



Department of  
Environmental  
Conservation

New York State  
Department of Environmental Conservation  
**MAJOR PETROLEUM FACILITY LICENSE**

**FACILITY:**

**BROOKHAVEN NATIONAL LABORATORY  
40 BROOKHAVEN AVENUE  
UPTON, NY 11973**

**LICENSEE:**

**DEPARTMENT OF ENERGY (DOE)  
BROOKHAVEN GROUP  
UPTON, NY 11973**

**The facility named above has been duly licensed, pursuant to Article 12 of the Navigation Law. Any conditions placed on this license are marked on the attached Special Conditions Check List.**

**MAILING CORRESPONDENCE:**

**LICENSE NUMBER: 1-1700  
DATE ISSUED: 3/8/2017  
EXPIRATION DATE: 3/31/2022**

**ATTN: FRANK CRESCENZO, MGR.  
DEPARTMENT OF ENERGY (DOE)  
BROOKHAVEN SITE OFFICE  
UPTON, NY 11973**

Commissioner of Environmental Conservation

By

**Regional Spill Engineer**

Title

**THIS LICENSE IS NON-TRANSFERABLE**



# MAJOR PETROLEUM FACILITY LICENSE

Tank Listing For License Number: 1-1700

TANK NUMBER	TANK SUBPART	TANK CATEGORY	DATE INSTALLED	TANK LOCATION	TANK TYPE	CAPACITY (Gallons)	PRODUCT STORED
1000P-03	4	2	01/01/1994	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	300	diesel
1002A-01	4	2	01/01/1994	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	300	diesel
1004A-01	4	2	01/01/1994	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	300	diesel
1005S-01	4	2	01/01/1994	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	500	diesel
1006A-01	4	2	01/01/1994	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	300	diesel
1008A-01	4	2	01/01/1994	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	300	diesel
1010A-01	4	2	01/01/1994	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	300	diesel
1012A-01	4	2	01/01/1994	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	300	diesel
244-09	4	2	12/01/2004	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	1,000	#2 fuel oil
30-08	4	2	09/15/2015	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	2,000	#2 fuel oil
321-03	4	2	10/01/2004	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	1,000	#2 fuel oil
339-04	4	2	12/01/2004	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	1,000	#2 fuel oil
422-07	4	2	10/07/2014	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	1,000	#2 fuel oil
423-01	4	2	08/07/1998	Aboveground - in contact with impervio	Steel/Carbon Steel/Iron	375	waste oil/used
423-06	2	2	03/01/1990	Underground including vaulted with no	Steel/Carbon Steel/Iron	8,000	gasoline/ethanol
423-07	2	2	03/01/1990	Underground including vaulted with no	Steel/Carbon Steel/Iron	8,000	gasoline/ethanol
423-08	3	2	03/01/1990	Underground including vaulted with no	Steel/Carbon Steel/Iron	3,000	#2 fuel oil
423-16	4	2	12/01/2003	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	500	lube oil
423-17	4	2	12/01/2003	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	500	lube oil
449-04	4	2	01/01/2006	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	225	diesel
452-09	4	2	01/01/1990	Aboveground - in contact with impervio	Steel/Carbon Steel/Iron	275	waste oil/used
455-02	4	2	11/01/2012	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	1,000	diesel
463-19	4	2	01/01/2007	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	400	diesel
488-05	4	2	05/01/2006	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	100	diesel
490-30	4	2	01/01/2007	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	400	diesel



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TANK NUMBER	TANK SUBPART	TANK CATEGORY	DATE INSTALLED	TANK LOCATION	TANK TYPE	CAPACITY (Gallons)	PRODUCT STORED
50-02	2	2	09/13/2000	Underground including vaulted with no	Steel/Carbon Steel/Iron	1,000	diesel
515-03	4	2	06/01/2007	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	4,000	diesel
555-14	4	2	01/01/2010	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	224	diesel
575-05	4	2	01/01/1997	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	230	diesel
575-09	4	2	09/15/2008	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	500	#2 fuel oil
580-02	4	2	01/01/1997	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	140	diesel
599-02	4	2	01/01/2006	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	225	diesel
603-06	4	2	09/15/2015	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	4,000	diesel
611-03	4	1	01/01/1964	Aboveground - in contact with soil	Steel/Carbon Steel/Iron	300,810	#6 fuel oil
611-04	4	1	01/01/1974	Aboveground - in contact with soil	Steel/Carbon Steel/Iron	424,482	empty
611-05	4	1	01/01/1983	Aboveground - in contact with soil	Steel/Carbon Steel/Iron	301,174	empty
611-06	4	1	01/01/1983	Aboveground - in contact with soil	Steel/Carbon Steel/Iron	301,174	#2 fuel oil
611-09	4	2	08/01/1989	Aboveground - in contact with soil	Steel/Carbon Steel/Iron	398,197	empty
611-10	4	2	08/01/1989	Aboveground - in contact with soil	Steel/Carbon Steel/Iron	601,242	empty
614-05	4	2	12/01/2011	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	500	diesel
618-04	4	2	12/01/2011	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	500	diesel
619-04	4	2	12/01/2011	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	500	diesel
630-12	4	2	12/01/2003	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	280	lube oil
630-14	4	2	10/07/2014	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	1,000	#2 fuel oil
635-03	4	2	04/01/2011	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	336	diesel
639-02	4	2	12/01/2009	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	1,000	biodiesel
651-02	4	1	01/01/1982	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	10,000	diesel
651-03	4	1	01/01/1982	Aboveground on saddles, legs, stilts, rac	Other	5,000	diesel
651-04	4	1	01/01/1982	Aboveground on saddles, legs, stilts, rac	Other	5,000	diesel
725-13	4	2	01/01/1992	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	250	diesel



**MAJOR PETROLEUM FACILITY LICENSE**

Tank Listing For License Number: 1-1700

TANK NUMBER	TANK SUBPART	TANK CATEGORY	DATE INSTALLED	TANK LOCATION	TANK TYPE	CAPACITY (Gallons)	PRODUCT STORED
734-01	4	2	12/01/2012	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	600	diesel
735-01	4	2	01/01/2006	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	115	diesel
740-01	4	2	04/01/2011	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	450	diesel
740-02	4	2	04/01/2011	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	450	diesel
801-38	4	2	01/01/2010	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	224	diesel
814-02	4	2	10/01/2013	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	1,000	#2 fuel oil
814-03	4	2	10/01/2013	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	280	biodiesel
814-04	4	2	10/01/2013	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	280	biodiesel
911-04	4	1	01/01/1959	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	1,100	lube oil
912A-05	4	2	09/01/2008	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	3,000	diesel
928-02	4	1	01/01/1969	Aboveground on saddles, legs, stilts, rac	Steel/Carbon Steel/Iron	845	lube oil

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Spills Prevention Response, Region 1  
SUNY @ Stony Brook, 50 Circle Road, Stony Brook, NY 11790  
P: (631) 444-0320 | F: (631) 444-0328 | 24 Hour Hotline: (800) 457-7362  
www.dec.ny.gov

March 8, 2017

Dear Major Oil Storage Facility Owner/Operator:

Enclosed herein is your Onshore Major Oil Storage Facility License # 01-1700 which expires on March 31, 2022. You must reapply 90 days before that date and comply with any new or modified conditions or guidelines to prevent, contain, cleanup, and remove discharges of petroleum to surface and groundwater. Scheduled facility inspections will be made by the Department representatives, as well as random inspections. Information regarding license fees and surcharges will be sent by the Department's Division of Management and Budget, Oil Spill Revenue Unit.

The Department bases the issuance of this license upon an evaluation of the information contained in your application, on-site facility inspections, and:

- evaluation of submitted State and Federal plans to prevent, control, contain, and remove discharges; OR
- a schedule of when such plans are to be submitted.

The Department hereby certifies that the facility operator currently:

- has implemented OR  is in the process of implementing: State and Federal plans and regulations for the prevention, control, containment, and removal of discharges; AND
- has implemented OR  is in the process of implementing: the requirements of 6 NYCRR Part 613.

Included in your license are General and Special Conditions as deemed necessary to protect the waters of the State based upon evaluation of State and Federal plans, compliance with 6 NYCRR Part 613, environmental setting and/or facility inspections.

Future license renewals will be based on, among other factors, the history of spills and discharges at the facility, the history of compliance with the applicable provisions of 6 NYCRR Part 613, a review of submitted plans and inspections of the facility, compliance with license conditions and additional guidelines as subsequently issued.

Please post this license conspicuously at the facility for which it is issued.

Sincerely,



Hugh Cirrito, P.E.  
Regional Spill Engineer



Department of  
Environmental  
Conservation

## **General Conditions and Information Regarding Onshore Major Oil Storage Facility Licenses**

### **I. General Conditions**

1. No chemical dispersants may be employed in the cleanup of a spill or discharge without approval by DEC. If a Spill Prevention and Containment Plan or spill cleanup plan contains a list of chemical or biological agents, the use of such agents is subject to prior approval from DEC.
2. The use of sorbents shall be limited to the cleanup of small spills and the final cleanup of large spills.
3. Disposal of all recovered petroleum products and oil-soaked debris shall be in accordance with 6 NYCRR Section 611.6.
4. The owner or operator shall maintain all equipment, including spill cleanup equipment, in good repair.
5. Major additions, changes, or rehabilitation in the structures or equipment of the onshore major oil storage facility which would materially affect the potential for a petroleum discharge (hereafter referred to as "project") must be approved in advance by DEC. Any amendments or changes to any plans submitted with or referred to in the license applications shall be furnished promptly to the Regional Office.
6. DEC shall be notified of all leaks, spills, and discharges immediately, but in no case later than two hours after the discovery of a discharge. Notifications must be made by calling the DEC Spill Hotline at (800) 457-7362 or (518) 457-7362 outside New York State.
7. Any person transporting and/or disposing of recovered oil and/or oily debris must be registered by DEC as a "REGISTERED WASTE HAULER," pursuant to 6 NYCRR Part 364, and must transport the material to a disposal facility shown on the Part 364 registration.
8. Monthly reports shall be submitted, and license fees and surcharges must be paid by the licensee as required by 17 NYCRR Sections 30.8 and 30.9, "Oil Spill Prevention and Control – Licensing of Major Facilities."
9. The owner or operator of the facility shall provide access to representatives of DEC during normal business hours for the purpose of determining compliance with State and Federal regulations and all general and special conditions of this license.
10. The owner or operator shall comply with the conditions specified in any Order on Consent or variance pertaining to the facility.

### **II. DEC-Initiated Modifications, Suspensions, or Revocations**

1. DEC may modify, suspend, or revoke this license at any time; the ground for such action may include, but are not limited to, the following:

- a. materially false or inaccurate statements in the license application or supporting documentation;
  - b. failure by the licensee to comply with any terms or conditions of the license;
  - c. exceeding the scope of the project as described in the license application;
  - d. failure to pay monthly license fees and surcharges and/or submit monthly license reports;
  - e. newly discovered material information or material changes in environmental conditions, relevant technology, applicable laws, or regulations, or a change in DEC's policy since the issuance of the existing license; or
  - f. non-compliance with previously issued license conditions, Orders on Consent, orders of the Commissioner, variances, any provision of the Navigation Law or Environmental Conservation Law or the regulations adopted pursuant to such laws related to the licensed activity.
2. DEC shall send a notice of intent to modify, suspend, or revoke a license to the licensee by Certified Mail with return receipt requested or personal service. The notice shall state the alleged facts or conduct which appear to warrant the intended action.
  3. Within 15 days of the date of such notice of intent, the licensee may submit a written statement to DEC, giving reasons why the permit should not be modified, suspended, or revoked, or requesting a hearing, or both. Failure by the licensee to submit a timely statement shall result in DEC's action becoming effective on the date specified in the notice of intent.
  4. Within 30 days of receipt of the licensee's statement, DEC shall take the following action. If a statement without a request for a hearing is submitted, DEC shall rescind or confirm the notice of intent based on a review of the information provided by the licensee. If a statement with a request for a hearing has been submitted, DEC shall notify the licensee of a date and place for a hearing, to be commence not later than 60 days from that notification.
  5. In the event such a hearing is held, the Commissioner shall, within 30 days of the receipt of the complete record, and receipt of the hearing officer's findings of fact and recommendations, issue a decision which:
    - a. continues the license in effect as originally issued;
    - b. modifies the license, or suspends it for a stated period of time or upon stated conditions; or
    - c. revokes the license, including when ordered by the Commissioner, the removal or modification of all or any portion of a project, whether completed or not.

Notice of the Commissioner's decision, stating the findings and reasons for the action, shall be mailed to the licensee.

6. Where DEC has proposed to modify a license and the licensee requests a hearing on the proposed modification, the original license conditions remain in effect until there has been a decision issued by the Commissioner as provided herein.

7. Nothing in these license conditions shall preclude or affect the Commissioner's authority to issue summary abatement orders under Title 3 of Article 71 of the Environmental Conservation Law or take emergency action summarily suspending a license under section 401(3) of the State Administrative Procedure Act.

### **III. Licensee-Initiated Modification**

Applications for modification of a license must include a written statement of necessity or reasons for the modification, as well as a description of the requested modification. DEC shall notify the licensee of its decision, by mail, within fifteen days of receipt of a completed application. An application for modification may be denied for failure to meet any of the standards or criteria applicable under the Navigation Law and regulations adopted thereunder, Article 8 of the Environmental Conservation Law or for any of the reasons set forth in paragraphs II(1)(a)-(f) above.

DEC may determine that an application for modification shall be treated as a new application for a license if:

- the requested modification would result in a material change to existing license conditions or in the scope of the permitted activities; or
- there is newly discovered material information or there has been a material change in environmental conditions, relevant technology, or applicable law or regulations since the issuance of the existing license.

Until DEC grants a request for modification, the original license conditions remain in effect.

## Onshore Major Oil Storage Facility Special License Conditions Checklist

**Instructions:** If an “X” appears in the column labeled “Condition,” the specified condition applies to the license issued to the facility. The details of each condition and compliance dates are included in Attachment 3(d), “Onshore Major Oil Storage Facility Special License Conditions – Instructions and Deadlines.”

<u>Condition</u>	<u>Section Number</u>	<u>Compliance Date</u> (mm/dd/yyyy)	<u>Section Title</u>
<b>INSTALLING MONITORING WELLS</b>			
<input type="checkbox"/>	1(a)	/ /	Initial Installation of Monitoring Wells
<input type="checkbox"/>	1(b)	/ /	Additional Monitoring Wells
<input type="checkbox"/>	1(c)	/ /	Geological Survey of Groundwater Flow
<b>SAMPLING AND TESTING OF MONITORING WELLS</b>			
<input type="checkbox"/>	2(a)	/ /	Initial Testing of Monitoring Wells
<input checked="" type="checkbox"/>	2(b)	See Section	Six-Month Testing of Monitoring Wells
<input type="checkbox"/>	2(c)	/ /	Annual Testing of Monitoring Wells
<input checked="" type="checkbox"/>	2(d)	See Section	Monthly Monitoring of Monitoring Wells
<b>SPILL PREVENTION AND CONTAINMENT PLAN</b>			
<input checked="" type="checkbox"/>	3(a)	05/31/2021	P.E. Certification/Management Review of Plan
<input type="checkbox"/>	3(b)	/ /	Description of Secondary Containment System
<input type="checkbox"/>	3(c)	/ /	Testing of Secondary Containment System (Initial Construction)
<input checked="" type="checkbox"/>	3(d)	05/01/2017	Engineering Plan for Upgrading Secondary Containment System
<input checked="" type="checkbox"/>	3(e)	09/30/2017	Implementation of Engineering Plan
<input type="checkbox"/>	3(f)	/ /	Site Map
<input type="checkbox"/>	3(g)	/ /	Description of Previous Spills
<input checked="" type="checkbox"/>	3(h)	12/31/2021	Environmental Compliance Report
<input checked="" type="checkbox"/>	3(i)	05/31/2021	Facility Response Plan
<input checked="" type="checkbox"/>	3(j)	To Be Determined	Inspection Certification of Secondary Containment Systems (every five years)
<input checked="" type="checkbox"/>	3(k)	See Section	Updated SPCC Plan / Facility Response Plan
<b>CLOSURE OF FACILITY</b>			
<input checked="" type="checkbox"/>	4(a)	See Section	Site Assessment

## **Onshore Major Oil Storage Facility Special License Conditions – Instructions and Deadlines**

The Department of Environmental Conservation (DEC) is required by Article 12 of the Navigation Law to protect and preserve the lands and waters of New York State from all discharges of petroleum, including any from onshore major oil storage facilities. To protect and preserve the waters of the State, owners/operators are required to show how they guard against contamination of surface and groundwater. Surface and groundwater protection at MOSFs is accomplished through the following:

- installing groundwater monitoring wells
- monitoring groundwater quality; and
- developing and implementing the Spill Prevention and Containment Plan, in accordance with 6 NYCRR Section 610.4(a)(4).

The following sections detail how to meet each of the conditions marked on the Special License Conditions Checklist. Sections 1 through 3 correspond to the three elements of protection he waters of the State. The section numbers on the checklist correspond to the following section numbers.

### **1. Installation of Monitoring Wells**

Monitoring wells are needed to determine ambient groundwater quality and to detect possible contamination that could come from any portion of the facility. The number and location of wells must be approved by DEC. Plans for existing and/or proposed wells must be submitted to the issuing Regional Office by the indicated date. Subject to DEC approval, these monitoring wells must be installed by the date set by DEC.

#### **a. Initial Installation of Monitoring Wells**

Install at least one (1) well hydraulically up-gradient of the facility and install at least three (3) wells hydraulically down-gradient of the facility, spaced as needed to detect any releases from the facility. Monitoring wells must be properly installed to a depth that compensates for seasonal variations.

When adjacent facilities exist, monitoring wells should be placed on the property lines to determine the source of contamination. In this case, common monitoring wells will exist between facilities so the schedules for testing should be consistent.

- Submit a Plan by:     /     /
- Install Wells by:     /     /

#### **b. Additional Monitoring Wells**

Installation of additional wells may be necessary based on site-specific conditions, information obtained from existing wells, evidence of past spills, or evidence of a potential spill source. The number and location of all additional monitoring wells must be submitted on a site plan for approval by the Regional Office prior to installation.

- Number of Wells to be Installed: \_\_\_\_\_
- Install wells by:     /     /

**c. Geological Survey of Groundwater Flow**

A geological survey of groundwater flow direction is necessary for installation of an effective groundwater monitoring system. A geological survey report must be submitted to the regional office to verify the proper placement of the groundwater monitoring wells or if additional wells are needed prior to the installation of the additional wells.

**2. Sampling and Testing of Monitoring Wells**

Owners/operators shall conduct a groundwater sampling and testing program to ensure protection of groundwater at the facility. Owners/operators must test the groundwater for the presence of the different types of petroleum that are stored at the site. The groundwater monitoring program must include testing for methyl tertiary butyl ether (MTBE) whenever petroleum is stored or has been stored since the beginning of MTBE usage in the 1970s.

All sampling and testing must be conducted by a third-party laboratory which is ELAP-certified by the NYS Department of Health for the specific parameter or category of parameters. A list of certified laboratories is available at <http://www.wadsworth.org/labcert/elap/elap.html>. The laboratory must send the test results directly to both the facility and the DEC Regional Office. The facility operator may monitor for free product without the aid of an outside contractor. Upon request, laboratories shall submit analytical results in an electronic format acceptable to DEC.

<b>TABLE 1 – RECOMMENDED TESTING METHODS FOR            DETECTING PETROLEUM IN GROUNDWATER.</b> Site-specific concerns or changes in testing methods may allow for the substitution of Environmental Protection Agency (EPA) methods.	
<u><b>To test for...</b></u> Volatile Organic Compounds (VOCs) Semivolatile Organic Compounds (SVOCs) Initial Testing of Monitoring Wells	<u><b>Use EPA Method...</b></u> 8260, 524.2 624, 8021, 502.2 8260 (Base Neutral Extractable) or 625 8260 + MTBE, 8270
<u><b>Type of Petroleum...</b></u> Gasoline Aviation Gasoline Kerosene Diesel Fuel Oils	<u><b>Must test for...*</b></u> VOC + MTBE VOC + MTBE VOC + MTBE and SVOC VOC + MTBE and SVOC VOC + MTBE and SVOC

*\* Measurements of MTBE are not standard outputs of these EPA Methods. To obtain such a measurement, the lab must be instructed to add MTBE as a target analyte to the test method selected. Minimum detection limit for MTBE is 5 ppb.*

**EPA 8021** test analyzes for a broad number of aromatic volatile compounds that are found in light grade petroleum products by purge-and-trap capillary column gas chromatography with a photoionization detector (GC-PID). Identification of a compound is based on detector response and retention time.

**EPA 624 (EPA 8260)** test series covers a broader number of substances using gas chromatography mass spectrometry (GC-MS) by extraction. This is effective in testing for volatile organic compounds in gasoline and aviation gasoline.

**EPA 8270 (EPA 625)** test series covers a broader number of substances using GC-MS by extraction.

This is useful for detecting semivolatile organics found in kerosene, fuel oil, and jet and diesel fuels.

**EPA 500** test series was adopted by the NYS Department of Health to test drinking water. The 502.2 test is applicable in the determination of 33 aromatic hydrocarbons using a chromatographic/photoionization detector. This is effective for detecting volatile organics found in light grade products, such as gasoline.

**EPA 524.2** is a capillary column GC-MS purgeable-organics test for volatile organics which have a vapor pressure equal to or greater than 0.1 mm of Hg. The method is suited for the detection of MTBE and is described in EPA's reference "Methods for the Determination of Organic Compounds in Drinking Water."

For quick reference on what compounds of petroleum products should be monitored and which analytical methods can be used in analyzing them, see Chart 7-1, Section 7.0 of "Sampling Guidelines and Protocols," NYS Department of Environmental Conservation, Division of Water, dated March 1991.

Note: GC-PID methods used to analyze for MTBE are subject to interference (i.e., co-elution problems) when samples contain significant amounts of petroleum product contamination. This may lead to false-positive MTBE results. Results can be verified by use of GC-MS methods.

## **Sampling Procedures**

Groundwater samples for analysis must be taken and handled properly to ensure that they are representative of in-situ conditions. Standard practice is to purge wells prior to sampling by bailing 3 to 5 volumes of water present in the well prior to taking samples. Guidance on purging and other approved techniques may be found in DEC's "Sampling Guidelines and Protocols" manual. Alternate sampling procedures, such as (but not limited to) low- and no-flow methods, may be appropriate in specific situations as approved by DEC.

If free product is found in any monitoring wells, the discharge must be reported to the DEC Spill Hotline immediately, but in no case later than two hours after the discharge. The owner/operator must perform the following testing and monitoring of wells, and provide results and reports as scheduled.

### **a. Initial Testing of Monitoring Wells**

All monitoring wells must have an initial testing to determine a baseline assessment of water quality, using appropriate methods discussed above.

- Test Results to be Submitted by:     /     /

### **b. Six-Month Testing of Monitoring Wells**

All monitoring wells must be retested six months after initial testing. This requires analytical testing as described in Section 2(a) above. Based on the results of the initial and six-month testing, the Regional Office will establish a schedule for further sampling and testing.

- Test Results to be Submitted by:     **06/01 and 12/31 of each year.**

### **c. Annual Testing of Monitoring Wells**

Annual testing of monitoring wells must be done between April 15 and May 15 of each year using the analytical tests that are described in Section 2, Table 1. The Regional Office may specify a different testing period if site-specific conditions indicate the need for more frequent testing.

- Test Results to be Submitted Annually by:     /     /

### **d. Monthly Monitoring of Wells**

Routine monitoring for free product is to be done at least monthly using manual methods, such as a bailer, product paste, electronic hydrocarbon probe, or other equivalent method. Results from the visual test are to be recorded and kept on file at the facility as part of the facility's monthly inspection. If free product is found, DEC must be notified on the DEC Spill Hotline immediately, but in no case later than two hours after the discharge. DEC may request that these monthly reports be submitted to the Regional Office.

- Submit Monitoring Well Monthly Reports to Regional Office.
- Keep Monitoring Well Monthly Reports on file at facility.

## **3. Spill Prevention and Containment Plan**

A Spill prevention and Containment Plan (Plan) prepared in accordance with 6 NYCRR Section 610.4(a)(4) must be submitted to DEC prior to the issuance of a license. The Plan must include the following elements:

- Spill Prevention, Control and Countermeasure (SPCC) Plan and a Facility Response Plan written according to 40 CFR 112;
- U.S. Coast Guard Operations Manual written according to 33 CFR 151, 154, 155, and 156;
- Groundwater Contingency Plan written in accordance with Special License Conditions 1 and 2 and 6 NYCRR Section 610.4(a)(4)(ii);
- site plan written in accordance with Special License Condition 3(f) and 6 NYCRR Section 610.4(a)(iii);
- description of previous spills written in accordance with Special License Condition 3(g) and 6 NYCRR Section 610.4(a)(4)(iv);
- Environmental Compliance Report written in accordance with Special License Condition 3(h) and 6 NYCRR Section 610.5(a)(4);
- inspection reports for secondary containment pursuant to 6 NYCRR Section 613-4.3; and
- inspection records for aboveground storage tanks pursuant to 6 NYCRR Section 613-4.3.

The following sections detail how to satisfy the elements of a Spill Prevention and Containment Plan.

**a. P.E. Certification/Management Review of Plan**

A professional engineer (P.E.), licensed and registered in New York State (NYS) by the NYS Education Department, must review and certify that the Spill Prevention and Containment Plan has been prepared in accordance with good engineering practices and other requirements as defined in 40 CFR 112.3(d). The Plan must be updated and recertified whenever any major addition, change, or rehabilitation occurs, as defined in 6 NYCRR Section 610.5(c)(2). If no major changes occur, the owner/operator must complete a review and evaluation of the Plan at least once every five years. The owner/operator must submit all recertification or management reviews to the Regional Office. If the SPCC Plan has not been signed by a P.E., licensed and registered in NYS, then the recertification must include a review and recertification by a New York licensed and registered P.E.

- P.E. Certification/Management Review to be Submitted by: **5/31/2021**

**b. Description of Secondary Containment System**

Owners or operators shall submit a description of the existing secondary containment system in detail and explain how this system prevents a spill of petroleum from reaching the lands or waters outside the containment area before cleanup occurs.

- Secondary Containment Description to be Submitted by: / /

**c. Testing of Secondary Containment System (Initial Construction)**

The secondary containment system shall be tested according to the guidance provided in DEC's technical guidance memo, SPOTS #10, "Secondary Containment Systems for Aboveground Storage Tanks." The Plan must contain a description of the procedures and methods used to inspect and test the effectiveness of the system.

When soil permeability is being evaluated, the test methods, procedure, results, test limitations and advantages as outlined in API Publication Standard 351, "Overview of Soil Permeability Test Methods," April 1999, are considered to be good engineering practice and must be used by the design engineer when seeking approval from the Regional Office.

- Test Results to be Submitted by: / /

**d. Engineering Plan for Upgrading Secondary Containment System**

If the secondary containment system does not meet the standards set forth in 6 NYCRR Section 613-4.1(b)(1)(v) or 613-4.1(c)(1), then an engineering plan certified by a P.E. (licensed and registered with the NYS Education Department) must be submitted to the Regional Office describing how existing systems will be improved. This plan must include: the composition and permeability of the existing soil; the methodology that will be used to upgrade the secondary containment system, such as a synthetic liner; the specifications of the material to be used; procedure on installation; and the proposed permeability of the resulting containment system.

This plan must be submitted to and approved by the Regional Office before construction is started.

- Engineering Plan to be Submitted by: **5/01/2017**

#### **e. Implementation of Engineering Plan**

After the engineering plan to improve the secondary containment system has been reviewed and approved by DEC, the owner or operator may begin implementation of the proposed secondary containment system.

- Construction to be Completed by: **09/30/2017**

#### **f. Site Map**

The Plan must contain a site map showing the location of all surface water, observation, monitoring, and recovery wells, location of tanks and their respective secondary containment areas, product transfer areas, and spill cleanup equipment storage. The scale used for the site map must be drawn such that all of the referenced map features (e.g., tanks, transfer areas, wells, etc.) are readily visible. This must be submitted to DEC in an acceptable electronic format, if available.

- Site Map to be Submitted by: / /

#### **g. Description of Previous Spills**

The Plan must contain a description of all spills, discharges, and cleanup activities during the preceding 12-month period. This description must include the cause, type and amounts of product spilled and recovered, corrective action taken, cleanup effectiveness, long-term cleanup plans, and plans for preventing the recurrence of a spill or discharge. This description must be submitted within one year after discovery of the spill or discharge, or at the time the application for a transferred or renewed license is submitted to DEC, whichever is sooner.

- Description of Previous Spills to be Submitted by: / /

#### **h. Environmental Compliance Report**

The Plan must contain an assessment of compliance with 6 NYCRR Parts 610, 611, and 613, 17 NYCRR Parts 30 and 32, 40 CFR 112, 40 CFR 280, and special conditions required under this license. This must include a status report and schedule for compliance. The Environmental Compliance Report Guidance is attached.

- Environmental Compliance Report to be Submitted by: **12/31/2021**

#### **i. Facility Response Plan**

Facility Response Plans are required under 40 CFR 112.20 and the Oil Pollution Act (OPA) of 1990 for any onshore facility that could reasonably be expected to discharge oil to navigable waters, adjoining shoreline, or the exclusive economic zone. These must contain plans for responding, to the maximum extent practical, to a worse-case discharge.

Any facility which must have a Facility Response Plan pursuant to the OPA must file a copy of that plan and any subsequent amendments with DEC. Such plan must be filed concurrent with the filing with EPA.

- Facility Response Plan to be Submitted by: **05/31/2021**

#### **j. Inspection Certification of Secondary Containment Systems**

Secondary containment systems must be inspected monthly for compliance with standards set forth in 6 NYCRR Section 613-4.1(b)(1)(v) or 613-4.1(c)(1). Inspection reports must be maintained which identify any deficiencies found during the inspection and any subsequent repairs rendered. See 6 NYCRR Section 613-4.3(b)(1).

DEC will accept documented monthly inspections that are “visually performed,” provided they are performed in conjunction with in-depth integrity inspections at least once every five years. Such in-depth inspections are to be conducted and certified by a P.E., licensed and registered in NYS by the NYS Education Department. The Regional Office must be notified prior to any modifications and repairs to the secondary containment systems. The Regional Office will decide if additional information or plans are required. When soil permeability is being evaluated, the test methods, procedure, results, test limitations and advantages as outlined in API Publication Standard 351, “Overview of Soil Permeability Test Methods,” April 1999, must be considered by the design engineer prior to approval by the Regional Office.

- Test Results to be Submitted by:     /     /
- In-depth Integrity Inspection and Reports to be submitted **To Be Determined** by and every five years thereafter.

#### **k. Updated SPCC Plan/Facility Response Plan**

Any amendments to the SPCC Plan required by revisions to 40 CFR 112 or any other update or change whatsoever must be filed with DEC. Updated SPCC Plan must be submitted **within 60 days of the effective date of the amendments.**

### **4. Closure of Facility**

#### **a. Site Assessment**

Prior to permanently closing a facility, the facility owner must perform a site assessment to determine if environmental contamination exists at the facility. The site assessment must include both soil and groundwater samples. Sample locations must include, at a minimum, the areas adjacent to the tanks, manifolds, loading racks, and transfer areas.

Prior to conducting the site assessment, a proposal must be submitted to DEC which details the assessment. The proposal must include, at a minimum, a site sketch indicating the sample locations, a description of the technology to be used to collect the samples, and the sampling methodology to be used to collect the samples and the sampling methodology to be used to analyze the samples.

If contamination is encountered at any time during the site assessment, DEC shall be notified immediately, but in no case later than two hours after discovery of the discharge.

A site assessment proposal shall be submitted 60 days prior to permanent closure. The site assessment shall commence in accordance with an agreed upon time frame after DEC’s acceptance of the site assessment proposal. A site assessment report detailing the findings of the assessment shall be submitted to DEC no later than 60 days after the completion of the site assessment.

### **Guidelines on Installation of Monitoring Wells**

The following is DEC's guidance on the installation of monitoring wells at onshore major oil storage facilities. All installations of monitoring wells must follow guidelines from 6 NYCRR Section 360-2.11(a)(8). In addition, all monitoring well installations must comply with the following guidelines:

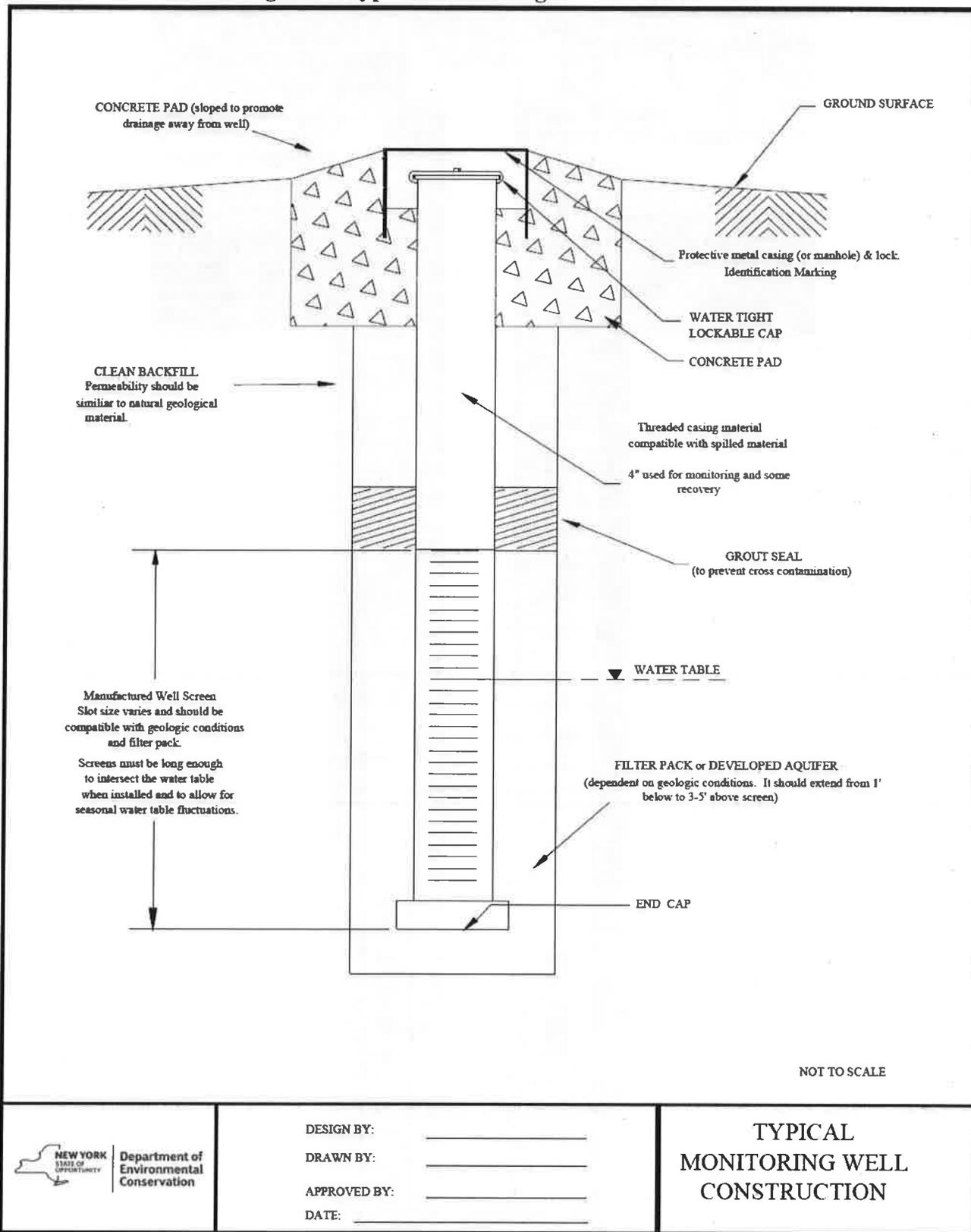
1. All wells must be four (4) inches in diameter or larger.
2. A log must be kept for each boring that is made. Soil samples must be taken when the composition of the soil layers changes or at five-foot (5-foot) intervals, whichever comes first. The log must include a general description of the composition of the soil and the depth that groundwater was first encountered.
3. Monitoring wells must be installed plumb and straight.
4. The well must be sufficiently developed to ensure that it is free-flowing and accurately represents the conditions of the groundwater table.

All monitoring wells must conform to the well specifications given in the section. The number and location of monitoring wells will be approved by the Regional Office based on topography and geological studies of the facility. A drawing of an acceptable monitoring well is given on the next page.

All monitoring wells shall be installed outside a secondary containment area, except where DEC has approved an alternate installation plan. Monitoring wells that are installed inside the secondary containment area must have water tight well caps and be installed so the top of the well is above the height of the dike wall. In addition, the well casing must be properly sealed to prevent infiltration of petroleum in the event of a spill.

## Monitoring Well Design

**Figure 1: Typical Monitoring Well Construction**

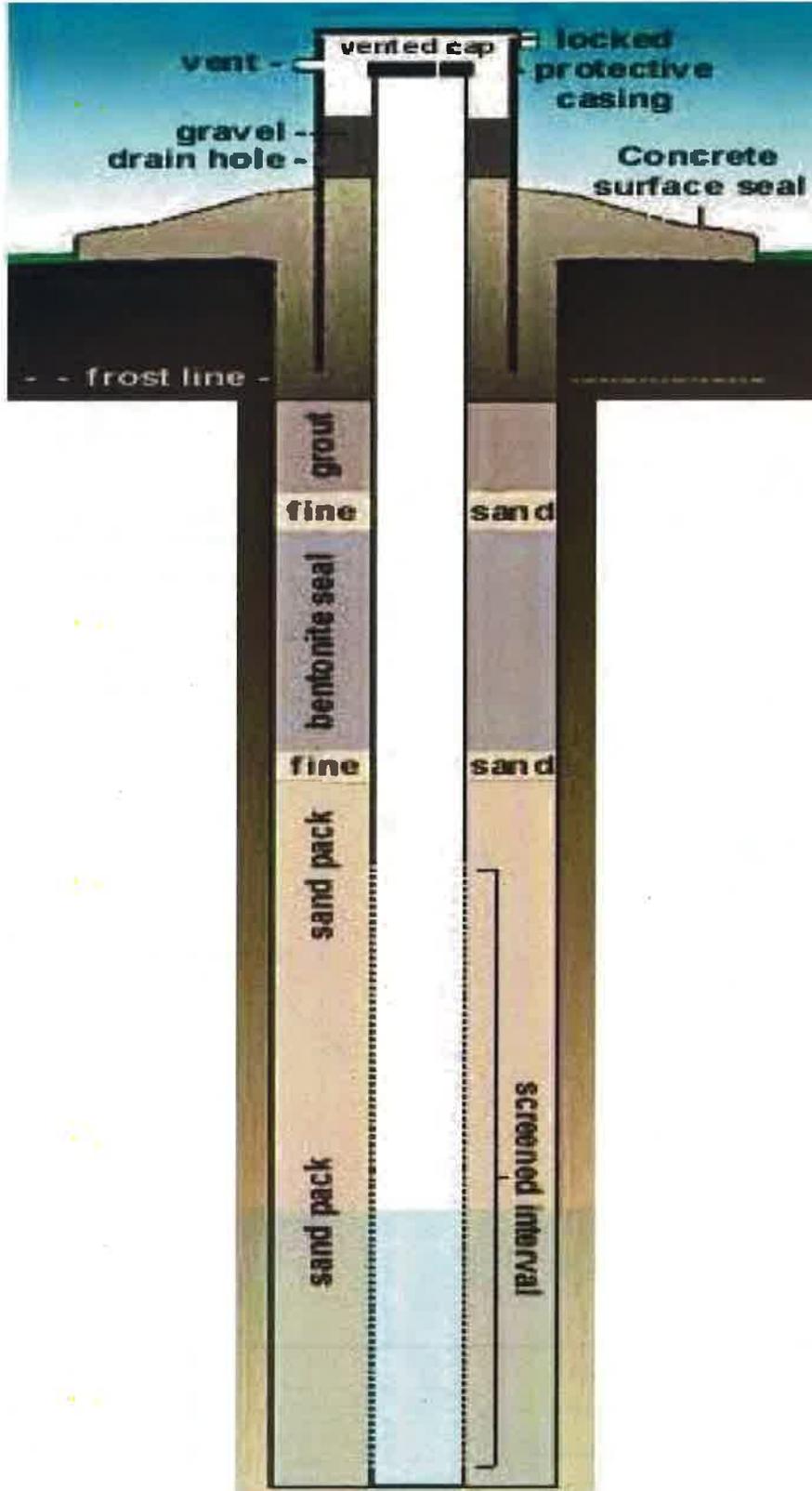


DESIGN BY: \_\_\_\_\_  
 DRAWN BY: \_\_\_\_\_  
 APPROVED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_

**TYPICAL  
 MONITORING WELL  
 CONSTRUCTION**

## Monitoring Well Design

Figure 2: A “Stick-Up” Groundwater Monitoring Well Construction



## Guidance for Preparing an Environmental Compliance Report

### INTRODUCTION

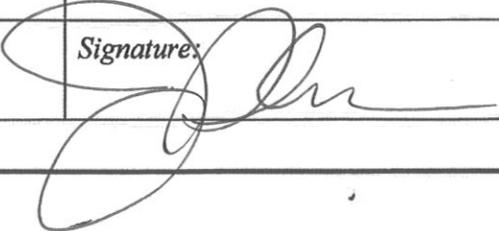
The following Environmental Compliance Report is intended to assist MOSF facility owners/operators in complying with the requirement to prepare an environmental compliance report. The checklist addresses the major requirements of the following regulations:

- 40 CFR     Part 112   SPCC Plan/Facility Response Plan (effective August 16, 2002)
- 6 NYCRR   Part 610   Certification of Onshore Major Facilities
- Part 611   Environmental Priorities and Procedures in Petroleum Cleanup & Removal
- Part 613   Petroleum Bulk Storage Regulations
- 17 NYCRR  Part 30    Licensing of Major Facilities
- Part 30.6  General/Special License Conditions
- Part 32    Actions to be Taken in Case of Discharge

Additional Federal, State, and local regulations not specified in this report also may be applicable to the facility.

Section A addresses Federal requirements for SPCC planning under 40 CFR 112. Sections B and C address major State requirements under the Petroleum Bulk Storage Regulations (6 NYCRR Part 613). Section D deals with MOSF licensing conditions under Article 12 of the Navigation Law.

## Environmental Compliance Report

<i>MOSF License #:</i> 01 -1700	<i>Facility is:</i> <input checked="" type="checkbox"/> <b>Active</b> <i>(check one)</i> <input type="checkbox"/> <b>Inactive</b> – Date Inactive: / /
<i>Facility Name:</i> Brookhaven National Laboratory	
<i>Facility Address:</i> 40 Brookhaven Avenue	<i>City/Town:</i> Upton, NY
	<i>ZIP Code:</i> 11973
<i>Operator:</i> U.S. Department of Energy	<i>Phone:</i> ( 631 ) 344- 3433
<i>Person Responsible for this Report:</i> Jason Remien	<i>Phone:</i> ( 631 ) 344-3477
<i>Preparer's Printed Name:</i> Jason Remien	<i>Signature:</i> 
<i>Date Prepared:</i> 12/16/16	

## Environmental Compliance Report – SECTION A

### SPCC PLAN IMPLEMENTATION CHECKLIST

**This section of the report addresses compliance with certain requirements of the Federal Regulations (40 CFR 112). For inactive facilities, proceed to Section D, Line VII.B.**

#### I. STATUS OF SPCC PLAN (40 CFR 112.3)

- A. Is the Plan up-to-date with contact persons?  Yes  No
- B. Has the Plan been reviewed within the past five years?  
Date of Last Review: 5 /31 /16  Yes  No
- C. Has the Plan been reviewed and certified by a Professional Engineer who is licensed and registered by the New York State Education Department?  Yes  No
- D. Has the Plan been approved and signed by management?  Yes  No

#### II. SPILL HISTORY OF THE FACILITY (40 CFR 112.4)

Has there been a reportable discharge(s) at the facility since the last license was issued?  Yes  No  
If Yes, enter the information below. Add sheets as necessary. SEE ATTACHED

DEC Spill #	Date (mm/dd/yy)	Material & Amount Spilled	Cause
	/ /		
	/ /		
	/ /		
	/ /		
	/ /		

#### III. MODIFICATION TO THE FACILITY (40 CFR 112.5)

- A. Has there been a major change in the design, construction, operation, or maintenance of the facility within the past five years?  Yes  No
- If Yes, were the changes certified by a Professional Engineer who is licensed and registered by the New York State Education Department? NA  Yes  No
- Date of Major Changes:     /     /

- B. Does the SPCC Plan or the Facility Response Plan contain the following:
1. A written commitment by management to provide the necessary resources to implement the Plan?  Yes  No
  2. A written description of all spills and actions taken to prevent recurrence?  Yes  No
  3. An assessment of potential spills showing possible location, volume and direction of flow?  Yes  No
  4. A description of the type of secondary containment needed to contain each spill?  
If secondary containment is not provided, explain on a separate sheet how spills are prevented from reaching waters.  Yes  No

**IV. DRAINAGE (40 CFR 112.7)**

A. Does the Plan discuss the following issues:

- |  |    |   |                             |
|--|----|---|-----------------------------|
| 1. How drainage from the diked area is contained and released?       |    | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 2. The use of drainage valves and how the valves are opened?         |    | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 3. Undiked system that is used to return a spill to the plant?       | NA | <input type="checkbox"/> Yes            | <input type="checkbox"/> No |
| If Yes, does the Plan discuss how this is accomplished?              | NA | <input type="checkbox"/> Yes            | <input type="checkbox"/> No |
| 4. Any diversion system that is used to return a spill to the plant? | NA | <input type="checkbox"/> Yes            | <input type="checkbox"/> No |
| If Yes, does the Plan discuss how this is accomplished?              | NA | <input type="checkbox"/> Yes            | <input type="checkbox"/> No |

B. Does the facility have a SPDES Permit to release wastewater from the diked area?  
*A SPDES Permit is required to discharge wastewater.*  Yes  No

C. Are wastewater discharges from treatment plants monitored to detect system upset?  Yes  No

- D. Are there written procedures for draining stormwater from the diked area?  Yes  No
- |   |  |   |                             |
|---|--|---|-----------------------------|
| 1. Are bypass valves normally sealed closed?  |  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 2. When the bypass valve is open, is a supervisor present? Authorization form used. |  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 3. Are records maintained for each drainage release?                                |  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |

**V. BULK STORAGE TANKS (40 CFR 112.7)**

Does the Plan address the following issues:

A. Is the petroleum being stored compatible with the materials used to construct the tank, ancillary equipment, and secondary containment?  Yes  No

B. Does the secondary containment system(s) meet the following requirements:

- |                                  |  |   |                             |
|----------------------------------|--|---|-----------------------------|
| 1. International Building Codes? |  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 2. Federal?                      |  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 3. New York State?               |  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 4. County?                       |  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |

C. Are aboveground tanks in contact with soil protected from corrosion?  Yes  No

D. Are underground tanks tested or have leak detection to ensure that the tanks are not leaking?  Yes  No

E. Are aboveground tanks internally inspected for structural integrity and to ensure that they are not leaking?  Yes  No

F. Have plans been implemented to prevent spills during transfers of petroleum products, including use of:

- |   |  |   |                             |
|---|--|---|-----------------------------|
| 1. High-level alarms and alarm pump shut-off devices? MOSF and several other tanks. |  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 2. Communications between persons at the tank and the pumping station?              |  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |

G. Are leaks from tank seams, gaskets, rivets, and bolts immediately repaired?  Yes  No

**VI. TRANSFER OPERATIONS, PUMPING, AND IN-PLANT PROCESSES (40 CFR 112.7)**

Does the Plan address the following issues:

- A. Are buried pipelines cathodically protected? NA  Yes  No
- B. Are out-of-service pipelines properly closed, capped or blank-flanged, and properly labeled? NA  Yes  No
- C. Are aboveground pipe supports properly designed to minimize:
1. Abrasion and corrosion?  Yes  No
2. Expansion and contraction?  Yes  No
- D. Do personnel check the conditions of pipelines, including flange and expansion joints, valves, drip pans, pipeline supports, locking of valves, and metal surfaces?  Yes  No
- E. Are pipelines periodically pressure tested? **During initial installations.**  Yes  No
- F. Is vehicular traffic controlled near aboveground pipelines?  Yes  No

**VII. TANK CAR AND TANK TRUCK LOADING/UNLOADING RACK (40 CFR 112.7)**

Does the Plan address the following issues:

- A. Do loading/unloading procedures meet Department of Transportation regulations?  Yes  No
- B. Is the secondary containment for the loading area designed to hold at least the largest single compartment of a tanker truck? **MOSF and Bldg. 651 tanks only.**  Yes  No
- C. Are written procedures in place to ensure transfer lines are disconnected prior to vehicular departure?  Yes  No

**VIII. INSPECTIONS AND RECORDS (40 CFR 112.7)**

Does the Plan include a copy of:

- A. Written inspection procedures to be followed by personnel?  Yes  No
- B. Records of inspections for the past three years?  Yes  No

**IX. SECURITY (40 CFR 112.7)**

Does the Plan discuss:

- A. The need for security, such as full fencing, locking of entrance gates, and/or guards?  Yes  No
- B. The security for all master flow and drain valves which would permit direct outward flow of a tank's contents?  Yes  No
- C. How product pump starter controls are locked or limit accessibility when not operating?  Yes  No
- D. The need for capping or installing blank flanges in loading/unloading pipelines when they are not in full service or are in standby service?  Yes  No
- E. The adequacy of facility lighting to facilitate discovery of spills and prevention of vandalism?  Yes  No

**X. PERSONNEL, TRAINING, AND SPILL PREVENTION PROCEDURES (40 CFR 112.7)**

A. Does the Plan contain a training program for personnel responsible for:

- 1. Operation and maintenance of equipment?  Yes  No
- 2. Preventing discharges of oil and complying with pollution control laws, rules, and regulations?  Yes  No
- 3. Spill response?  Yes  No

B. Name the person who has been given responsibility for spill prevention.

Name: Chris Bruno  
Title: Energy and Utilities Manager  
Phone: (631 )344-8262

**IX. FACILITY RESPONSE PLAN (40 CFR 112.20)**

Does the facility have a Facility Response Plan (FRP) approved by the USCG/USEPA?  Yes  No

Date of the Latest FRP: 5/30/16 (see NOTE below)

Date Last FRP Drill was Performed: 12 /05/16

[NOTE: BNL's 2011 Facility Response Plan (FRP) was previously submitted and approved by the U.S.EPA. The recently updated 2016 FRP was submitted to the U.S. EPA for review and approval in Sept. 2016.]

## Environmental Compliance Report – SECTION A/SPCC Plan Implementation Checklist

### II SPILL HISTORY OF THE FACILITY (40 CFR 112.4): 2011-2015

CY2011			
DEC Spill #/BNL Spill #	Date (mm/dd/yy)	Mat'l. Spilled & Am't Spilled	Cause
1011-437/11-03	2/6/11	Diesel fuel /0.5 gallons	Contractor's vehicle – fuel filter due to mechanical failure.
1012995/11-10	3/30/11	Fuel oil (<10 gallons)	Legacy contamination from a formerly used elec. generator due to mechanical failure.
1100559/11-12	4/15/11	Hydraulic fluid (1 cup)	Hydraulic hose on contractor's crane due to mechanical failure.
1100562/11-13	4/15/11	Diesel fuel (3 gallons)	Contractor's vehicles fuel lines due to mechanical failure.
1100705/11-14	4/20/11	Diesel fuel (<1 pint)	Contractor's concrete pumping vehicle due to mechanical failure.
1100959 /11-15	4/27/11	Power steering fluid (1 cup)	Leaking power steering hose on gov't vehicle due to mechanical failure.
1101226/11-16	5/3/11	Hydraulic fluid (1 gallon)	Front end loader hydraulic line fitting due to mechanical failure.
1103604/11-20	5/30/11	Hydraulic fluid (4 gallons)	Contractor's municipal trash vehicle's hydraulic hose due to mechanical failure. .
1103610/11-21	6/30/11	Diesel fuel (1 gallons)	Unknown vehicle leak at parking lot-unknown cause.
1103914/11-22	7/8/11	Hydraulic fluid (1 cup)	Punctured 55-gallon drums containing oil-contaminated soil due to human error.
1104186/11-25	7/15/11	Silicone transformer oil (37 gallons)	Pad-mounted transformer's O-ring seal at Bldg. 197 due to mechanical failure.
1104261/11-26	7/18/11	Silicone transformer oil (<1 gallons)	Same as 1104186 except Bldg. 726.
1107579/11-30	9/14/11	U-Con LB 170-X Hydraulic oil (100 gals.)	Pipe connected to a helium compressor at Bldg. 902 due to mechanical failure.
11074431/11-31	9/13/11	Hydraulic fluid (1 cup)	Hydraulic hose leak from a hydraulic hammer on a gov't. Vehicle due to mechanical failure.
1109222/11-37	10/21/11	Hydraulic fluid (1 quart)	Contractor's man-lift's hydraulic hose due to mechanical failure.

## Environmental Compliance Report – SECTION A/SPCC Plan Implementation Checklist

<b>CY2012</b>			
DEC Spill #/BNL Spill #	Date (mm/dd/yy)	Mat'l. Spilled & Am't Spilled	Cause
1112326/12-04	1/24/12	Lubricating oil & R-22	Accidental discharge of Freon gas while servicing equipment due to human error.
1113724/12-07	3/8/12	Hydraulic fluid (0.5 gals.)	Forklift gear oil box on a gov't. Vehicle due to mechanical failure.
1200320/12-10	4/11/12	Gear oil (12 qts.)	Fire Rescue Brush truck used during fire-fighting due to being consumed by fire.
1200883/12-11	4/26/12	Mineral oil & R-22 (1 quart)	Compressor failure due to electrical malfunction of package AC Unit.
1200865/12-12	4/19/12	Lubricating oil (4 ozs.) & R-22 (20 pounds)	Hairline fracture of pressurized condenser on a packaged AC Unit – mechanical failure
1202811/12-15	6/21/12	Hydraulic fluid (10 gallons)	Hydraulic line n forklift – gov't. vehicle due to mechanical failure.
1202833/12-16	6/21/12	Transmission fluid (1 gallon)	Gov't. vehicle struck railing of wheelchair ramp due to human error.
1204103/12-20	7/25/12	Hydraulic fluid (4 gallons)	Hydraulic fluid on a gov't. dump truck at Borrow Area due to mechanical failure.
1204103/12-21	8/1/12	Hydraulic fluid (1 gallons)	Vacuum pump on Vacmaster road sweeper due to mechanical failure.
1205275/12-26	8/24/12	Hydraulic fluid (0.5 gallons)	Hydraulic fluid on a gov't. dump truck at First St. due to mechanical failure.
1211537/12-38	11/30/12	Hydraulic fluid (55 gallons)	Elevator jack stand annular space at Bldg. 725 passenger elevator due to mechanical failure.
1213531/12-40	12/14/12	Hydraulic fluid (0.5 gallons)	Lift truck hydraulic hose during post-hurricane clean up due to mechanical failure.
1213682/12-41	12/18/12	Compressor oil (2 gallons)	Pressure relief valve on a cryo-compressor due to electrical power loss.

## Environmental Compliance Report – SECTION A/SPCC Plan Implementation Checklist

<b>CY2013</b>			
DEC Spill #/ BNL Spill #	Date (mm/dd/yy)	Mat'l. Spilled & Am't Spilled	Cause
1300168/13-14	4/6/13	Hydraulic fluid (4 gallons)	Hydraulic hose leak on gov't. vehicle-dump truck due to mechanical failure.
1302081/13-19	5/29/13	Hydraulic fluid (20 gallons)	Street sweeper hydraulic connector due to mechanical failure.
1302960/13-21	6/18/13	Power steering fluid (5 gallons)	Clamshell crane and backhoe – gov't. owned vehicles-mechanical failure.
1305052/13-28	8/9/13	Hydraulic fluid (25 gallons)	Freight elevator in Bldg. 734 due to brass fitting on supply line due to mechanical failure.
1307257/13-33	10/14/13	Fuel oil (unk. amount)	Legacy contamination at Tank No. 3's soil below geotextile berm. Cause is unknown.
1307391/13-34	10/17/13	Diesel fuel and sulfuric acid (4 gallons)	Lawnmower fire caused fuel tank to leak due to mechanical failure of tank.
1308571/13-39	11/22/13	Hydraulic fluid (0.5 gallons)	Backhoe's hydraulic line rupture due to mechanical failure.

**Environmental Compliance Report – SECTION A/SPCC Plan  
Implementation Checklist**

<b>CY2014</b>			
<b>DEC Spill #/ BNL Spill #</b>	<b>Date (mm/dd/yy)</b>	<b>Mat'l. Spilled &amp; Am't Spilled</b>	<b>Cause</b>
1310097/14-02	1/16/14	Hydraulic fluid (0.5 gallons)	Skid steer loader hydraulic hose due to mechanical failure.
1310323/14-03	1/27/14	Hydraulic fluid (7 gallons)	Spilt in high pressure hydraulic line on gov't. vehicle due to mechanical failure.
1311861/14-05	3/20/14	Lubricating oil	Pressure gauge on Westinghouse generator due to mechanical failure.
1312111/14-06	3/26/14	Diesel fuel (3 gallons)	Loose bolt on contractor's fuel pump.
1400430/14-10	4/13/14	Motor oil (30 gallons)	Swagelock fitting leak at Motor Pool due to mechanical failure.
1402402/14-15	6/4/14	Gear oil (1 pint)	Contractor's liquid nitrogen delivery vehicle due to mechanical failure (assumed)
1403258/14-18	6/25/14	Hydraulic fluid (0.5 pints)	Hydraulic line on large crane (gov't. owned) due to mechanical failure.
1403886/14-19	7/10/14	Hydraulic fluid (3.5 quarts)	Hydraulic line on backhoe (gov't. owned) due to hydraulic failure.
1407706/14-24	10/27/14	Diesel fuel (1 gallon)	Contractor's vehicle fuel line fitting due to mechanical failure.
1408461/14-26	11/17/14	Hydraulic fluid (0.5 gallons)	Hydraulic lift ass'y. on dump truck (gov't. owned) due to mechanical failure.

**Environmental Compliance Report – SECTION A/SPCC Plan  
Implementation Checklist**

<b>CY2015</b>			
<b>DEC Spill #/ BNL Spill #</b>	<b>Date (mm/dd/yy)</b>	<b>Mat'l. Spilled &amp; Am't Spilled</b>	<b>Cause</b>
1411389/15-08	3/4/15	Compressor oil (2 quarts)	Oil stains found on snow from a contractor's vehicle (assumed) due to mechanical failure (assumed).
1501033/15-12	4/29/15	Petroleum distillates (1 pint)	Petroleum container fell off vehicle due to human error.
1507709/15-19	10/23/15	Compressor oil (2 quarts)	Compressor valve being used to remove condensate blowdown due to human error (wrong valve opened).

**Environmental Compliance Report – SECTION B**  
**FACILITY-LEVEL AND TANK-SPECIFIC INFORMATION**

**This section of the report addresses compliance with certain sections of the New York State Petroleum Bulk Storage (PBS) Regulations (6 NYCRR 613).**

**I. FACILITY-LEVEL INFORMATION**

A. Are monitoring/observation wells marked and secured?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> X (no wells)
B. Have dispenser sumps been properly maintained?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N (accumulation of product) <input type="checkbox"/> X (no sump; not required) <input type="checkbox"/> 1 (accumulation of water/debris) <input type="checkbox"/> 2 (no access) <input type="checkbox"/> 3 (sump required but not present)
C. For motor fuel tank systems with pressurized piping, are shear valves properly installed and operable?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N (no shear valve) <input type="checkbox"/> X (not pressurized piping) <input type="checkbox"/> 1 (inoperative valve) <input type="checkbox"/> 2 (improperly installed) <input type="checkbox"/> 3 (no access)

**II. TANK-SPECIFIC INFORMATION. For additional tanks, use extra copies of this form as necessary.**

A. Tank Registration #	<b>SEE ATTACHED</b>				
B. Applicable Subpart: 2 / 3 / 4					
C. Was the tank properly permanently closed or did it undergo a change-in-service? Y / N / X (active or out-of-service tank) / 1 (tank closed w/o notification)					
D. If the tank system is out-of-service, has it been out-of-service for more than 12 months? Y / N / X (active tank) / 1 (permanently closed tank system)					
E. Were any spills observed? (Include suspected releases from leak detection equipment and uninvestigated inventory discrepancies.) Y / N					
F. For underground tanks, have tank top sumps been properly maintained? Y / N (accumulation of product) / X (no sump) / 1 (accumulation of water/debris) / 2 (no access)					
G. For underground tanks, have spill buckets been properly maintained? Y / N (accumulation of product) / X (no spill bucket) / 1 (accumulation of water/debris) / 2 (no access)					
H. Is the fill port/tank color coded/marked to identify the product in the tank system? Y / N / X (day tank) / 1 (incorrectly color coded/marked)					

**ENVIRONMENTAL COMPLIANCE REPORT**

**SECTION B**

**FACILITY-SPECIFIC LEVEL AND TANK SPECIFIC INFORMATION**

**SECTION II - TANK SPECIFIC INFORMATION**

**ENVIRONMENTAL COMPLIANCE REPORT-SECTION B**  
**Facility-Level and Tank Specific Information (Section II)**

A. Tank Registration No.	B. Applicable Subpart: 2/3/4	C. Was the tank properly closed or did it undergo a change in-service? Y/N/X (active or out-of-service) tank/1 (closed w/o notification)	D. If tank out-of-service, has it been for >12 mos.? Y/N/X (active tank)/1 (permanently closed tank system)	E. Any spills observed? (Y/N)	F. For underground tanks, have tank top sumps been properly maintained? Y/N (accum. Of product)/ X (no sump)/ Y/N (Of water/debris) /2 (no access)	G. For underground tanks, have spill buckets been properly maintained? Y/N (accum. Of product) / X (no sump)/ 1 (accum. Of water/debris)/(no access)	H. Is the fill port/tank been color coded/ marked to identify the product in the tank system? Y/N/X (day tank)/1 (incorrectly color coded/ marked)
423-08	613-2	X	X	N	Y	Y	Y
50-02	613-3	X	X	N	Y	Y	Y
423-06	613-3	X	X	N	Y	Y	Y
423-07	613-3	X	X	N	Y	Y	Y
630-06	613-3	X	X	N	Y	Y	Y
630-07	613-3	X	X	N	Y	Y	Y
630-08	613-3	X	X	N	Y	Y	Y
630-09	613-3	X	X	N	Y	Y	Y
575-05	613-4	X	X	N	NA	NA	Y
580-02	613-4	X	X	N	NA	NA	Y
599-02	613-4	X	X	N	NA	NA	Y
603-06	613-4	X	X	N	NA	NA	Y
614-05	613-4	X	X	N	NA	NA	Y
618-04	613-4	X	X	N	NA	NA	Y
619-04	613-4	X	X	N	NA	NA	Y
635-03	613-4	X	X	N	NA	NA	Y
725-13	613-4	X	X	N	NA	NA	Y
734-01	613-4	X	X	N	NA	NA	Y
735-01	613-4	X	X	N	NA	NA	Y
740-01	613-4	X	X	N	NA	NA	Y
740-02	613-4	X	X	N	NA	NA	Y
801-38	613-4	X	X	N	NA	NA	Y
830-13	613-4	X	X	N	NA	NA	Y
912A-05	613-4	X	X	N	NA	NA	Y
1000P-03	613-4	X	X	N	NA	NA	Y
1002A-01	613-4	X	X	N	NA	NA	Y
1004A-01	613-4	X	X	N	NA	NA	Y
1005S-01	613-4	X	X	N	NA	NA	Y
1006A-01	613-4	X	X	N	NA	NA	Y
1008A-01	613-4	X	X	N	NA	NA	Y
1010A-01	613-4	X	X	N	NA	NA	Y
1012A-01	613-4	X	X	N	NA	NA	Y
30-08	613-4	X	X	N	NA	NA	Y
244-09	613-4	X	X	N	NA	NA	Y
321-03	613-4	X	X	N	NA	NA	Y
339-04	613-4	X	X	N	NA	NA	Y
422-07	613-4	X	X	N	NA	NA	Y
814-02	613-4	X	X	N	NA	NA	Y
814-03	613-4	X	X	N	NA	NA	Y
814-04	613-4	X	X	N	NA	NA	Y
575-09	613-4	X	X	N	NA	NA	Y
630-14	613-4	X	X	N	NA	NA	Y
651-02	613-4	X	X	N	NA	NA	Y
651-03	613-4	X	X	N	NA	NA	Y
651-04	613-4	X	X	N	NA	NA	Y
611-03	613-4	X	X	N	NA	NA	Y
611-04	613-4	X	X	N	NA	NA	Y

**ENVIRONMENTAL COMPLIANCE REPORT-SECTION B**  
**Facility-Level and Tank Specific Information (Section II)**

A. Tank Registration No.	B. Applicable Subpart: 2/3/4	C. Was the tank properly closed or did it undergo a change in-service? Y/N/X (active or notification)	D. If tank out-of-service, has it been for >12 mos.? Y/N/X (active tank)/1 (permanently closed tank system)	E. Any spills observed? (Y/N)	F. For underground tanks, have tank top sumps been properly maintained? Y/N (accum. Of product)/ X (no sump)/ 1 (accum. Of water/debris) /2 (no access)	G. For underground tanks, have spill buckets been properly maintained? Y/N (accum. Of product) /X (no sump)/ 1 (accum. Of water/debris)/(no access)	H. Is the fill port/tank been color coded/ marked to identify the product in the tank system? Y/N/X (day tank)/1 (incorrectly color coded/ marked)
611-05	613-4	X	X	N	NA	NA	Y
611-06	613-4	X	X	N	NA	NA	Y
611-09	613-4	X	X	N	NA	NA	Y
611-10	613-4	X	X	N	NA	NA	Y
423-01	613-4	X	X	N	NA	NA	Y
423-16	613-4	X	X	N	NA	NA	Y
423-17	613-4	X	X	N	NA	NA	Y
452-02	613-4	X	X	N	NA	NA	Y
630-12	613-4	X	X	N	NA	NA	Y
911-04	613-4	X	X	N	NA	NA	Y
928-02	613-4	X	X	N	NA	NA	Y

## Environmental Compliance Report – SECTION C

### TANK-SPECIFIC INFORMATION BY SUBPART

<b>This section of the report addresses compliance with specific Subparts of the New York State Petroleum Bulk Storage (PBS) Regulations (6 NYCRR 613).</b>					
<b>I. SUBPART 2 UST SYSTEMS. For additional tanks, use extra copies of this form as necessary.</b>					
A. Tank Registration #	630-06	630-07	630-08	630-09	423-06
B. Is the spill prevention device (i.e., spill bucket) present? Y / N / X (tank receives ≤25 gallons at one time)	Y	Y	Y	Y	Y
C. Is the overfill prevention device (i.e., automatic shut-off, high-level alarm, ball float valve) present? Y / N / X (tank receives ≤25 gallons at one time)	Y	Y	Y	Y	Y
D. Are metal tank system components in contact with soil (including tank, piping, fittings, connections, etc.) continuously protected from corrosion? Y / N / X (no metal tank system components) / 1 (tank not protected from corrosion) / 2 (piping not protected from corrosion)	Y	Y	Y	Y	Y
E. Is leak monitoring being performed? Y / N / X (SW piping installed on or before 10/11/15 is tested for tightness every 3 years/annually OR exempt suction piping OR tank stores No. 5/6 fuel oil) / 1 (no tank leak monitoring) / 2 (no piping leak monitoring)	Y	Y	Y	Y	Y
F. Does the facility have adequate inventory records for metered tanks storing motor fuel/kerosene that will be sold as part of a commercial transaction? Y / X (tank does not store motor fuel/kerosene for resale) If not, which items are deficient? 1 (no records) / 2 (no tank bottom water measurements) / 3 (equipment not capable of 1/8" measurement) / 4 (meter not calibrated) / 5 (no reconciliation of records) / 6 (improper reconciliation) / 7 (no investigation of discrepancy)	Y	Y	Y	X	X
F. If piping system is pressurized, does the piping system have: 1. An automatic line leak detector (ALLD)? Y / N / X (not applicable)	N	N	N	X	Y
2. An additional form of leak detection other than ALLD? Y / N / X (not applicable)	Y	Y	Y	X	X
G. If piping system is non-exempt suction, does the piping system have a form of leak detection? Y / N / X (not applicable)	X	X	X	X	X
H. If the tank is permanently closed or underwent a change-in-service within the last 3 years, was a site assessment performed? Y / N / X (not applicable) / 1 (site assessment is inadequate)	X	X	X	X	X

## Environmental Compliance Report – SECTION C

### TANK-SPECIFIC INFORMATION BY SUBPART

<b>This section of the report addresses compliance with specific Subparts of the New York State Petroleum Bulk Storage (PBS) Regulations (6 NYCRR 613).</b>					
<b>I. SUBPART 2 UST SYSTEMS. For additional tanks, use extra copies of this form as necessary.</b>					
A. Tank Registration #	423-07	50-02			
B. Is the spill prevention device (i.e., spill bucket) present? Y / N / X (tank receives $\leq 25$ gallons at one time)	Y	Y			
C. Is the overfill prevention device (i.e., automatic shut-off, high-level alarm, ball float valve) present? Y / N / X (tank receives $\leq 25$ gallons at one time)	Y	Y			
D. Are metal tank system components in contact with soil (including tank, piping, fittings, connections, etc.) continuously protected from corrosion? Y / N / X (no metal tank system components) / 1 (tank not protected from corrosion) / 2 (piping not protected from corrosion)	Y	Y			
E. Is leak monitoring being performed? Y / N / X (SW piping installed on or before 10/11/15 is tested for tightness every 3 years/annually OR exempt suction piping OR tank stores No. 5/6 fuel oil) / 1 (no tank leak monitoring) / 2 (no piping leak monitoring)	Y	Y			
F. Does the facility have adequate inventory records for metered tanks storing motor fuel/kerosene that will be sold as part of a commercial transaction? Y / X (tank does not store motor fuel/kerosene for resale) If not, which items are deficient? 1 (no records) / 2 (no tank bottom water measurements) / 3 (equipment not capable of 1/8" measurement) / 4 (meter not calibrated) / 5 (no reconciliation of records) / 6 (improper reconciliation) / 7 (no investigation of discrepancy)	X	X			
F. If piping system is pressurized, does the piping system have:					
1. An automatic line leak detector (ALLD)? Y / N / X (not applicable)	X	X			
2. An additional form of leak detection other than ALLD? Y / N / X (not applicable)	X	X			
G. If piping system is non-exempt suction, does the piping system have a form of leak detection? Y / N / X (not applicable)	Y	Y			
H. If the tank is permanently closed or underwent a change-in-service within the last 3 years, was a site assessment performed? Y / N / X (not applicable) / 1 (site assessment is inadequate)	X	X			

**II. SUBPART 3 UST SYSTEMS.** For additional tanks, use extra copies of this form as necessary.

A. Tank Registration #	423-08				
B. For Cat. 2 and 3 UST systems, does the UST system meet standards? Y / X (Cat. 1 UST system)  If not, how is the tank system deficient? 1 (tank not corrosion-resistant) / 2 (no tank secondary containment) / 3 (no tank leak monitoring) / 4 (no overfill prevention) / 5 (piping not corrosion-resistant) / 6 (no piping leak monitoring) / 7 (no fill port label) / 8 (as-built plans/drawings missing or incomplete)	Y				
C. Is cathodic protection for steel tank and piping systems monitored annually? Y / N (no CP test on either) / X (CP not required) / 1 (no CP test on tank) / 2 (no CP test on piping) / 3 (records not maintained) / 4 (minimum protection not provided/failed annual survey) / 5 (inadequate monitoring – not enough readings) / 6 (operator has not completed appropriate repair in response to test results)	Y				
D. Is leak monitoring being performed? Y / N / X (tank and/or piping installed before 12/27/86 is tested for tightness annually OR tank stores No. 5/6 fuel oil) / 1 (inoperative system) / 2 (weekly leak detection records no maintained) / 3 (monthly operability records not maintained) / 4 (interstitial space on Cat. 2/3 tanks and/or piping not monitored) / 5 (leak monitoring method is inappropriate)	Y		TANK		
E. For Cat. 1 UST systems, has tightness testing been conducted within the last year? Y / N (no test on either tank or line) / X (exempt from tightness testing) / 1 (no tank test) / 2 (no line test) / 3 (test report not submitted)	X		PUMPING		

**III. SUBPART 4 AST SYSTEMS.** *For additional tanks, use extra copies of this form as necessary.*

A. Tank Registration #	SEE ATTACHED				
B. For Cat. 2 and 3 AST systems, does the AST system meet standards? Y / X (Cat. 1 AST system) If not, how is the tank system deficient? 1 (tank not welded steel) / 2 (no surface coating) / 3 (tank resting on soil w/o cathodic protection) / 4 (tank on grade w/o impermeable barrier) / 5 (no leak monitoring between tank & barrier)					
C. For ASTs $\geq 10,000$ gallons (or ASTs $< 10,000$ gallons within 500 feet of a sensitive receptor), is the secondary containment adequately designed and in good condition? Y / N (no secondary containment) / X (secondary containment not required) / If N, explain on a separate sheet.					
D. For ASTs $< 10,000$ gallons that are using alternatives to secondary containment, are DER-25 issues addressed? Y / N / X (not required/applicable) If N, explain on a separate sheet.					
E. Are dike drain valves locked in a closed position? Y / N (unlocked) / X (no dike/discharge pipe) / 1 (no valve on discharge pipe)					
F. Does the AST have a gauge, high-level alarm, high-level liquid pump cut-off controller, or an equivalent device? Y / N / 1 (inoperative)					
G. Is the tank marked with design & working capacities and tank ID number? Y / N					
H. Is a solenoid or equivalent valve in place for gravity-fed motor fuel dispensers? Y / N / X (AST system not storing motor fuel OR dispensers not gravity-fed) / 1 (inoperative) / 2 (valve not adjacent to and downstream from the operating valve)					
I. Is a check valve in place for pump-filled ASTs with remote fills? Y / N / X (no remote fill) / 1 (inoperative)					
J. Does the facility conduct monthly inspections for all AST systems? Y / N / 1 (records not maintained)					
K. Does the facility conduct ten-year inspections for Cat. 1 AST systems? Y / N / X (not required per Part 613-4.3(a)(1)(iii) OR Cat. 2/3 AST system) / 1 (records not maintained)					
Date of the Last Ten-Year Inspection?					

**Environmental Compliance Report - SECTION C**  
**Tank Specific Information/ III. SUBPART 4 AST SYSTEMS**

<i>A. Tank Registration No.</i>	<i>B. For Cat. 2 and 3 AST systems, does the AST System meet standards?</i>	<i>C. For ASTs &gt; 10,000 gallons, does the AST System w/ 500 feet of a sensitive receptor, is the secondary containment adequately designed and in good condition?</i>	<i>D. For ASTs &lt; 10,000 gallons, is the secondary containment addressed?</i>	<i>E. Are dike drain valves locked in a closed position?</i>	<i>F. Does the AST have a gauge, high level alarm, high level liquid pump cut-off controller, or an equiv. device?</i>	<i>G. Is the tank marked with design &amp; working capacities and tank ID number?</i>	<i>H. Is a solenoid or equivalent valve in place for gravity-fed motor fuel dispensers?</i>	<i>I. Is a check valve in place for pump-filled ASTs with remote fills?</i>	<i>J. Does the facility conduct monthly inspections for AST Systems?</i>	<i>K. Does the facility conduct ten-year inspections for Cat. 1 AST Systems?</i>
30-08	Y	X	X	X	Y	Y	X	X	Y	X
321-03	Y	X	X	X	Y	Y	X	X	Y	X
339-04	Y	X	X	X	Y	Y	X	X	Y	X
422-07	Y	X	X	X	Y	Y	X	X	Y	X
423-01	Y	X	X	X	Y	Y	X	X	Y	X
423-16	Y	X	X	X	Y	Y	X	X	Y	X
423-17	Y	X	X	X	Y	Y	X	X	Y	X
449-04	Y	X	X	X	Y	Y	X	X	Y	X
452-02	Y	X	X	X	Y	Y	X	X	Y	X
463-19	Y	X	X	X	Y	Y	X	X	Y	X
488-05	Y	X	X	X	Y	Y	X	X	Y	X
490-30	Y	X	X	X	Y	Y	X	X	Y	X
515-03	Y	X	X	X	Y	Y	X	X	Y	X
555-14	Y	X	X	X	Y	Y	X	X	Y	X
575-05	Y	X	X	X	Y	Y	X	X	Y	X
575-09	Y	X	X	X	Y	Y	X	X	Y	X
580-02	Y	X	X	X	Y	Y	X	X	Y	X
599-02	Y	X	X	X	Y	Y	X	X	Y	X
603-06	Y	X	X	X	Y	Y	X	X	Y	X
611-03	Y	Y	X	Y	Y	Y	X	X	Y	X
611-04	Y	Y	X	Y	Y	Y	X	X	Y	X
611-05	Y	Y	X	Y	Y	Y	X	X	Y	Y (7/20/2015)
611-06	Y	Y	X	Y	Y	Y	X	X	Y	Y (12/19/2013)
611-09	Y	Y	X	Y	Y	Y	X	X	Y	X
611-10	Y	Y	X	Y	Y	Y	X	X	Y	X
614-05	Y	X	X	X	Y	Y	X	X	Y	X
618-04	Y	X	X	X	Y	Y	X	X	Y	X
619-04	Y	X	X	X	Y	Y	X	X	Y	X
630-12	Y	X	X	X	Y	Y	X	X	Y	X
630-14	Y	X	X	X	Y	Y	X	X	Y	X
635-03	Y	X	X	X	Y	Y	X	X	Y	X

**Environmental Compliance Report - SECTION C**  
**Tank Specific Information/ III. SUBPART 4 AST SYSTEMS**

<i>A. Tank Registration No.</i>	<i>B. For Cat. 2 and 3 AST systems, does the AST System meet standards?</i>	<i>C. For AST's &gt; 10,000 gallons (or AST's &lt; 10,000 gallons w/ 500 feet of a sensitive receptor), is the secondary containment adequately designed and in good condition?</i>	<i>D. For AST's &lt; 10,000 gallons that are using alternatives to secondary containment, are DER-25 issues addressed?</i>	<i>E. Are dike drain valves locked in a closed position?</i>	<i>F. Does the AST have a gauge, high level alarm, high level liquid pump cut-off controller, or an equiv. device?</i>	<i>G. Is the tank marked with design &amp; working capacities and tank ID number?</i>	<i>H. Is a solenoid or equivalent valve in place for gravity-fed motor fuel dispensers?</i>	<i>I. Is a check valve in place for pump-filled AST's with remote fills?</i>	<i>J. Does the facility conduct monthly inspections for AST Systems?</i>	<i>K. Does the facility conduct ten-year inspections for Cat. 1 AST Systems?</i>
639-02	Y	X	X	X	Y	Y	X	X	Y	X
651-02	Y	X	X	X	Y	Y	X	X	Y	X
651-03	Y	X	X	X	Y	Y	X	X	Y	X
651-04	Y	X	X	X	Y	Y	X	X	Y	X
725-13	Y	X	X	X	Y	Y	X	X	Y	X
734-01	Y	X	X	X	Y	Y	X	X	Y	X
735-01	Y	X	X	X	Y	Y	X	X	Y	X
740-01	Y	X	X	X	Y	Y	X	X	Y	X
740-02	Y	X	X	X	Y	Y	X	X	Y	X
801-38	Y	X	X	X	Y	Y	X	X	Y	X
814-02	Y	X	X	X	Y	Y	X	X	Y	X
814-03	Y	X	X	X	Y	Y	X	X	Y	X
814-04	Y	X	X	X	Y	Y	X	X	Y	X
830-13	Y	X	X	X	Y	Y	X	X	Y	X
911-04	Y	X	X	X	Y	Y	X	X	Y	X
912A-05	Y	X	X	X	Y	Y	X	X	Y	X
928-02	Y	X	X	X	Y	Y	X	X	Y	X
1000P-03	Y	X	X	X	Y	Y	X	X	Y	X
1002A-01	Y	X	X	X	Y	Y	X	X	Y	X
1004A-01	Y	X	X	X	Y	Y	X	X	Y	X
1005S-01	Y	X	X	X	Y	Y	X	X	Y	X
1006A-01	Y	X	X	X	Y	Y	X	X	Y	X
1010A-01	Y	X	X	X	Y	Y	X	X	Y	X
1012A-01	Y	X	X	X	Y	Y	X	X	Y	X

**Environmental Compliance Report - SECTION C**  
**Tank Specific Information/ III. SUBPART 4 AST SYSTEMS**

**Key**

- A. Tank Registration #
- B. For Cat. 2 and 3 UST systems, does the UST System meet standards?  
Y/N/X (Cat. 1 UST system)  
If not, how is the tank deficient?  
1.(tank not welded steel)/2.(no surface coating)  
3.(tank resting on soil w/o cathodic protection)/  
4.(tank on-grade w/o impermeable barrier)/  
5. (no leak monitoring between tank & barrier)
- C. For AST's >10,000 gallons (or AST's <10,000 gallons w/ 500 feet of a sensitive receptor,  
is the secondary containment adequately designed and in good condition?  
Y/N (no secondary containment)/X (secondary containment not required)/  
If N, explain on a separate sheet
- D. For AST's <10,000 gallons that are using alternatives to secondary containment, are DER-25 issues addressed?  
Y/N/X (not required/applicable)  
If, N, explain on a separate sheet
- E. Are dike drain valves locked in a closed position?  
Y/N (unlocked)/X (no dike/discharge pipe)/  
1.(no valve on discharge pipe)
- F. Does the AST have a gauge, high level alarm, high level liquid pump cut-off controller, or an equiv. device?  
Y/N/1.(inoperative)
- G. Is the tank marked with design & working capacities and tank ID number?  
Y/N
- H. Is a solenoid or equivalent valve in place for gravity-fed motor fuel dispensers?  
Y/N/X (AST system not storing motor fuel OR dispensers not gravity-fed)/  
1.(inoperative)  
2.(valve not adjacent to and downstream from the operating valve)
- I. Is a check valve in place for pump-filled AST's with remote fills?  
Y/N/X (no remote fill)/1.(inoperative)
- J. Does the facility conduct monthly inspections for AST Systems?  
Y/N/1 (records not maintained)
- K. Does the facility conduct ten-year inspections for Cat. 1 AST Systems?  
Y/N  
X (not required per Part 61.3-4.39a)(1)(iii) OR Cat. 2/3 AST system/  
1. (records not maintained)  
Date of last Ten-Year Inspection?

## Environmental Compliance Report – SECTION D

### ONSHORE MAJOR OIL STORAGE FACILITY LICENSING CONDITIONS

This section of the report addresses licensing conditions applicable to your facility regulated under Article 12 of the New York Navigation Law.

#### I. CLOSURE PLAN

- A. If the facility is inactive, was a closure plan submitted to the Department?  
 Date of Last Review:      /      /      NA       Yes       No
- B. Did the Department approve of the closure plan?      NA       Yes       No
- C. Are any of the aboveground tanks considered out-of-service or permanently closed?  
*If Yes, explain on a separate sheet.*      Tank #836-01       Yes       No

#### II. MONITORING WELLS AND SAMPLING

- A. Has the Department approved the monitoring well system?       Yes       No
- B. Has a baseline assessment of groundwater quality been completed?       Yes       No
- C. Are wells monitored monthly?      For floating product       Yes       No
- D. Are wells monitored biannually?       Yes       No
- E. Are wells monitored annually?      Semiannually as per MOSF Special License Condition       Yes       No
- F. Are sampling results forwarded to the Department's Regional Office:
1. Annually?      Semiannually       Yes       No
  2. Biannually?       Yes       No
  3. Monthly?       Yes       No

#### III. SECONDARY CONTAINMENT

- A. Have secondary containment systems been evaluated for permeability?       Yes       No
- B. Has a detailed description of the secondary containment systems been submitted to the Department?       Yes       No
- C. Do all secondary containment systems meet the Department's standards in 6 NYCRR 613-4.1(b)(1)(v) or 613-4.1(c)(1)? *If No, explain on a separate sheet.* See attached sheet       Yes       No
- D. Was a five-year in-depth secondary containment system integrity inspection performed?       Yes       No  
 Date of Last Inspection:      /      /      See attached  
 Was the inspection approved by the Department? *If No, explain on a separate sheet.*       Yes       No
- E. Does the Spill Prevention and Containment Plan (SPCP) evaluate groundwater geology, hydrology, contamination, and risks?       Yes       No
- F. If secondary containment systems do not meet standards set forth in 6 NYCRR 613-4.1(b)(1)(v) or 613-4.1(c)(1), have engineering plans been submitted to the Department?       Yes       No
- G. Has the Department approved the engineering plans?       Yes       No

<b>IV. SITE MAP</b>		
Has a site map acceptable to the Department been prepared?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>V. VARIANCE</b>		
Has the Department granted a variance?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes, is the facility in compliance with the variance?	NA	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>VI. VIOLATIONS</b>		
Were any violations to Federal, State and county, local regulations, codes and license conditions cited during the last five years? <i>If Yes, explain on a separate sheet.</i>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>VII. ADDITIONAL LICENSING REQUIREMENTS</b>		
A. Have accurate monthly reports on the number of barrels transferred at the facility been submitted to the Department each month?	NA	<input type="checkbox"/> Yes <input type="checkbox"/> No
B. Have monthly license fees and surcharges been paid to the Department?	NA-Exempt (Federal)	<input type="checkbox"/> Yes <input type="checkbox"/> No

<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	Has a baseline assessment of groundwater quality been completed?
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	Are wells monitored monthly for floating product?
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	Are wells monitored biannually?
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	Are wells monitored semiannually, semiannually or per MGR Special License Condition?
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	Are sampling results forwarded to the Department's Regional Office?
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	Annually, semiannually?
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	Biannually?
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	Monthly?
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	Are secondary containment systems located outside the property?
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	Has a detailed description of the secondary containment systems been submitted to the Department?
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	Do all secondary containment systems meet the Department's standards in 6NYCRR 613-4.1(b)(1)(v) or 613-4.1(c)(1)? <i>Was a written and signed well detection sheet performed?</i>
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	Was a five-year in-situ secondary containment system integrity inspection performed?
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	Is a copy of last inspection report attached?
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	Was the inspection approved by the Department? <i>Was a written and signed well detection sheet performed?</i>
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	Does the Spill Prevention and Containment Plan (SPC) evaluate groundwater geology, hydrology, contamination and risks?
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	Do secondary containment systems do not meet standards set forth in 6NYCRR 613-4.1(b)(1)(v) or 613-4.1(c)(1)? <i>Have engineering plans been submitted to the Department?</i>
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	Has the Department approved the engineering plans?

**SUPPLEMENTAL INFORMATION**

**ENVIRONMENTAL COMPLIANCE REPORT**

**SECTION D**

**ONSHORE MAJOR OIL STORAGE FACILITY LICENSING  
CONDITIONS**

**I – CLOSURE PLAN and  
III-SECONDARY CONTAINMENT**

## **SUPPLEMENTAL INFORMATION**

### **Environmental Compliance Report - Section D**

I. (C.) Closure Plan

Tank Number 836-01 has been permanently taken out-of-service as per 6 NYCRR Part 613-4.5(b). This occurred on 3/26/15. See attached certified report including BNL Process Knowledge Form.

III. SECONDARY CONTAINMENT

C.) and F.) In mid-July of 2016 the geotextile-lined, secondary containment berms for above-ground Tank Numbers 4, 9 and 10 (all used for the storage of #6 Fuel Oil) failed the flood -berm permeability test that was performed by a third-party engineering firm. Reports associated with these tests were forwarded to the NYSDEC Spill Engineer and a corrective action plan is currently being developed for submission to the Regional NYSDEC Spill Engineer for review and eventual approval.

D.) The secondary containment berms for Tank Numbers 3, 5, and 6 were previously tested after berm rehabilitation projects were completed and have passed their respective flood tests. Tank Number 3 was tested in April 2013 and Tank Numbers 5 and 6 (common berm) were tested in June 2014.

**Environmental Compliance Report - Section D**

I.(C.) CLOSURE PLAN

**Out-of-Service Report for Tank No. 836-01**



**PROCESS KNOWLEDGE FORM  
FOR CLEAN AND SUSPENSION ENCUMBERED METALS**

Waste Quantity (pounds): 6000 lbs or Total volume of waste (ft<sup>3</sup>): 350 CF

# of items: 4 Detailed description of items: See attached

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**CERTIFICATION**

Based upon my radiological and chemical process knowledge of the origin, storage, and use of the items(s) listed, I certify that all of the applicable information on this form is correct.

<u>S Ferrone</u>	<u>Stephen Ferrone</u>	<u>22585</u>	<u>3/30/15</u>
Print name of Requestor	Signature of Requestor	Life #	Date

**All Suspension Encumbered Metal must be transported to the Waste Management Facility and/or designated area and placed into a metals disposal container(s). Items must fit into waste container(s) – contact WM for size requirements. Suspension Encumbered Metals will NOT be recycled.**

**NOTE: If any unacceptable item(s) is found within the metals disposal container, they will be removed and properly disposed of through Waste Management. Any associated costs will be billed back to the responsible department(s). If any spills occur due to oils or chemicals not being properly removed, then the associated cleanup and disposal costs will also be the responsibility of the owning department(s).**


TAD: FD-888 .gnc

**NYSDEC Major Petroleum Facility License # 1-1700**

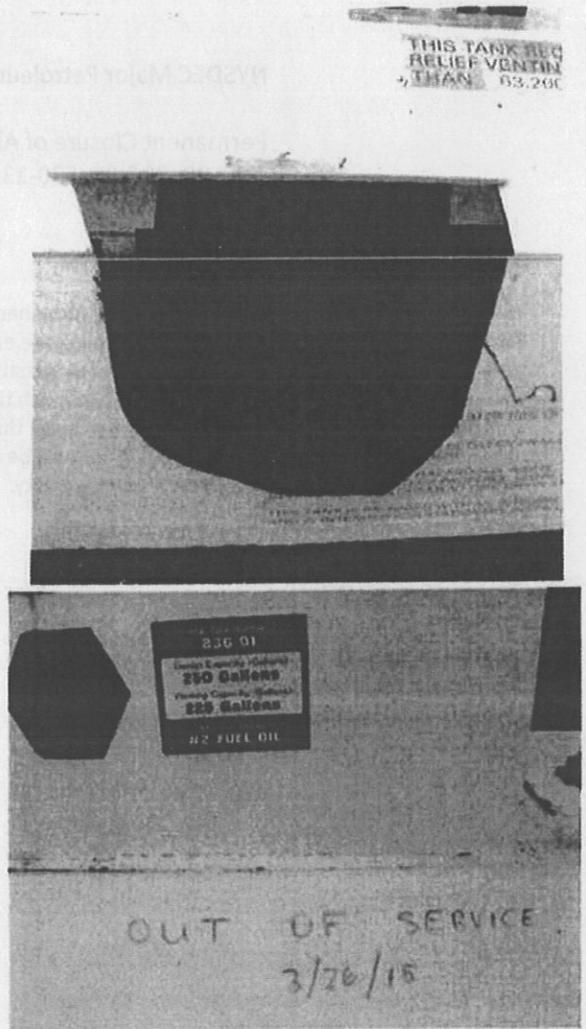
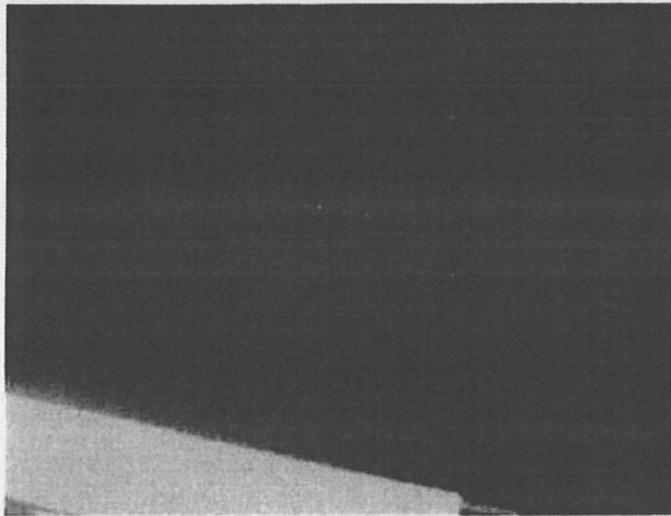
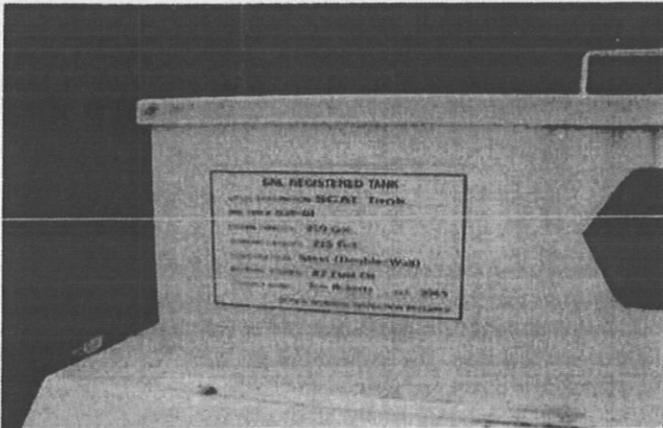
**Permanent Closure of Above Ground Tanks:  
452-08, 836-01, 630-13 and 422-05**

In accordance with NYSDEC requirements for permanent closure of above ground petroleum tanks and as per 6 NYCRR Part 613-4.5(b), the above, double walled tanks were emptied of petroleum and then cleaned by the use of a steam generator and a vactor truck so as to render the primary tank shell free of all petroleum liquids, petroleum vapors and any sludge. Additionally, the tanks were marked with the date of permanent closure. The liquid and sludge were transferred from the vactor and containerized inside three (3)-55 gallon metal drums and were placed inside a secondary containment structure. These drums will be properly disposed of off-site through the on-site, NYSDEC Part 373-permitted RCRA Hazardous Waste Storage facility.

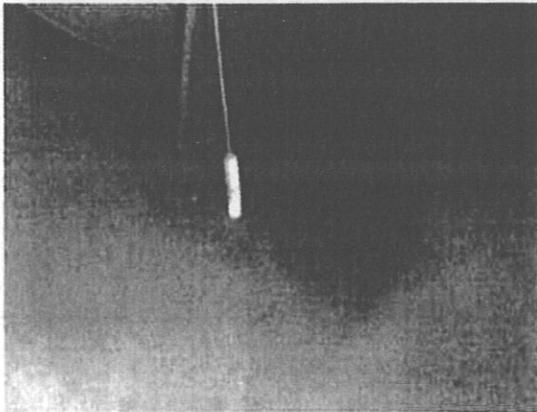
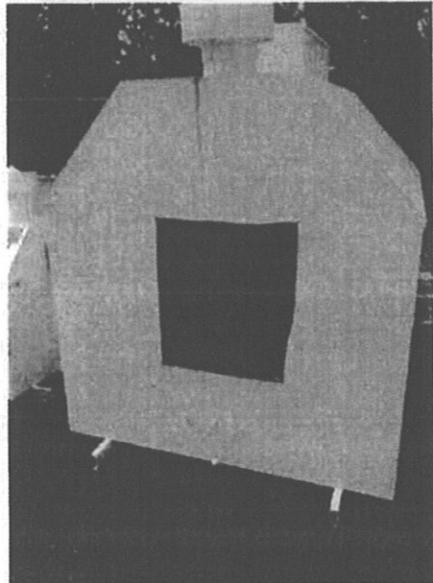
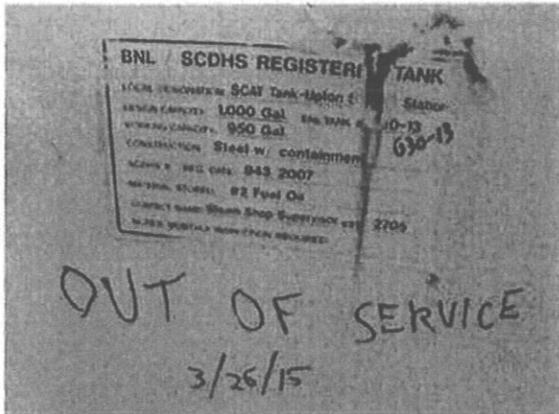


Stephen Ferrone, PE  
Brookhaven National Laboratory  
Environmental Compliance Representative  
Bldg. 129  
Upton, NY 11973

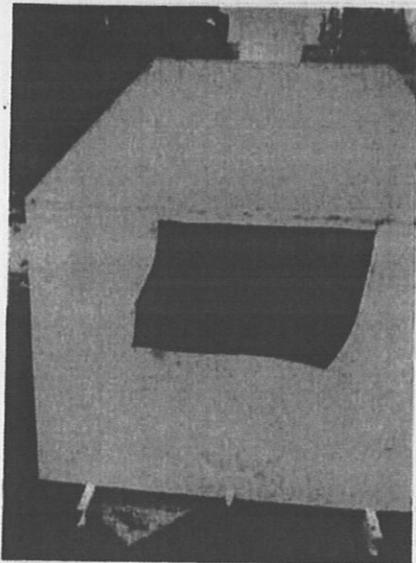
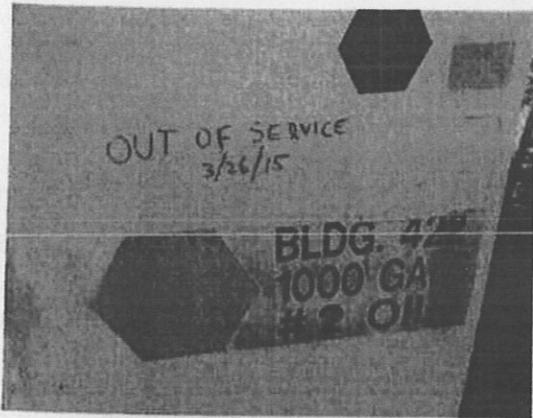
Bldg. 836-01 SCAT



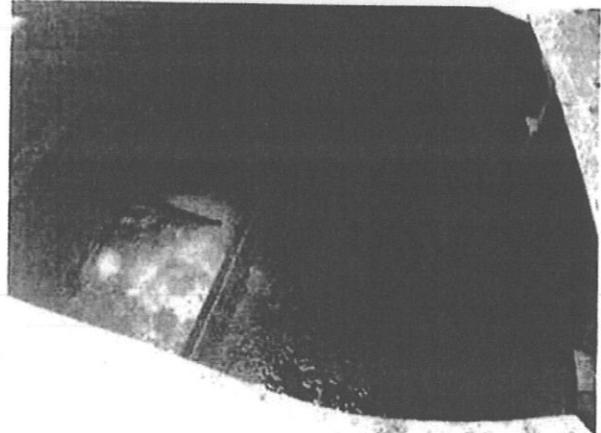
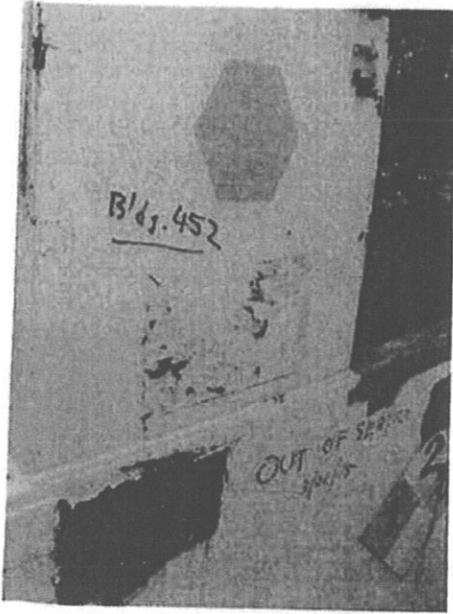
Bldg. 630-13 SCAT



Bldg. 422-05 SCAT



Bldg. 452-08 Lube Cube for Genset



**SUPPLEMENTAL INFORMATION**

**ENVIRONMENTAL COMPLIANCE REPORT**

**SECTION D**

**ONSHORE MAJOR OIL STORAGE FACILITY LICENSING  
CONDITIONS**

**VI – VIOLATIONS**

**Environmental Compliance Report  
Supplemental Information  
Summary of Violations over 5-years**

**2012**

On February 14 and 15, 2012, NYSDEC conducted its annual inspection of all storage facilities included on the MPF license. Three conditions that required corrective action were identified: the audible segment of the high-level alarm for one of the satellite fuel oil storage tanks failed to operate; the need to take level readings from the Automatic Tank Gauge for BNL's underground storage tanks before and after each delivery and compare the delivery tickets to ensure accuracy; and the identification of a minor piping leak under the regular gasoline pump at the on-site service station. All conditions were corrected in 2012 in accordance with NYSDEC directives.

**2013**

On March 12 and 13, 2013, NYSDEC conducted its annual inspection of all storage facilities included on the MPF license. Five conditions that required corrective action were identified: faded/illegible color coding and tank identification labels and four instances where electronic leak detectors or high level alarm systems were not fully functional. All conditions were corrected in 2013 in accordance with NYSDEC directives.

**2014**

On April 17 and 18, 2014, NYSDEC conducted its annual inspection of all storage facilities included on the MPF license. Seven findings that required corrective action were identified: evaluation/repairs of the cathodic protection system for Tanks #9 and #10, need for repairs of Tank #3 secondary containment to satisfy permeability requirements for product stored, shear valve for mid-grade dispenser not installed correctly, additional cleanup required from previously reported spill of motor oil from failed piping on Tank #423-17, completion of ten-year Out-of-Service inspections/reporting for Tanks #3 and #6, minor paint failure on shell plate of Tanks #5, and the need to update BNL's Best Management Practices (BMP) Plan. Five of the seven findings were corrected in 2014 in accordance with NYSDEC directives. The remaining two findings will continue to be evaluated/addressed in 2015, and updates on progress will be provided to NYSDEC on a regular basis.

**2015**

Due to strong performance on past annual petroleum bulk storage compliance audits and strong overall program, the NYSDEC exempted the Laboratory from its annual inspection in 2015.

**2016**

On July 19 and 20, 2016, NYSDEC conducted its annual inspection of all storage facilities included on the MPF license. Four findings that required corrective actions were identified: Tank No. 725-13's overfill prevention device (tank gauge) was inoperative, Tank No. 630-06's high level alarm (electronic) was inoperative, and Tank No. 488-05's identification labelling was partially covered. All conditions were corrected in 2016 in accordance with NYSDEC directives.