all aboveground valves, piping and appurtenances. During the inspection you must assess the general conditions of items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces. You must conduct integrity and leak testing of buried metal piping at the time of installation, construction, relocation, or replacement.

Aboveground piping and valves are inspected at the time facility inspections are conducted on a monthly basis. Records of these inspections are documented and signed by the inspector.

6.4.5 Aboveground piping protection from vehicular traffic

112.8(b)(5) Warn all vehicles entering the facility to be sure that no vehicle will endanger aboveground piping or other oil transfer operations.

All aboveground piping is protected from vehicular traffic. The aboveground piping at ASTs situated atop the AST and dispenser. The entire AST system is protected with concrete bollards.

6.5 Facility Truck Unloading

6.5.1 Unloading procedures meet DOT regulations

Rutgers requires all drivers to comply with DOT regulations in 49 CFR part 177 and a facility standard operating procedure (see Attachment D).

6.5.2 Secondary containment for tanker trucks

112.7(h)(1) Facility tank car and tank truck loading/unloading rack (excluding offshore facilities). Where loading/unloading area drainage does not flow into a catchment basin or treatment facility designed to handle discharges, use a quick drainage system for tank truck loading and unloading areas. You must design a containment system to hold at least the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded at the facility.

All tanker truck unloading areas associated with storage tanks are undiked. However, there are no areas where there is a reasonable potential for a discharge to occur from the tanker truck and immediately affect a navigable water course. Therefore, Rutgers maintains spill control equipment at the facility (see Section 6.9) and has a contract with a local emergency response

contractor so that immediate action can be taken in the event of a discharge. The emergency response contractor would be contacted immediately following the discovery of a discharge to conduct remediation.

6.5.3 Warning or barrier system for vehicles

112.7(h)(2) Provide an interlocked warning light or physical barrier system, warning signs, wheel chocks, or vehicle break interlock system in loading/unloading areas to prevent vehicles from departing before complete disconnection of flexible or fixed transfer lines.

Warning signs are posted in the unloading areas for the tanks to prevent vehicular departure before disconnecting flexible or fixed transfer lines

6.5.4 Vehicles examined for lowermost drainage outlets before leaving

112.7(h)(3) Prior to filling and departure of any tank car or tank truck closely inspect for discharges the lowermost drain and all outlets of such vehicles, if necessary, ensure that they are tightened, adjusted, or replaced to prevent liquid discharge while in transit.

Warning signs are posted in all the unloading areas to remind drivers to examine drain outlets prior to departure.

6.6 Inspections and Recordkeeping

112.7(e) Conduct inspections and test required of this part in accordance with written procedures that you or the certifying engineer develop for the facility. You must keep these written procedures and a record of the inspections and tests, signed by the appropriate supervisor or inspector, with the SPCC Plan for a period of three years. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph

Facility inspection procedures:

Formal facility inspections are conducted monthly and records of these inspections are documented and signed by the inspector. During the monthly inspections, all unloading areas, containment structures, valves, pipelines, and other equipment are inspected.

Length of time records kept:

Inspection, training, and tank integrity testing records are retained for at least three years.

6.7 Site Security

6.7.1 Fencing

112.7(g)(1) Fully fence each facility handling, processing, and storing oil and lock and/or guard entrance gates the facility is not in production or is unattended.

Fencing is provided around the entire facility.

6.7.2 Flow valves locked

112.7(g)(2) Security. Ensure the master flow and drain valves and any other valves permitting direct outward flow of the container's contents to the surface have adequate security measures so that they remain in the closed position when in non-operating or nonstandby status.

The only tanks where an appurtenance could be opened to allow the contents to flow outward are at the ASTS. Piping at these tanks is connected to a fuel dispenser. The fuel dispensers are secured with a lock.

6.7.3 Starter controls locked

112.7(g)(3) Lock the starter control on each oil pump in the 'off' position and locate it at a site accessible only to authorized personnel when the pumps are in a non-operating or non-standby status.

Starter controls for pumps associated with boilers and other heating equipment are located inside buildings accessible only to authorized Rutgers personnel. Starter controls for fuel dispensers which service the ASTs are secured with locks.

6.7.4 Fill piping connections securely capped

112.7(g)(4) Securely cap or blank flange the loading/unloading connections of oil pipelines or facility piping when not in service or standby service.

All fill piping connections are securely capped when they are not in use and blank-flanged when they are in standby service for an extended time.

6.7.5 Lighting adequate to detect spills

112.7(g)(5) Provide facility lighting commensurate with the type and location of the facility that will assist in the:

- (i) Discovery of discharges occurring during hours of darkness, both by operating personnel, if present, and by nonoperating personnel (the general public, local police, etc.) and*
- (ii) Prevention of spills occurring through acts of vandalism.*

There is no lighting to illuminate the individual storage tank areas. However, there is lighting to illuminate the facility and deter acts of vandalism.

6.8 Personnel Training and Spill Prevention Procedures

6.8.1 Personnel instructions

112.7(f)(1) Personnel, training and discharge prevention procedures. At a minimum, train your oil handling personnel in the operation and maintenance of equipment to prevent the discharges; discharge procedure protocols; applicable pollution control laws, rules and regulations; general facility operations; and, the contents of the SPCC Plan.

Any oil handling personnel responsible for implementing the provisions of this SPCC Plan are required to have spill prevention training which includes a complete review of Rutgers' SPCC Plan. Rutgers conducts yearly training to ensure that these personnel are familiar with the SPCC Plan and the measures to be implemented in the event of a discharge.

6.8.2 Designated person accountable for spill prevention

112.7(f)(2) Designate a person at each applicable facility who is accountable for oil spill prevention and who reports to facility management.

The Director of Farm Activities is the designated person accountable for spill prevention at this facility.

6.8.3 Spill prevention briefings

112.7(f)(3) Schedule and conduct discharge prevention briefings for your oil-handling personnel at least once a year to assure adequate understanding of the SPCC Plan for that facility. Such briefings must highlight and describe known discharges in paragraph 112.1(b) or failures, malfunctioning components, and recently developed precautionary measures.

During yearly safety briefings, spill prevention is discussed. Any incidents are discussed in these briefings in order to prevent them from recurring. Employee feedback and recommendations are encouraged in spill prevention and operation. .

6.9 Spill Control Equipment

Spill control equipment stored at or near the oil storage areas includes absorbent pads and booms, oil-absorbent clay, empty drums, brooms and shovels.

6.10 Emergency Contacts

Part 110-Discharge of Oil: 110.10 Notice. Any person in charge of a vessel or of an onshore or offshore facility shall, as soon as he or she has knowledge of any discharge of

oil from such vessel or facility in violation of §110.6, immediately notify the National Response Center (NRC) (800-424-8802; in the Washington, DC metropolitan area, 426-2675). If direct reporting to the NRC is not practicable, reports may be made to the Coast Guard or EPA predesignated On-Scene Coordinator (OSC) for the geographic area where the discharge occurs. All such reports shall be promptly relayed to the NRC. If it is not possible to notify the NRC or the predesignated OCS immediately, reports may be made immediately to the nearest Coast Guard unit, provided that the person in charge of the vessel or onshore or offshore facility notifies the NRC as soon as possible. The reports shall be made in accordance with such procedures as the Secretary of Transportation may prescribe. The procedures for such notice are set forth in U.S. Coast Guard regulations, 33 CFR part 153, subpart B and in the National Oil and Hazardous Substances Pollution Contingency Plan, 40 CFR part 300, subpart E. (Approved by the Office of Management and Budget under the control number 2050-0046).

In the event of discharge, the person who is at the scene shall first contact the Research Farm Supervisor. The Research Farm Supervisor shall then contact REHS and Emergency Personnel, as necessary. Table No. 6 lists the emergency contacts.

Table 4 Emergency Contacts

Name/Organization	Phone Number
Joseph C. Goffreda, Director	(609) 758-7311
Federal National Response Center	(800) 424-8802
NJDEP Spill Hotline	(877) WARN DEP
Upper Freehold Township Board of Health	(609) 758-7738
Upper Freehold Township Fire Department	9-1-1
Rutgers Environmental Health and Safety (REHS)	(848) 445-2550

ATTACHMENT A

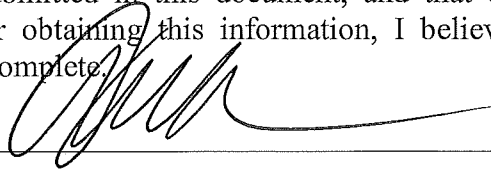
**Certification of the Applicability
of the Substantial Harm Criteria
(40 CFR 112.20)**

Certification of the Applicability of the Substantial Harm Criteria (40 CFR 112.20)

1. 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
2. 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 to allow for precipitation within any aboveground oil storage tank area?
Yes ___ No X
3. 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 water intake?
Yes ___ No X
5. 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 spill 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:  _____

Name: Antonio M. Calcado

Title: Senior Vice President Institutional Planning & Operations

Date: 3/8/16

ATTACHMENT B

Monthly Facility Inspection Checklist

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)

X	N/A	O	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Any noticeable oil sheen on runoff.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Containment area drainage valves are closed and locked.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Oil / Water separator systems working properly.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Effluent from oil / water separator inspected.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No visible oil sheen in containment area.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No standing water in containment area.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Valves, flanges, and gaskets are free from leaks.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Containment walls are intact.

AST's

X	N/A	O	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Tank surfaces checked for signs of leakage.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Tank condition good (no rusting, corrosion, pitting)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Bolts, rivets or seams are not damaged.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Tank foundations intact.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Level gauges and alarms working properly.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vents are not obstructed.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Containers properly labeled.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Containment free of liquid (i.e. rain/product)

Pipelines

X	N/A	O	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No signs of corrosion damage to pipelines or supports.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Buried pipelines are not exposed.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Out-of service pipes capped.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Signs / barriers to protect pipelines from vehicles are in place.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No leaks at valves, flanges or other fittings.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Containment curbing or trenches are intact.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Connections are capped or blank-flanged.

Truck Loading / Unloading Area

X	N/A	O	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Warning signs posted.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No standing water in rack area.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No leaks in hoses.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Drip pans not overflowing
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Catch basins free of contamination.

Security

X	N/A	O	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fence and gates intact.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Gates locked and secure.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Entrance door secure.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AST's locked when not in use.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Starter controls for pumps locked when not in use.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lighting is working properly.

Drums/Containers & Oil Filled Equipment

X	N/A	O	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Containers condition good (i.e. no bulging, no leaks)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Containers properly labeled/identified (product or waste)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Containers properly closed
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Proper containment
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Containment free of liquid (i.e. rain/product)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Transformers in good condition

UST's

X	N/A	O	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are sumps free of product/water/debris
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are manways free of product/water/debris
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are fill ports marked
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Have any alarms sounded in the last month
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Level gauges and alarms working properly.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vents are not obstructed.

Spill Kit Supplies

X	N/A	O	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Spill Kit on site / available

Comments / Remarks / Recommendations

ATTACHMENT C
Standard Operating Procedure
Tanker Truck Unloading

Standard Operating Procedure – Tanker Truck Unloading

This standard operating procedure (SOP) is for the unloading of petroleum products only at Rutgers University. The SOP is intended to be used for unloading from tanker trucks into above ground or underground storage tanks.

Prior to Unloading

1. Ensure that tanker truck is positioned in approved location for unloading.
2. Make sure that parking brakes on tanker trucks are engaged. Secure the loading/unloading vehicle prior to transfer operations with physical barriers such as wheel chocks and interlocks, to safeguard against accidental movement and rupture of transfer lines.
3. If applicable to the storage location, verify that containment structures are intact and spill control equipment is readily available.
4. Inspect condition of all storage tank flanges, joints, connections, and outlets. Tighten, adjust, or replace as necessary prior to unloading.
5. Properly lock in the closed position all drainage valves in the secondary containment structure.
6. Closely examine the lowermost drain and all outlets of the tanker truck for leakage or defects. If necessary, properly tighten, adjust, or replace to prevent liquid leakage while in transit.
7. Establish adequate bonding/grounding of the tanker truck and receiving container before connecting to the fuel transfer point.
8. Keep hose ends tightly capped while moving hoses into position.
9. Position transfer hoses inside containment structures.
10. Check the pumping circuit and verify the proper alignment of valves.
11. Gauge storage tank to determine volume required.
12. The transfer of Class 3 (flammable liquids) materials, shut off motors of the tank truck when making and breaking hose connections. If unloading is done without requiring the use of the motor of the tank truck to operate pumps, keep the motor shut off throughout unloading.

During Unloading

1. The driver, operator and/or attendant of a tanker truck should remain in the immediate area but outside the vehicle during unloading.
2. When unloading, keep the internal and external valves on the receiving tank open.
3. Make sure that communication is maintained between the pumping and receiving operators at all times.

4. Periodically inspect the condition of the alligator clips, especially the joint between the bonding wire and the clip, to ensure effective bonding circuits.
5. Monitor all hose couplings during unloading.
6. Monitor the liquid level in the receiving tank during unloading to prevent overflow.
7. Monitor flow meters to determine rate of flow during unloading>
8. Reduce flow rate while topping off the tank to provide sufficient reaction time for pump shutdown without overflow of the receiving tank.
9. Never completely fill the receiving tank; provide a minimum of 1 percent ullage to prevent leakage due to thermal expansion.

Subsequent to Unloading

1. Make sure all material has been transferred to tank prior to disconnecting any transfer hoses.
2. Close all tank valves and tanker truck internal, external, and dome-cover valves before disconnecting.
3. Secure all hatches.
4. Disconnect grounding/bonding wires.
5. Prior to vehicle departure, make sure that all connections, fill lines, and grounding/bonding wires are disconnected.
6. Use a drip pan when breaking a connection.
7. Make sure that the hoses are drained, vented, or blown down, to remove the remaining oil before moving them away from their connections.
8. Cap the end of the hose or other connecting devices before moving them, to prevent uncontrolled oil leakage.
9. Disconnect, drain, and support out-of-service or standby hoses, to avoid crushing or excessive strain.
10. Cap associated hose risers.
11. Close all hose riser valves not in use.
12. Remove wheel chocks.