STATE OF MAINE

Department of Environmental Protection

Paul R. Lepage
GOVERNOR

Patricia W. Aho
COMMISSIONER

March 5, 2015

Mr. Drake Bell
Terminal Manager
Irving Oil Terminals Inc.
52 Station Ave.
Searsport, ME. 04974
e-mail: Drake.Bell@irvingoil.com

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0021181
Maine Waste Discharge License (WDL) Application #W000942-5S-F-R
Proposed Draft Permit

Dear Mr. Bell:

Enclosed is a **proposed draft** MEPDES permit and Maine WDL (permit hereinafter) which the Department proposes to issue as a final document after opportunity for your review and comment. By transmittal of this letter you are provided with an opportunity to comment on the proposed draft permit and its conditions. If it contains errors or does not accurately reflect present or proposed conditions, please respond to this Department so that changes can be considered.

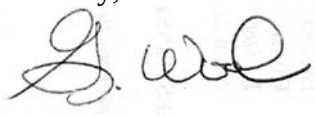
By copy of this letter, the Department is requesting comments on the proposed draft permit from various state and federal agencies, as required by our regulations, and from any other parties who have notified the Department of their interest in this matter.

All comments must be received in the Department of Environmental Protection office on or before the close of business **Monday, April 6, 2015.** Failure to submit comments in a timely fashion will result in the final document being issued as drafted. Comments in writing should be submitted to my attention at the following address:

Maine Department of Environmental Protection
Bureau of Land & Water Quality
Division of Water Quality Management
17 State House Station
Augusta, ME 04333

If you have any questions regarding the matter, please feel free to call me at 287-7693.

Sincerely,



Gregg Wood
Division of Water Quality Management
Bureau of Land and Water Quality

Enc.

cc: Tanya Hovell, DEP/EMRO
Barry Mower, DEP/CMRO
Lori Mitchell, DEP/CMRO
David Webster, USEPA
David Pincumbe, USEPA
Olga Vergara, USEPA
Maine Department of Marine Resources
Maine Department of Inland Fisheries & Wildlife
Ivy Frignoca, CLF

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION
AUGUSTA, ME 04333

DEPARTMENT ORDER

IN THE MATTER OF

IRVING OIL TERMINALS INC.	)	MAINE POLLUTANT DISCHARGE
SEARSPORT, WALDO COUNTY, MAINE	)	ELIMINATION SYSTEM PERMIT
BULK FUEL STORAGE FACILITY	)	AND
W000942-5S-F-R	)	WASTE DISCHARGE LICENSE
ME0021181 **APPROVAL**	)	**RENEWAL**

Pursuant to the provisions of the Federal Water Pollution Control Act, Title 33 USC, Section 1251, *et. seq*. and Maine Law 38 M.R.S.A., Section 414-A *et. seq*., and applicable regulations, the Department of Environmental Protection (Department hereinafter) has considered the application of IRVING OIL TERMINALS INC. (Irving/permittee hereinafter), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

The permittee has submitted a timely and complete application to the Department for the renewal of combination Maine Waste Discharge License (WDL) # W000942-5S-E-R /Maine Pollutant Discharge Elimination System (MEPDES) Permit # ME0021181 (permit hereinafter), which was issued by the Department on April 9, 2010, for a five-year term. The permit authorized the discharge of treated storm water runoff up to a daily maximum flow rate of 1,019 gallons per minute (gpm) and hydrostatic test water up to a daily maximum flow rate of 2.85 million gallons per day, to Searsport Harbor (Penobscot Bay), Class SB. See **Attachment A** of the Fact Sheet for a site location map.

PERMIT SUMMARY

This permit is carrying forward all of the terms and conditions of the April 9, 2010 permit.

CONCLUSIONS

BASED on the findings in the attached **PROPOSED RAFT** Fact Sheet dated March 5, 2015, and subject to the Conditions listed below, the Department makes the following CONCLUSIONS:

1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.

2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.

3. The provisions of the State's antidegradation policy, 38 MRSA Section 464(4)(F), will be met, in that:

    a. Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;

    b. Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;

    c. Where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;

    d. Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification, that higher water quality will be maintained and protected; and

    e. Where a discharge will result in lowering the existing quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.

4. The discharge will be subject to effluent limitations that require application of best practicable treatment.

ACTION

THEREFORE, the Department APPROVES the application of IRVING OIL TERMINALS INC., to discharge 1,019 gpm of treated storm water and 2.85 MGD of hydrostatic test water from a bulk fuel storage and transfer facility to Searsport Harbor (Penobscot Bay),Class SB, subject to the attached conditions and all applicable standards and regulations:

1. "Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits," revised July 1, 2002, copy attached.

2. The attached Special Conditions, including any effluent limitations and monitoring requirements.

3. This permit becomes effective upon the date of signature below and expires at midnight five (5) years after that date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the terms and conditions of this permit and all subsequent modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. [*Maine Administrative Procedure Act,* 5 M.R.S.A. § 10002 and *Rules Concerning the Processing of Applications and Other Administrative Matters,* 06-096 CMR 2(21)(A) (effective April 1, 2003)].

DONE AND DATED AT AUGUSTA, MAINE, THIS ____DAY OF_____, 2015.

COMMISSIONER OF ENVIRONMENTAL PROTECTION

BY:_____
Patricia W. Aho, Commissioner

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application September 3, 2014.

Date of application acceptance September 4, 2014.

Date filed with Board of Environmental Protection _____

This Order prepared by Gregg Wood , BUREAU OF LAND & WATER QUALITY

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge treated wastewater to Searsport Harbor (Penobscot Bay). Such treated wastewater discharges shall be limited and monitored by the permittee as specified below:

OUTFALL #001 - Storm water runoff(1)

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	Monthly Average as specified	**Daily Maximum** as specified	**Monthly Average** as specified	**Daily Maximum** As specified	**Measurement Frequency** as specified	**Sample Type** as specified
Flow(2,3) *[50050]*	---	---	---	1,019 gpm *[78]*	1/Quarter *[01/90]*	Measure *[MS]*
Total Suspended Solids *[00530]*	---	---	50 mg/L(4) *[19]*	100 mg/L *[19]*	1/Quarter *[01/90]*	Grab(5) *[GR]*
Oil & Grease *[00552]*	---	---	---	15 mg/L *[19]*	1/Quarter *[01/90]*	Grab(5) *[GR]*
Benzene *[34030]*	---	---	---	Report mg/L *[19]*	1/Quarter *[01/90]*	Grab(5) *[GR]*

The italicized numeric values bracketed in the table and in subsequent text are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports.

FOOTNOTES: See pages 6 – 8 of this permit for applicable footnotes.

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

2. The permittee is authorized to discharge hydrostatic test water to Searsport Harbor (Penobscot Bay). Such discharges shall be limited and monitored by the permittee as specified below:

ADMINISTRATIVE OUTFALL #002 - Hydrostatic test water(1)

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	Monthly Average as specified	Daily Maximum as specified	Monthly Average as specified	Daily Maximum As specified	Measurement Frequency As specified	Sample Type as specified
Flow (3) *[50050]*	---	---	---	2.85 MGD*[03]*	1/Discharge ***[01/DS]***	Measure *[MS]*
Total Suspended Solids *[00530]*	---	---	---	50 mg/L *[19]*	1/Discharge ***[01/DS]***	Grab(5) *[GR]*
Oil & Grease(6) *[00552]*	---	---	---	15 mg/L *[19]*	1/Discharge ***[01/DS]***	Grab(5) *[GR]*
Total Residual Chlorine(7) *[50060]*	---	---	---	13 ug/L *[28]*	1/Discharge ***[01/DS]***	Grab(5) *[GR]*

The italicized numeric values bracketed in the table and in subsequent text are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports.

FOOTNOTES: See pages 6 – 8 of this permit for applicable footnotes.

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

Footnotes:

Sampling Locations: Discharges from Outfall #001 and #002 shall be sampled independently, prior to co-mingling with any other waste stream(s).

Outfall #001 (storm water) samples for all parameters shall be collected after the oil/water separator during the first hour of discharge.

Outfall #002 (hydrostatic test water) samples for all parameters shall be collected from the tank or piping prior to discharge directly to the receiving waters or before being co-mingled with storm water runoff.

Sampling and analysis must be conducted in accordance with; a) methods approved in 40 Code of Federal Regulations (CFR) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis shall be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services. Samples that are analyzed in-house or sent to another POTW licensed pursuant to *Waste discharge licenses*, 38 M.R.S.A. § 413 are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (last amended February 13, 2000).

Storm Water Runoff (Outfall #001) and Hydrostatic Test Water (Outfall #002)

(1) The flow through the oil/water separator shall consist of storm water runoff only except as specified for hydrostatic test water discharged through Outfall #002. The direct or indirect discharge of liquids from petroleum product pipelines, transport tanks, vessels or storage tanks through the oil/water separator is not authorized by this permit except as specified for Outfall #002. No chemical treatment such as dispersants, emulsifiers or surfactants may be added to the oil/water separator or any wastewater discharge stream contributing flow to the oil/water separator.

(2) **Flow** - At no time shall the flow through the oil/water separator exceed the design flow of the separator (1,019 gpm).

(3) Flow measurement devices or calculated flow estimates via pump curves or tank volumes or other methods must be approved by the Department. Measurement of flow may be suspended upon approval from the Department in the event the permittee limits flow to the separator by installing a permanent constriction to prevent flows from exceeding the design capacity of the separator. The installation, replacement or modification of any flow measurement or constriction device requires prior approval by

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

Footnotes:

the Department. For the purposes of this permitting action, utilizing pump curves and run times for measuring flows for Outfall #001 and utilizing the strapping chart (a chart showing amount of material stored versus depth of material in tank) for Outfall #002 for measuring flow are approved by the Department.

(4) **Total Suspended Solids (TSS)** – The monthly average concentration limitation of 50 mg/L for TSS is based on an average over the previous twelve-month period. For the purposes of this permitting action, the **twelve-month rolling average** calculation is based on the test results for the most recent twelve-month period. Months when there is no discharge are not to be included in the calculations.

(5) One grab sample for TSS, benzene and oil & grease analyses for each sampling event shall be taken during the first hour of discharge.

(6) Oil and grease monitoring is not required if the discharge of hydrostatic test water is from tanks and pipes that are gas-free as certified by a marine chemist. The test water is not required to be pretreated through the oil/water separator, provided the test water is municipal water or from some other source which does not contain oil and grease.

(7) **Total residual chlorine (TRC)** - When using chlorinated hydrostatic test water, the total residual chlorine shall be measured and limited as specified in the effluent limitations for hydrostatic test water.

For the purposes of this permit, compliance with the daily maximum limitation in this permit will be based on EPA's current minimum level (ML) of detection of 20 ug/L (0.02 mg/L). The permittee shall utilize approved test methods that are capable of producing analytical results down to or below 20 ug/L. All analytical test results shall be reported to the Department including results which are detected below the ML.

Results reported below the RL will be considered to be in compliance with the permit. The Discharge Monitoring Reports will be coded with the RL of 20 ug/L such that detectable results reported below 20 ug/L but greater than the daily maximum water quality based limit established in this permit will not be recorded as violations of the permit.

SPECIAL CONDITIONS

B. NARRATIVE EFFLUENT LIMITATIONS

1. The effluent shall not contain a visible oil sheen, foam or floating solids at any time that would impair the uses designated for the classification of the receiving waters.

2. The effluent shall not contain materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the uses designated for the classification of the receiving waters.

3. The discharge shall not cause visible discoloration or turbidity in the receiving waters which would impair the uses designated for the classification of the receiving waters.

4. Notwithstanding specific conditions of this license the effluent must not lower the quality of any classified body of water below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.

C. OIL/WATER SEPARATOR MAINTENANCE

The permittee shall maintain an up-to-date written Operations and Maintenance Plan for the oil/water separator. The plan shall include, but not be limited to, measures to ensure the separator performs within the designed performance standards of the system, is maintained on a routine basis to maximize the design capacity and efficiency of the system and that adequate staffing and training of personnel is provided to ensure compliance with discharge limitations. The Operations and Maintenance Plan shall remain on site at all times and will be subject to periodic inspection by Department personnel.

For the purposes of minimizing suspended solids in the storm water directed to the separator, the permittee shall implement best management practices (BMP's) for erosion and sedimentation control. See Department publication entitled, Maine Erosion And Sedimentation Control BMP’s for guidance. The permittee shall periodically inspect, maintain and repair erosion and sedimentation control structures as necessary.

D. HYDROSTATIC TEST WATER

Tanks and pipes being hydrostatically tested must be clean of product and all construction debris, including sandblasting grit, prior to testing and discharge through Outfall #002. The discharge must be dechlorinated if test results indicate that discharged water will violate water quality standards. Hydrostatic test water from tanks and pipes that are gas-free as certified by a marine chemist need not be discharged through the oil/water separator. The permittee shall notify the Department of an intended discharge of hydrostatic test water at least three days, excluding weekends, prior to the discharge.

SPECIAL CONDITIONS

E. STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

The permittee shall develop, implement, maintain and annually update a Storm Water Pollution Prevention Plan (SWPPP) for the facility that is consistent with the SWPPP requirements established in Part V of the Department's *Multi-Sector General Permit Maine Pollutant Discharge Elimination System Stormwater Discharge Associated with Industrial Activity*, dated April 26, 2011. See **Attachment B** of the attached Fact Sheet for a copy of Part V of the Multi-Sector General Permit. The permittee shall maintain a copy of the SWPPP on-site for Department or USEPA staff inspection. **Within 60 days of any change** in design, construction, operation, maintenance, or any chemical spill at the facility which has or may have a significant effect on the amount of pollutants present in storm water, the permittee shall amend the SWPPP and note all changes.

At a minimum frequency of once per calendar quarter, the permittee shall perform and document a visual examination of a storm water discharge in accordance with Department guidance document #DEPLW0768, *Standard Operating Procedure Guidelines for Visual Monitoring of Stormwater Associated with Industrial Activities*, including *Instructions for Completing the Visual Monitoring Form* and *Visual Monitoring Form* (all included as **Attachment C** of the Fact Sheet of this permit).The permittee shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The permittee must maintain the visual examination reports on-site with the SWPPP for a minimum of three years from the observation date.

F. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with: 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on September 4, 2014; 2) the terms and conditions of this permit; and 3) only from Outfalls #001and #002. Discharges of wastewater from any other point source are not authorized under this permit, and shall be reported in accordance with Standard Condition B(5), *Bypass*, of this permit.

SPECIAL CONDITIONS

G. MONITORING AND REPORTING

Monitoring results obtained during the previous calendar quarter shall be summarized for each quarter and reported in the months of **March June, September and December of each year** on separate Discharge Monitoring Report (DMR) forms provided by the Department and postmarked on or before the thirteenth (13^{th}) day of the month or hand-delivered to a Department Regional Office such that the DMR's are received by the Department on or before the fifteenth (15^{th}) day of the month following the completed reporting period. A signed copy of the DMR and all other reports required herein shall be submitted to the following address:

Department of Environmental Protection
Eastern Maine Regional Office
Bureau of Land and Water Quality
Division of Water Quality Management
106 Hogan Road
Bangor, Maine 04401

Alternatively, if you are submitting an electronic DMR (eDMR), the completed eDMR must be electronically submitted to the Department by a facility authorized DMR signatory not later than close of business on the 15^{th} day of the month following the completed reporting period. Hard Copy documentation submitted in support of the eDMR must be postmarked on or before the thirteenth (13^{th}) day of the month or hand-delivered to the Department's Regional Office such that it is received by the Department on or before the fifteenth (15^{th}) day of the month following the completed reporting period. Electronic documentation in support of the eDMR must be submitted not later than close of business on the 15^{th} day of the month following the completed reporting period.

H. REOPENING OF PERMIT FOR MODIFICATIONS

Upon evaluation of the tests results in the Special Conditions of this permitting action, new site-specific information, or any other pertinent test results or information obtained during the term of this permit, the Department may, at any time and with notice to the permittee, modify this permit to: (1) include effluent limits necessary to control specific pollutants or whole effluent toxicity where there is a reasonable potential that the effluent may cause water quality criteria to be exceeded; (2) require additional monitoring if results on file are inconclusive; or (3) change monitoring requirements or limitations based on new information such as mixing zone information/characteristics.

I. SEVERABILITY

In the event that any provision(s), or part thereof, of this permit is declared to be unlawful by a reviewing court, the remainder of the permit shall remain in full force and effect, and shall be construed and enforced in all aspects as if such unlawful provision, or part thereof, had been omitted, unless otherwise ordered by the court.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
AND
MAINE WASTE DISCHARGE LICENSE

Draft FACT SHEET

Date: **March 5, 2015**

PERMIT NUMBER: **ME0021181**
LICENSE NUMBER: **W000942-5S-F-R**

NAME AND ADDRESS OF APPLICANT:

IRVING OIL TERMINALS INC.
52 Station Avenue
Searsport, ME 04974

COUNTY WHERE DISCHARGE OCCURS: **Waldo**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

Mack Point
Searsport, ME 04974

RECEIVING WATER AND CLASSIFICATION: **Searsport Harbor (Penobscot Bay), Class SB**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Mr. Drake Bell**
(207) 548-2541
Drake.Bell@irvingoil.com

1. APPLICATION SUMMARY

a. Application - Irving Oil Terminals Inc., (Irving/ permittee hereinafter) has submitted a timely and complete application to the Department for the renewal of combination Maine Waste Discharge License (WDL) # W000942-5S-E-R /Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0021181 (permit hereinafter), which was issued by the Department on April 9, 2010, for a five-year term. The permit authorized the discharge of treated storm water runoff up to a daily maximum flow rate of 1,019 gallons per minute (gpm) and hydrostatic test water up to a daily maximum flow rate of 2.85 million gallons per day, to Searsport Harbor (Penobscot Bay), Class SB. See **Attachment A** of this Fact Sheet for a site location map.

1. APPLICATION SUMMARY (cont'd)

b. Source Description: The permittee is engaged in the transfer (ship to shore), storage and distribution of refined petroleum products such as gasoline and distillate oils. The site has two above-ground storage tanks (Tanks 7 & 8) having a gross capacity of approximately 135,000 barrels (5,670,000 gallons) each and store No. 2 fuel. These tanks are located in Tank Farm #2, which is composed of a clay-lined dike with sufficient capacity to contain the entire contents of either tank in the event of an unplanned discharge. In addition to tankage, there is an extensive above-ground and below-ground network of piping. These tanks and pipelines are completely enclosed and under normal operations, petroleum products do not come into contact with storm water. During normal maintenance, repairs and upgrades of these tanks and pipelines, the potential for miscellaneous drips and spills may occur. Total drainage area of the site contributing to the discharge is entirely from Tank Farm #2 which is approximately 4.4 acres. Tank Farm #2 is associated with a much larger bulk fuel storage and transfer facility (11 storage tanks in two tank farms—Tank Farm #1 and Tank Farm #3) owned and operated by Irving. Tank Farms #1 and #3 are located approximately 0.5 miles to the southeast of Tank Farm #2. Discharges of treated storm water to Long Cove (east side of Mack Point) from Tank Farms #1 and #3 are permitted under a separate MEPDES permit/WDL.

Sanitary wastewater generated by employees is conveyed to the Town of Searsport's wastewater treatment facility which is also regulated by the USEPA and the Department via a separate NPDES permit/WDL.

Outfall #001 is associated with Tanks 7 and 8 at the facility. All final discharge from Outfall #001 is treated by an oil/water separator. There are no overflows, bypasses or emergency discharge locations associated with this outfall.

Hydrostatic test water is used to test structural integrity of the tanks when necessary. Discharges of the test water are from tanks which have been washed and cleaned in preparation for repair and then cleaned before testing. The permittee has indicated that hydrostatic testing of the largest tank would discharge approximately 5.67 million gallons of hydrostatic test water.

Outfall #001 is designated as Administrative Outfall #002 when hydrostatic test water is discharged. As of this permitting cycle, Administrative Outfall #002 is now identified as the only outfall for hydrostatic test water. The discharge locations are shown in **Attachment A** of this Fact Sheet.

c. Wastewater treatment: The majority of wastewater discharged through Outfall #001 is storm water that is collected in the diked area housing Tanks 7 and 8. All storm water that accumulates in the dike is inspected by facility personnel for evidence of oil prior to being discharged from the dike. If personnel determine that the storm water is contaminated by petroleum, measures are taken to recover the oil prior to being discharged from the dike. The diked area is either manually drained by gravity or pumped out and conveyed to an oil/water separator where it receives best practicable treatment prior to discharge. The drain valves are kept closed for safety and must be opened each

1. APPLICATION SUMMARY (cont'd)

time the diked area is drained. The oil/water separator is cleaned annually and any recovered oily waste is disposed offsite via a State of Maine licensed waste handler. The permittee has indicated in the application for permit renewal that the oil/water separator is rated for 1,019 gallons per minute.

This permit does not require further treatment of the hydrostatic test water unless dechlorination is required to protect water quality.

All waste streams described in this section are discharged to Searsport Harbor through one outfall pipe designated as Outfall #001 for storm water discharges or as Administrative Outfall #002 for hydrostatic test water discharges. The outfall pipe is six (6) inches in diameter and is exposed at mean low water.

2. PERMIT SUMMARY

a. This permitting action is carrying forward all of the terms and conditions of the previous permit.

b. History: The most current/relevant licensing/permitting actions include:

April 11, 1979 – The EPA issued NPDES permit #ME0021181 for a five-year term.

March 3, 2000 – The Department issued WDL#W000942-5S-C-R renewal for a five-year term.

March 9, 2005 – The Department issued WDL#W000942-5S-D-R renewal for a five-year term.

April 9, 2010 – The Department issued combination MEPDES permit ME0021181/WDL #W000942-5S-E-R for a five-year term.

September 3, 2014 – Irving Oil Terminals Inc. submitted a timely and complete application to the Department to renew the April 9, 2010, MEPDES permit/WDL.

3. CONDITIONS OF PERMITS

Conditions of licenses, 38 M.R.S.A. § 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System. In addition, *Certain deposits and discharges prohibited*, 38 M.R.S.A., § 420 and 06-096 CMR 530 require the regulation of toxic substances not to exceed levels set forth in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (effective October 9, 2005), and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

4. RECEIVING WATER QUALITY STANDARDS

Classifications of estuarine and marine waters, 38 M.R.S.A. §469 classifies Searsport Harbor at the point of discharge as a Class SB waterway. 38 M.R.S.A §465-(B)(2) describes the classification standards for Class SB waters as follows;

Class SB waters must be of such quality that they are suitable for the designated uses of recreation in and on the water, fishing, aquaculture, propagation and harvesting of shellfish, industrial process and cooling water supply, hydroelectric power generation, navigation and as habitat for fish and other estuarine and marine life. The habitat must be characterized as unimpaired.

The dissolved oxygen content of Class SB waters must be not less than 85% of saturation. Between May 15th and September 30th, the numbers of enterococcus bacteria of human and domestic animal origin in these waters may not exceed a geometric mean of 8 per 100 milliliters or an instantaneous level of 54 per 100 milliliters. In determining human and domestic animal origin, the department shall assess licensed and unlicensed sources using available diagnostic procedures. The numbers of total coliform bacteria or other specified indicator organisms in samples representative of the waters in shellfish harvesting areas may not exceed the criteria recommended under the National Shellfish Sanitation Program, United States Food and Drug Administration.

Discharges to Class SB waters may not cause adverse impact to estuarine and marine life in that the receiving waters must be of sufficient quality to support all estuarine and marine species indigenous to the receiving water without detrimental changes in the resident biological community. There may be no new discharge to Class SB waters that would cause closure of open shellfish areas by the Department of Marine Resources. For the purpose of allowing the discharge of aquatic pesticides approved by the department for the control of mosquito-borne diseases in the interest of public health and safety, the department may find that the discharged effluent will not cause adverse impact to estuarine and marine life as long as the materials and methods used provide protection for nontarget species. When the department issues a license for the discharge of aquatic pesticides authorized under this paragraph, the department shall notify the municipality in which the application is licensed to occur and post the notice on the department's publicly accessible website.

5. RECEIVING WATER CONDITIONS

The State of Maine 2012 Integrated Water Quality Monitoring and Assessment Report, published by the Department lists Long Cove as a portion of Waterbody #722-24/Department of Marine Resources Area #33 in a tabled entitled "*Category 4-A: Estuarine and Marine Waters with Impaired Use, TMDL Completed.*" Current sampling of the 4.36 square mile area, designated Waterbody ID 722-24, indicated the presence of elevated fecal levels. The Department completed the TMDL in 2009 and it was approved by USEPA on September 28, 2009.

The report also lists the tidewaters of Searsport as "Category 5-D: Estuarine and Marine Waters Impaired by Legacy Pollutants." All estuarine and marine waters capable of supporting American lobster are listed in Category 5-D for shellfish consumption due to elevated levels of PCBs and other persistent, bioaccumulating substances in tomalley.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Discharges from activities associated with bulk petroleum stations and terminal operations must satisfy best conventional technology (BCT) and best available technology (BAT) requirements and must comply with more stringent water quality standards if BCT and BAT requirements are not adequate. On September 25, 1992, EPA promulgated through its General Permit for Storm Water Discharge Associated with Industrial Activity, that the minimum BAT/BCT requirement for storm water discharges associated with industrial activity is a Storm Water Pollution Prevention Plan (SWPPP) [57 FR, 44438]. This permitting action is establishing the requirement for the permittee to implement a SWPPP. This permitting action is carrying forward numeric effluent limitations and/or monitoring requirements for petroleum constituents from the previous permitting action to ensure the discharges do not contribute to violations of the State's water quality standards.

This permit authorizes the discharge of treated storm water and hydrostatic test water by applying numeric effluent limitations which are within applicable water quality standards. The effluent parameters for each waste stream are discussed in more detail below. The sections are arranged according to the effluent characteristic(s) being regulated.

a. Storm Water Runoff – Outfall #001

1. Flow - Typically, the treatment technology for storm water runoff employed by bulk storage petroleum terminals is an oil/water [O/W] separator. This device uses gravity to separate the lower-density oils from water, resulting in an oil phase above the oil/water interface and a heavier particulate (sludge) phase on the bottom of the O/W separator. It follows that the sizing of O/W separators is based on the following design parameters: water flow rate, density of oil to be separated, desired percentage removal of oil and the operating temperature range.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

The O/W separator daily maximum flow limit of 1,019 gpm is based on the capacity rating information provided by the permittee. The O/W separator daily maximum flow limit and minimum monitoring frequency requirement of once every calendar quarter is being carried forward in this permitting action.

A review of the quarterly discharge flow data as reported on the DMRs submitted to the Department for the period January 2011 – June 2014 indicates the following:

Flow

Value	Limit (gpm)	Range (gpm)	Average (gpm)	#DMR's
Daily Maximum	1019	50 – 50	50	14

2. Total Suspended Solids (TSS) – Total suspended solids are limited in this permit to minimize the potential carryover of petroleum fractions to the receiving water(s) by adsorption to particulate matter or suspended solids. Both heavy metals and polynuclear aromatic hydrocarbons (PAHs) readily adsorb to particulate matter.

   This permitting action is carrying forward the daily maximum TSS concentration limit of 100 mg/L based on an EPA Region I BPJ determination that the technology guidelines promulgated at 40 CFR Part 423—*Steam Electric Power Generating Point Source Category*, for point source discharges of low-volume wastewater were appropriate to control the discharge of sediment particles and oils from bulk storage petroleum terminals in the region.

   This permitting action is carrying forward the twelve-month rolling averaging period for compliance with the monthly average TSS concentration limit of 50 mg/L based on the Department's BPJ.

   As stated in Footnote #4 of Special Condition A, *Effluent Limitations and Monitoring Requirements*, the 12-month rolling averaging period is based on the most recent twelve months with sampling data. Months where no discharge took place are excluded (i.e., do not figure in a zero) in the calculation.

   A review of the quarterly TSS data as reported on the DMRs submitted to the Department for the period January 2011 – June 2014 indicates the following:

TSS

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)	#DMR's
Daily Maximum	100	4-46	9	14
12-month Rolling Average	50	5 - 23	8	14

Results reported as "less than" were considered to be present at the minimum detection limit for calculation purposes.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

a. Storm Water Runoff – Outfall #001 (cont'd)

3. Oil and Grease (O&G) – This permitting action is carrying forward the daily maximum oil and grease concentration limit of 15 mg/L based on Department BPJ as facilities equipped with properly designed, operated and maintained oil/water separator systems are capable of reducing oil content to 15 mg/L or less.

A review of the quarterly O&G data as reported on the DMRs submitted to the Department for the period January 2011 – June 2014 indicate the following:

Oil and Grease

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)	#DMR's
Daily Maximum	15	< 1 – 13	2	14

Results reported as "less than" were considered to be present at the minimum detection limit for calculation purposes.

4. Benzene – Three gasoline compounds with the highest solubilities are: naphthalene, propylene, and benzene. Propylene and naphthalene, however, are minor constituents of gasoline. In the past, benzene has been selected as the main pollutant of concern in light distillates such as gasoline since it existed in light distillates at significant concentrations.

A traditional approach to limiting effluents contaminated with gasoline or other light distillates has been to limit the aggregate parameter of: benzene, ethylbenzene, toluene, and total xylenes (BETX). This approach stems from the petroleum industry's practice of determining the quality of fuels by measuring BETX, which can be highly variable among gasoline products. Of the four aromatics, benzene is by far the most soluble in water. Because of its relatively high solubility in water, benzene can be considered the "limiting pollutant parameter." Therefore, a "report only" monitoring requirement of the daily maximum concentration of benzene is being carried forward in this permitting action as a screening parameter for BETX compounds.

A review of the quarterly benzene data as reported on the DMRs submitted to the Department for the period January 2011 – June 2014 indicate the following:

Benzene

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)	#DMR's
Daily Maximum	Report	< 0.001 – <0.001	< 0.001	14

Results reported as "less than" were considered to be present at the minimum detection limit for calculation purposes.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

b. Hydrostatic Test Water (Administrative Outfall #002)

This permitting action is carrying forward the hydrostatic test water monitoring requirements from the previous permitting action. The permittee did not discharge hydrostatic test water during the previous permitting cycle.

7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

As permitted, the Department has determined the existing water uses will be maintained and protected and the discharge will not cause or contribute to the failure of the waterbody to meet standards for Class SB classification.

8. PUBLIC COMMENTS

Public notice of this application was made in the *Bangor Daily News* on or about August 18, 2014. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses*, 06-096 CMR 522 (effective January 12, 2001).

9. DEPARTMENT CONTACTS

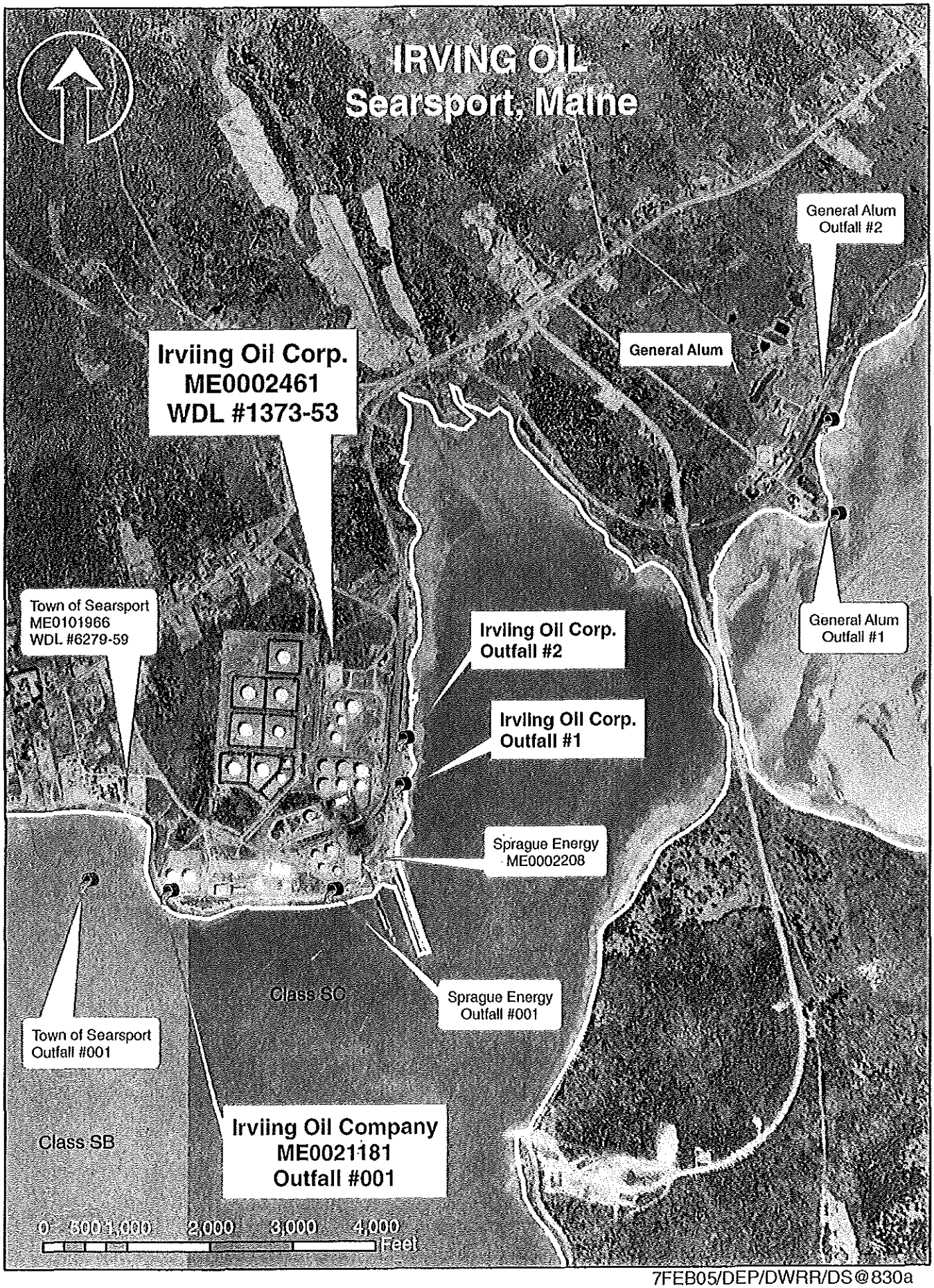
Additional information concerning this permitting action may be obtained from and written comments should be sent to:

Gregg Wood
Division of Water Quality Management
Bureau of Land and Water Quality
Maine Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 email: gregg.wood@maine.gov Tel: (207) 287-7693

10. RESPONSE TO COMMENTS

Reserved until the close of the 30-day comment period.

ATTACHMENT A



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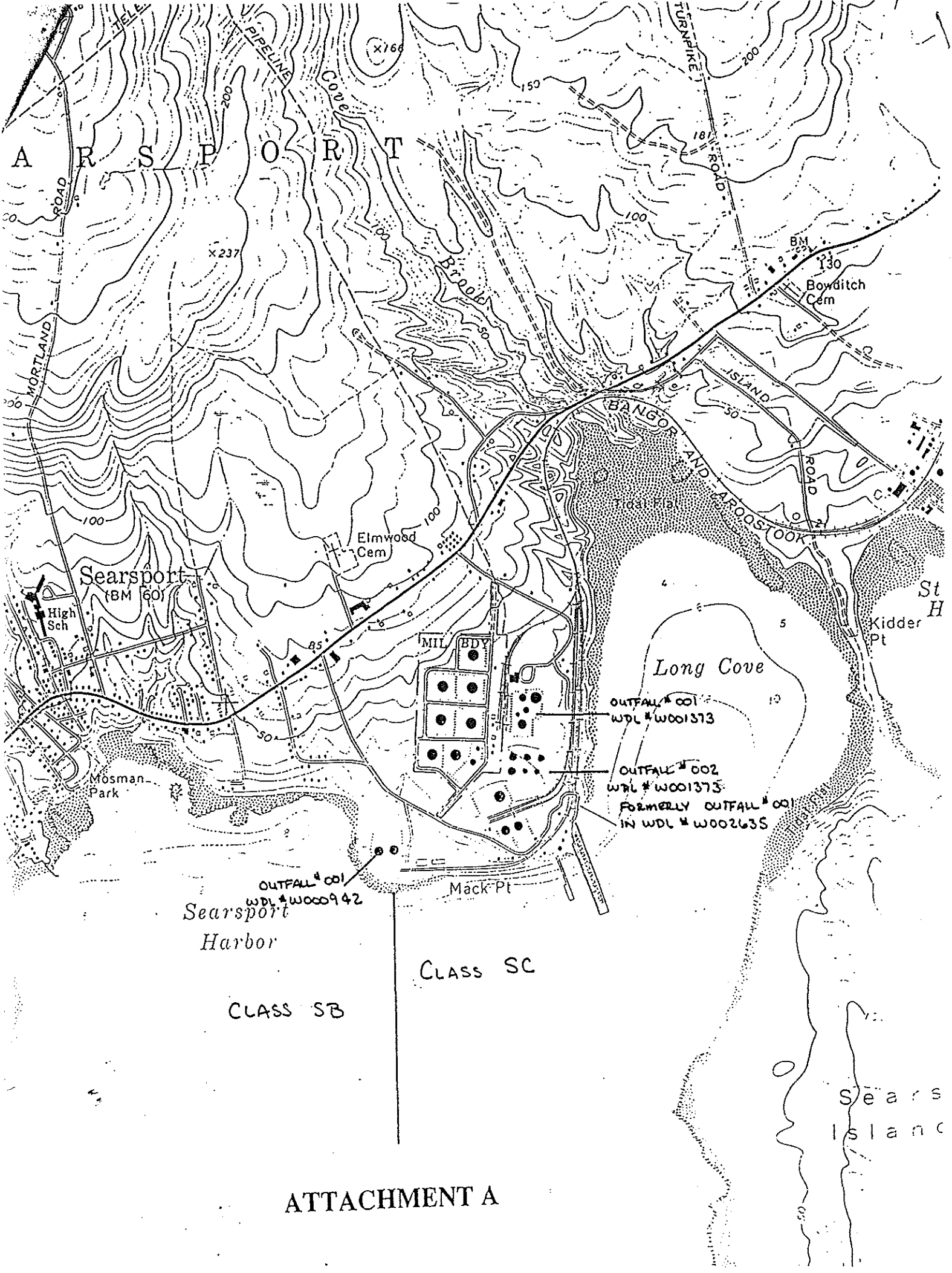

ATTACHMENT A

ATTACHMENT B

7. Additional information required by the Department as part of the NOI, to determine whether or not to authorize the discharge under this General Permit.

E. Where to Submit. A completed and signed NOI, in accordance with Part VIII(E), must be submitted with the appropriate fee to:

Maine Department of Environmental Protection
Municipal and Industrial Stormwater Coordinator
17 State House Station
Augusta ME 04333-0017

F. Deficient NOI. If any portion of the NOI does not meet one or more of the minimum requirements of this part, the applicant will be notified of the deficiency within the 30-day review period. It is the responsibility of the applicant to make all required changes and resubmit the NOI. The review period will begin when the revised NOI is received by the Department.

Part V. STORMWATER POLLUTION PREVENTION PLAN REQUIREMENTS

A. Stormwater Pollution Prevention Plan (SWPPP) Preparation. Each facility seeking coverage under this General Permit must prepare a SWPPP as described in Part III(A) prior to submitting a NOI for permit coverage. The SWPPP must be prepared in accordance with good engineering practices and identify potential pollutant sources which may reasonably be expected to affect the quality of stormwater discharges associated with industrial activity from the facility. The SWPPP must describe and ensure the implementation and maintenance of Best Management Practices (BMPs) and Control Measures as identified in this Part. Implementation of the SWPPP must reduce or eliminate polluted stormwater discharges associated with industrial activity, and assure compliance with this General Permit.

B. Control Measures. The permittee shall select, design, install and implement control measures (including BMPs) to address potential pollutant sources and any discharge(s) associated with industrial activity. Control measures must be evaluated in conjunction with monitoring to meet the terms and conditions of this General Permit. The selection of these control measures must be in accordance with good engineering practices, and the requirements of each Sector. (See Appendix A–AD.) The SWPPP must fully describe these control measures, including their implementation and maintenance schedules.

C. Non-Numeric Technology Based Effluent Limits. When developing control measures the following must be performed as applicable using the best practicable technology, best available technology, best control technology (BPT/BAT/BCT). The below listed Best Management Practices are considered limits of this General Permit which must be met for compliance. Additional Non-Numeric Technology Based Effluent Limits may also be

required as noted in the Sector specific requirements in Appendices A--AD. The methods utilized to meet these limits must be documented in the SWPPP:

1. The permittee shall minimize exposure of the manufacturing process, and material or product storage areas to stormwater (where practicable) by locating industrial activities and materials inside or by protecting them with storm resistant coverings. By eliminating the exposure of the manufacturing process, and material or product storage areas as required by Appendix AE, the facility may qualify for No Exposure Certification. The Department also encourages methods and designs which minimize or mitigate impervious area and reduce runoff.

2. The permittee shall perform good housekeeping procedures, and keep all exposed areas that are potential sources of pollutants clean and orderly. Implement at regular intervals, measures such as sweeping impervious areas, proper labeling of containers, and the storage of liquids within proper secondary containment.

3. The permittee shall regularly inspect, test, maintain and repair all industrial equipment, systems and BMPs to prevent situations that may result in leaks, spills or other releases of pollutants. If the permittee or Department inspector finds that a structural control measure(s) must be repaired or modified to ensure proper function, the permittee shall make the required repairs or modifications as quickly as possible, but no later than twelve (12) weeks from discovery unless otherwise authorized by the Department. Temporary control measures must be in place during this time to reduce or prevent discharges of pollutants. If a non-structural control measure is found to be deficient, the correction of the deficiency for that control measure must be initiated within five (5) days and completed no later than thirty (30) days from discovery. (See Part V(E).)

D. SWPPP Contents. The SWPPP must contain the following components:

1. Pollution Prevention Team. The SWPPP must identify the individual(s) (by name or title) whom comprise the facility's stormwater Pollution Prevention Team. The Pollution Prevention Team is responsible for assisting the facility/plant manager in developing, implementing, maintaining and revising the facility's SWPPP. Responsibilities of each team member must be listed.

2. Site Description. The SWPPP must include a narrative site description of the activities conducted at the site.

3. Site Map. The site map must include:

   a. Approximate drainage boundaries including directions of stormwater flow and outfall locations (use arrows to show flow path);

   b. Boundary of impervious surfaces;

c. Locations of all existing structural BMPs to reduce pollutants in stormwater runoff;

d. Locations of all surface waters including wetlands and streams;

e. Locations of potential pollutant sources identified under Part V(D)(4) below;

f. Locations where major spills or leaks identified under Part V(D)(5) have occurred within the past three years. For the purpose of the site map, mark only areas of frequent spills (greater than three occurrences per year) or large spills (greater than 10 gallons). ALL locations of fuel spills must be documented within the SWPPP;

g. Locations of the following activities exposed to stormwater: fueling stations, vehicle and equipment maintenance, storage and cleaning areas; loading or unloading areas; locations used for the treatment, storage or disposal of wastes; liquid storage tanks; material processing, transfer or storage areas; access roads, rail cars or tracks;

h. Locations of stormwater conveyance systems including swales, ditches, culverts, subsurface stormwater infrastructure, outfalls, including boat ramps, and an approximate outline of the area draining to each outfall;

i. Location and description of non-stormwater discharges (e.g., wastewater licensed outfall);

j. Location and source of run-on from adjacent property that contains either significant quantities of pollutants or volume to the facility; and

k. The name of the nearest receiving water(s), including intermittent streams and wetland(s) that may receive discharges from the facility. An unnamed stream or wetland must be designated as such. The status of the receiving water in terms of water quality classification must also be noted. Contact a regional Stormwater Inspector for assistance if you are not aware of the classification status of the water body to which the facility discharges.

4. Summary of Potential Pollutant Sources. The permittee shall identify each separate area where industrial materials or activities are exposed, or have the potential to be exposed to stormwater. Industrial materials or activities include, but are not limited to, material handling equipment or activities; industrial machinery; cleaning, fueling and maintenance of vehicles; equipment storage; and, storage of raw materials, intermediate products, by-products, final products, or waste products. Material handling activities include the storage, loading or unloading, transportation, or movement of any raw material, intermediate product, final product or

waste product. If applicable, include an evaluation of how the quality and quantity of the stormwater flowing onto the facility from adjacent properties impacts the stormwater discharges from the permitted facility. For each separate area identified, the description must include:

a. Industrial activities area. A list of the activities (e.g., material storage, loading, access areas, equipment fueling and cleaning, cutting, grinding, or processing). Each drainage area must be described and include a prediction of the direction of flow and an estimate of the types of pollutants which may be present in the stormwater discharge. The flow of stormwater across the site must be clearly depicted on the site map;

b. Pollutants. A list of the associated pollutant(s) or pollutant parameter(s) (e.g., crankcase oil, iron, biochemical oxygen demand, pH, sediment, etc.) for each activity. The pollutant list must include all significant materials that have been handled, treated, stored or disposed of in a manner that may allow exposure to stormwater three (3) years prior to review of or development of the SWPPP; and

c. Method of on-site storage or disposal. A storage practice or disposal method must be detailed for all raw materials, intermediate materials, final products and waste materials. Waste materials must be handled in accordance with Maine's Solid Waste Management Rules.

5. Potential for Spills and Leaks. The permittee shall clearly identify areas where potential spills and leaks, may occur, along with the accompanying drainage points, and provide a list of spills and leaks that occurred during the three (3) year period prior to submitting a NOI or latest revision of the SWPPP for any area exposed to precipitation or area which drains to a stormwater conveyance.

   Spills and leaks include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under Clean Water Act (CWA) §311 (See 40 CFR 110 and 40 CFR 117.21), section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) or 38 M.R.S.A. §§ 543, 550 and 1318-B. Unlicensed discharges of oil and hazardous matter are prohibited (See 38 M.R.S.A. §§ 543 & 1317-A). These discharges must be removed to the Commissioner's satisfaction (See 38 M.R.S.A. §§ 1318-B, 548, 568). Hazardous matter discharges must be reported (See 38 M.R.S.A. §§ 1318-B). Oil and hazardous matter have "safe harbor" incentives for reporting (See 38 M.R.S.A. §§ 550 & 1318).

6. Wastewater/Process Water Containment. The location of all wastewater or process water containment tanks must be clearly noted in the SWPPP

and on the site map. Any stationary above ground tank, container, or container storage area used for the storage of wastewater or process water that has the potential to discharge to surface waters or a stormwater conveyance during a malfunction must be held in a secondary containment device capable of containing 100% of the contents of the tank, plus precipitation. The containment devices must meet all Federal and State rules for primary and secondary containment. Secondary containment may be waived if the tank is equipped with a level sensor and alarm to signal an overflow or leak and the facility has a contingency plan in place to remove excess liquid to a second containment structure or off site treatment facility to prevent exposure to stormwater. The containment structures must be visually inspected for signs of deterioration at least once per year. The contingency plan and tank inspection procedure must be documented in the SWPPP. (See CMR 06-096 520 for definitions.)

7. Sampling Data. All stormwater sampling data, including visual monitoring results collected during the term of this General Permit must be maintained in the SWPPP.

8. Stormwater Controls. Describe the type and location of existing non-structural and structural BMPs selected for each area where industrial materials or activities are exposed to stormwater. All the areas identified in Part V(D)(4) and (5) must have a BMP(s) identified for the area's discharges. For areas where BMPs are not currently in place, describe appropriate BMPs to control pollutants in stormwater discharges. The SWPPP must include an implementation schedule for all proposed BMPs. Refer to individual Sector(s) for additional requirements or guidelines for new BMP installations. Selection of all BMPs must take into account:

   - The quantity and nature of the pollutants, and their potential to impact the water quality of receiving waters;
   - Opportunities to combine the dual purposes of water quality protection and local flood control benefits (including physical impacts of high flows on streams such as bank erosion, impairment of aquatic habitat, etc.); and
   - Opportunities to offset stormwater and temperature impacts from impervious areas on dry weather flows and low flow situations to streams.

9. BMP Types Considered. (See Part V(C) Non-Numeric Technology Based Effluent Limits.) The permittee shall describe how each BMP is currently implemented, or will be implemented. The following types of structural, and non-structural BMPs must be considered for implementation at the facility. This requirement may have been fulfilled with the area-specific BMPs identified under Part V(D)(8), in which case, the previous description is sufficient. However, many of the following BMPs may be more generalized or non site-specific and therefore not previously

considered. If the permittee, agent or Department stormwater inspector determines that any of these BMPs are not appropriate or are inadequate to reduce or eliminate pollutants, an explanation of this determination along with corrective actions must be documented in the SWPPP. The BMP examples listed below are not intended to be a comprehensive list. The permittee is encouraged to keep abreast of new BMPs or new applications of existing BMPs to find the most cost effective means of permit compliance for the facility. If BMPs are planned at the facility which are not listed previously in the SWPPP (e.g., replacing a chemical with a less toxic alternative, adopting a new or innovative BMP, etc.), include an implementation timeline within this section of the SWPPP.

a. Non-Structural BMPs.

Good Housekeeping: The permittee shall keep all exposed areas free of materials which could contribute pollutants to stormwater discharges by performing good housekeeping measures such as sweeping, and proper material containment. Measures must include compliance with the Non-Numeric Technology Based Effluent limits noted in Part V(C) and the individual Sector requirements in Appendices A-AD.

Minimizing Exposure: Where practicable industrial materials and activities should be protected by a storm resistant shelter to prevent exposure to stormwater, or located in an area that does not discharge to a surface water or a MS4.

Preventive Maintenance: The permittee shall implement a preventive maintenance program which includes the timely inspection and maintenance of stormwater management devices, (e.g., cleaning oil/water separators, catch basins) as well as inspecting, testing, maintaining and repairing facility equipment and systems to avoid breakdowns or failures that may result in discharges of pollutants to surface waters.

Spill Prevention and Response Procedures: The permittee shall describe spill prevention and clean up procedures for spills or leaks. These procedures, and the necessary spill response equipment, must be made available to employees who may cause or encounter a spill or leak. Where appropriate, the permittee shall explain existing or planned material handling procedures, storage requirements, secondary containment, and equipment (e.g., diversion valves) in the SWPPP which are intended to minimize spills or leaks at the facility. Unlicensed discharges of oil and hazardous matter are prohibited (See 38 M.R.S.A. §§ 543 & 1317-A). These discharges must be removed to the Commissioner's satisfaction (See 38 M.R.S.A. §§ 1318-B, 548, 568). Hazardous matter discharges must be reported (See 38 M.R.S.A. §§ 1318-B).

Oil and hazardous matter have "safe harbor" incentives for reporting (See 38 M.R.S.A. §§ 550 & 1318).

- Procedures to properly label all storage containers.
- Preventative measures such as barriers between material storage and traffic areas, secondary containment provisions and procedures for material storage and handling.
- Procedures for quick response to stop leaks, spills and other releases. Employees who may cause, detect or respond to a spill situation shall be properly trained. The training must be documented in the SWPPP.
- Procedures to notify trained facility personnel, emergency response and regulatory agencies in the event of a spill or release. Documentation of spills and releases must be included in the facility SWPPP.

Employee Training: The permittee shall describe the annual stormwater employee training program for the facility. The description must include the topics to be covered, (such as spill response, good housekeeping and material management practices). The permittee shall provide employee training for all employees who work in areas where industrial materials or activities are exposed to stormwater, and for employees who are responsible for implementing activities identified in the SWPPP (e.g., inspectors, spill responders and maintenance staff). The employee training must address the components and goals of the SWPPP.

b. Structural BMPs.

Sediment and Erosion Control: The permittee shall identify areas at the facility which, due to topography, land disturbance or other factors, have a potential for soil erosion. The permittee shall describe and implement structural, vegetative, or stabilization BMPs to manage runoff and limit erosion and sediment transport and the resulting discharge of pollutants.

Stormwater Velocity Control: The permittee shall install stormwater velocity dissipation controls where appropriate.

NOTE: This Permit requires compliance with Maine's Erosion and Sedimentation Control Law. Installation of Structural BMPs may require a separate permit pursuant to the Natural Resources Protection Act, Maine Stormwater Management or the Site Location of Development Act.

Stormwater structural devices: The permittee shall describe the stormwater management practices (permanent structural BMPs other than those which control the generation or source(s) of pollutants) that currently exist or are planned for the facility.

These types of BMPs typically are used to divert, filter, reuse, or otherwise reduce pollutants in stormwater discharges from the site.

10. Other Controls. No solid materials, including floatable debris, may be discharged to waters of the State, except as authorized by a permit issued under section 404 of the Clean Water Act. Off-site vehicle tracking, or blowing, of raw, final, waste materials or sediments, and the generation of dust, must be minimized and documented in the SWPPP.

E. Maintenance. All BMPs identified in the SWPPP must be maintained in effective operating condition. If site inspections identify BMPs that are not operating effectively, maintenance must be performed before the next anticipated storm event, or as necessary, to maintain the continued effectiveness of stormwater controls. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and implemented as soon as practicable, but not later than twelve (12) weeks from the date of discovery unless authorized by the Department. The maintenance schedule and reason for delay must be documented in the SWPPP. The Department will take into account the size and cost of the project, the need to obtain supplies, construction timeframes, weather, the amount of pollution discharged and the condition of receiving waters in determining if a delay is acceptable. In the case of non-structural BMPs, the effectiveness of the BMP must be maintained by appropriate means (e.g., available spill response supplies, training, etc.). Maintenance and BMP follow up actions must comply with Part V(I)(3) of this General Permit.

F. Allowable Non-Stormwater Discharges. Allowable non-stormwater discharges are listed in Parts I(D) and (E). Except for flows from fire fighting activities, the permittee shall identify all sources of allowable non-stormwater discharge(s) in the SWPPP and include:

- Identification of each allowable non-stormwater source;
- The location where it is likely to be discharged; and
- Descriptions of appropriate BMPs for each source.

If mist blown from cooling towers is listed as an allowable non-stormwater discharge, the permittee shall specifically evaluate the potential for the discharge(s) to be contaminated by chemicals used in the cooling tower and determine that the levels of such chemicals would not cause or contribute to a violation of an applicable water quality standard.

G. Applicable State or Local Plans. The SWPPP must be consistent and updated with applicable state or local stormwater, waste disposal, sanitary sewer or septic system regulations to the extent these apply to the facility and are more stringent than the requirements of this General Permit.

H. Monitoring Frequency and Procedure Documentation. The SWPPP must document the procedures for conducting the three types of analytical

monitoring (Benchmark, Numeric, and Impaired Waters) and Visual Monitoring where applicable. These procedures are outlined in Part VI of this General Permit. SWPPP documentation must include the following:

1. Location of sample collection (outfall designation).
2. Sampling parameters and sampling frequency for each parameter including the benchmark or limit associated with that parameter.
3. Monitoring schedule including monitoring exceptions, adverse weather conditions and waivers.

I. Site Compliance Evaluations and Follow-up Corrective Actions. This General Permit requires the completion of quarterly site inspections or Site Compliance Evaluations. The SWPPP must include procedures for conducting and documenting the evaluations as required by this part.

1. Frequency of Inspections. The permittee shall conduct Site Compliance Evaluations a minimum of four (4) times a year, one of which must be conducted within 24 hours of a qualifying storm event. These inspections must be evenly spaced with a minimum of sixty (60) days between inspections. Inspections must be done by qualified personnel as defined by the permittee. Qualified personnel may be either a facility employee or agent provided the inspector can accurately assess facility conditions that may impact stormwater discharges and BMP effectiveness. These inspections may be conducted in conjunction with Part (VI)(B), Quarterly Visual Monitoring, or be conducted separately. If the permittee decides to conduct more frequent inspections, the SWPPP must specify the frequency of inspections.

2. Scope of the Site Compliance Evaluation. The evaluation/inspection must include all areas where industrial materials or activities are exposed to stormwater, as identified in Part V(D)(4), and all associated stormwater conveyances and areas where spills and leaks have occurred within the past three (3) years. Inspectors shall evaluate and document:

   a. Industrial materials, residue, or trash on the ground that could contaminate stormwater;
   b. Leaks or spills from industrial equipment, drums, barrels, tanks or similar containers;
   c. Offsite tracking of industrial materials or sediment where vehicles enter or exit the site;
   d. Tracking, blowing or whirling of raw, final, or waste materials and the evidence of, or the potential for, pollutants to contact stormwater;
   e. Stormwater BMPs identified in the SWPPP must be inspected and evaluated to ensure that they are operating correctly. Inspect

stormwater conveyances and outfalls for erosion, integrity and potential pollutants. Where discharge locations or outfalls are inaccessible, nearby downstream locations must be inspected if possible; and

f. The once per year Non-Stormwater Discharge Certification may be incorporated into one of the four Site Compliance Evaluations.

3. Site Compliance Evaluation Follow-up Actions. Based on the results of the Site Compliance Evaluation, the permittee shall:

a. Complete a Site Compliance Evaluation Report. This report summarizes the scope of the inspection as noted in Part V(I)(2) above. The permittee shall prepare a Site Compliance Evaluation Report upon completing the inspection. This report must include the name(s) or position(s) of personnel performing the inspection, the date(s) of the evaluation, and major observations relating to the implementation of the SWPPP. The inspection report(s) must identify any incidents of non-compliance and proposed or implemented follow-up action(s). Where an inspection report does not identify any incidents of non-compliance, the report must contain a certification that the facility is in compliance with the SWPPP and this General Permit. The Department has prepared a guidance checklist that may be used or modified for reporting.

b. Develop a Corrective Action Report (CAR). A Corrective Action Report is a description of actions, BMPs, site modifications or behaviors necessary to meet the terms and conditions of this General Permit. Two types of CARs may be generated.

c. Structural BMP Corrective Action Report. This CAR includes modification(s) or addition(s) and implementation of a structural BMP(s). If a noted deficiency is related to a structural BMP excluding routine maintenance, the permittee shall notify the regional stormwater inspector within fourteen (14) business days by phone, email or USPS. Notwithstanding the timeframes described above, the Department reserves the right to take enforcement actions for unpermitted discharges.

Note: If temporary stabilization measures are needed in emergency situations, a permittee may begin installation provided the addition of the BMP or stabilization measure is not in violation of State or Federal laws. The Department should be contacted with in 24 hours in these situations.

d. Non-Structural BMP Corrective Action Report. This CAR notes the addition or modification of a non-structural BMP(s) which must be developed, implemented and kept with the SWPPP.

e. Content of a Corrective Action Report. All CARs must contain at a minimum the initial inspection date, a summary of the deficiency and corrective action(s) planned or implemented including temporary measures. The date the corrective action(s) was initiated, completed or expected to be completed.

Inspection reports and follow-up CARs must be signed by the permittee in accordance with Part VIII(G).

f. SWPPP Modification and Timeline for Completion of Corrective Actions. Modify the SWPPP as necessary (e.g., to show additional controls on the site map) as required by Part V(D)(3) and revise the description of controls as required by Part V(D)(8) to include additional or modified BMPs to correct problems identified in the Site Compliance Evaluation and Corrective Action Report. The permittee shall complete revisions to the SWPPP within thirty (30) calendar days following the inspection, and initiate changes to non-structural BMPs within five (5) business days. If existing structural BMPs require modification or if additional structural BMPs are necessary, implementation must be completed before the next anticipated storm event to the extent practicable, but not more than twelve (12) weeks after discovery of the deficiency unless otherwise authorized by the Department. Temporary BMPs must be utilized during the design and construction phase of new structural BMPs. These temporary BMPs must be implemented as soon as practicable after the Site Compliance Evaluation is complete. The permittee shall retain a record of actions taken in accordance with Part V(I) of this General Permit as part of the SWPPP for at least three (3) years from the date that permit coverage expires or is terminated.

J. SWPPP Documentation Requirements. The permittee shall keep the following inspection, monitoring and certification records on site with the facility's SWPPP. The complete and up-to-date records which demonstrate full compliance with the conditions of this General Permit include:

1. A copy of the NOI submitted to the Department along with any correspondence exchanged between the permittee and the Department specific to coverage of this General Permit.

2. A copy of the Department's acknowledgement letter assigning the facility Permit ID number, and discharge authorization.

3. A copy of the General Permit, (electronic is acceptable), which can be made available to SWPPP team members.

4. Dates and descriptions of spills, leaks, or other releases that resulted in discharges of pollutants to waters of the State through stormwater or

otherwise; the circumstances leading to the release and actions taken in response to the release; and, the measures taken to prevent the recurrence of such releases.

5. Records of annual employee training, including topics covered, training date(s), and printed names and signatures of participating employees.

6. Documentation of maintenance and repairs of stormwater control measures, including dates of regular maintenance, discovery dates of areas in need of repair or replacement; repair date when control measure(s) returned to full function; and, the justification for any extended maintenance or repair schedules.

7. Documentation of inspections and monitoring data.

8. Description of any deviations from monitoring schedules.

9. Corrective Action Reports and summary of completed actions taken at the site, including event(s) and date(s) when problems were discovered and modifications occurred.

10. Documentation of monitoring exceedances and the facility's response including corrective actions; additional monitoring; documentation indicating the benchmark exceedance was due to natural background pollutant levels; or a finding of no further pollutant reductions were technologically, or economically, practicable, and achievable in light of best industry practice.

11. Documentation to support any determination that pollutants of concern are not expected to be present above natural background levels if the permittee discharges directly to impaired waters, and that such pollutants were not detected in the discharge or were solely attributable to natural background sources.

12. Documentation of the annual non-stormwater discharge certification.

K. Requirement to Maintain Updated SWPPP. The permittee shall amend the SWPPP within thirty (30) days of completion of any of the following:

1. A change in design, construction, operation, or maintenance at the facility that has a significant effect on the discharge or potential for discharge of pollutants from the facility including the addition or reduction of industrial activity;

2. Monitoring, inspections, or investigations by the permittee or by local, State, or Federal officials which determine the SWPPP is ineffective in eliminating or significantly minimizing pollutants from sources identified under Part V(D)(4), or is otherwise not achieving the general objectives of controlling pollutants in discharge(s) from the facility;

3. A release of hazardous substances and oil (see 38 M.R.S.A. § 543, 550 and 1318-B); and

4. A discharge authorized under this General Permit that is determined by Department notification to cause or have the reasonable potential to cause or contribute to the violation of an applicable water quality standard. The SWPPP must document actions necessary to ensure future discharge(s) do not cause or contribute to the violation of a water quality standard.

L. Department Review. Department staff may notify the permittee at any time that a SWPPP does not meet one or more of the minimum requirements of this General Permit.

M. Signature, SWPPP Review and SWPPP Availability. The SWPPP must be signed in accordance with Part VIII(E), and a working copy retained at the facility covered by this General Permit. (See Part III(E) for records retention requirements.) The permittee shall only submit a copy of the SWPPP to the Department upon written notification. Upon the Department's request, the SWPPP must be submitted electronically via e-mail or saved to a compact disc and mailed or hand delivered to the Department.

N. Additional Requirements for SARA Title III Facilities. Potential pollutant sources for which the permittee has reporting requirements under EPCRA 313 must be identified in the summary of potential pollutant sources as per Part V(D)(4). Note this additional requirement only applies to the permittee if the permittee is subject to reporting requirements under EPCRA 313.

O. Salt Storage Pile Requirements. Salt storage pile(s) used for deicing or commercial or industrial purposes located at the facility, must be enclosed or covered to prevent exposure to precipitation, with exception of adding or removing materials from the pile, and for sand/salt storage piles at municipal public works facilities. See 06-096 CMR 574, and 38 M.R.S.A. §413(2-D) for additional requirements.

Part VI. MONITORING REQUIREMENTS

A. Monitoring Requirements and Limitations. The monitoring requirements and numeric limitations applicable to a facility depend on the types of industrial activities conducted. The permittee shall review Parts III (Permit Conditions), VI (Monitoring Requirements) and VII (Sector Specific Requirements) of this General Permit to determine which monitoring requirements and numeric limitations apply to the industrial activity or activities at the facility.

1. Sector-specific monitoring requirements. Sector-specific monitoring requirements and limitations are applied outfall by outfall at facilities with multiple Sector-specific industrial activities. Where stormwater from multiple Sector-specific industrial mixes, the monitoring requirements and limitations are additional.

ATTACHMENT C

Bureau of Land and Water Quality
Division of Watershed Management
Industrial Stormwater Program

Standard Operating Procedure
Guidelines For Visual Monitoring of Stormwater Discharges Associated With Industrial Activities.

1. **APPLICABILITY.** This Standard Operating Procedure (SOP) applies to all industrial facilities covered under the Maine Multi-Sector General Permit (MSGP) for Stormwater Discharges Associated with Industrial Activity regardless of the facility's industrial sector code. All permitted facilities are required to perform quarterly visual monitoring of their stormwater discharges associated with industrial activity as part of their Stormwater Pollution Prevention Plans (SWPPP) in order to achieve compliance with the Multi-Sector General Permit.

2. **PURPOSE.** To provide guidelines for standardized methods for sample collection and visual examination of industrial stormwater discharges for indicators of stormwater pollution as defined in Part V of the Maine MSGP. To provide guidelines describing standardized methods of data recording and record keeping of all quarterly visual stormwater discharge monitoring data. These guidelines are described in Part 5 of the MSGP.

3. **DEFINITIONS.**

3.1. Multi-Sector General Permit (MSGP) A general permit for Stormwater Discharges Associated with Industrial Activities. Authorizes the direct discharge of stormwater associated with industrial activity to waters of the State other than groundwater, provided the discharge meets the requirements stated in this permit. This permit is effective October 11, 2005 and expires October 11, 2010. It replaces EPA's MSGP for Industrial Activities issued October 30, 2000.

3.2. SWPPP. Stormwater Pollution Prevention Plan. A plan developed and implemented by each industrial facility. It outlines sources of potential stormwater pollutants and the methods by which these pollutants will be reduced or prevented from entering waters of the State. The Plan identifies in writing a SWPPP team of facility personnel as well as a SWPPP team leader who is ultimately responsible for SWPPP implementation.

3.3. GRAB SAMPLE. Sample of stormwater discharge taken as a single uninterrupted event (i.e., grabbed at one time) from a single stormwater outfall from the industrial facility. The sample may be collected manually or with an automatic sampler.

3.4. OUTFALL. Any location such as a ditch, rill, pipe, storm drain, boat ramp, or detention pond exit where shallow concentrated flow of stormwater leaves an industrial facility.

3.5. MEASURABLE STORM EVENT. Any storm event that yields at least 0.1 inch of precipitation.

4. RESPONSIBILITIES.

4.1. MONITORING PROGRAM IMPLEMENTATION. The schedule for performing visual examinations should be clearly documented in the facility's SWPPP. The permittee must perform and document a quarterly visual examination of industrial stormwater discharges from each outfall which discharges stormwater associated with industrial activity from the facility.

4.2. OUTFALL IDENTIFICATION. The permittee must identify each industrial stormwater outfall at the facility. All outfalls shall be clearly identified on the facility site map which is part of the facility's SWPPP and also listed in the written text of the SWPPP.

4.3. EMPLOYEE TRAINING. The permittee is responsible for ensuring that all facility personnel involved in stormwater sampling are properly trained to do so. Staff involved in sampling should:

a. Be familiar with the site map and outfall locations
b. Walk the site to physically identify each sampling location
c. Become familiar with local rainfall and drainage patterns
d. Learn proper procedures for measuring rainfall
e. Become competent with proper sample collection procedures

Personnel involved in sampling should also be trained in all facility safety procedures as they apply to stormwater sampling. Where practicable the same individual should carry out the collection and examination of discharges for the entire permit term. Written documentation signed by the SWPPP team leader certifying that all personnel involved in sampling have been properly trained should be maintained onsite with the SWPPP.

4.4. SAMPLE COLLECTION FREQUENCY. Visual examinations of industrial stormwater discharges must be performed once per monitoring quarter. If no measurable storm event resulted in discharge from the facility during a monitoring quarter, the permittee is excused from visual monitoring for that quarter provided the permittee documents in the monitoring records that no runoff occurred. Schedule of monitoring quarters is listed below.

- First: October 1 to December 31
- Second: January 1 to March 31
- Third: April 1to June 30
- July 1 to September 30

All other time specific sampling requirements are to be performed in accordance with the parameters outlined in the procedures section of this document.

4.5. RECORD KEEPING AND REPORTING. The permittee must maintain reports of all visual examinations conducted onsite with the SWPPP. The permittee is not required to submit visual examination results to DEP unless specifically asked to do so. Requirements for recording visual examination data are outlined in the procedures section of this document.

5. PROCEDURES

5.1. MEASURING RAINFALL. All facilities required to perform visual monitoring of industrial stormwater discharges should have a rain gauge on site for measuring rainfall. The rain gauge may be a standard rain gauge, tipping bucket gauge, weighing type gauge, float recording gauge, or any other National Weather Service approved device for measuring rainfall to the nearest 0.1 inch. To minimize measurement errors, the gauge should be placed on a level surface that is not windswept and is away from trees or buildings that might interfere with the path of rainfall. The gauge should be regularly inspected by sampling personnel to ensure that it is in good working order and capable of accurately measuring rainfall to the nearest 0.1 inch.

5.2. SAMPLE COLLECTION TIMING. A grab sample must be collected from each facility outfall once per monitoring quarter during a measurable storm event that occurs at least 72 hours from the previously measurable storm event. The 72 hour interval is waived when the preceding measurable storm did not yield a measurable discharge. During a measurable storm event, a grab sample for visual examination should be collected during the first 60 minutes or as soon thereafter as practicable, but not to exceed 2.25 hours of when runoff begins discharging from areas of exposed industrial activity. During monitoring quarters when snowmelt represents the only stormwater discharge, a grab sample must also be collected during periods of significant snowmelt within the first 60 minutes or as soon thereafter as practicable, but not to exceed 2.25 hours) of when snowmelt begins discharging from areas of exposed industrial activity. Stormwater runoff from employee parking lots, administration buildings, and landscaped areas that is not mixed with stormwater associated with industrial activity, or stormwater discharges to municipal sanitary sewers does not need to be sampled.

5.3. SAMPLE CONTAINER CLEANING AND PREPARATION. The facility should have an adequate supply of containers prepared for collection of industrial stormwater samples from each outfall prior to collecting samples for visual examination. All sample containers used for sampling for visual examination should be certified as clean and free of residue by the container manufacturer, or cleaned according to the following procedure.

5.3.1. Wash containers in a non-phosphate detergent and tap water wash.

5.3.2. Thoroughly fill and rinse containers with tap water at least three (3) times.

5.3.3. Store containers closed, and in an area free of dust and other potential sample contaminants.

5.3.4. If additional containers are needed to collect samples from less accessible outfalls (i.e. buckets which are attached to poles for reaching outfalls), these containers should also be cleaned and prepared as indicated above.

5.4. SAMPLE COLLECTION. Samples should be examined in clear glass or clear plastic container prepared and cleaned as indicated above, so that all visual monitoring criteria can be observed.

5.4.1. MANUAL GRAB SAMPLE COLLECTION. Manual grab samples should be collected by inserting a container under or downstream of a discharge with the container opening facing upstream, and with the opening of the container completely immersed under water, whenever possible. Small containers (ideally 250 ml to 750 ml or approximately 8 to 24 ounces in size) are recommended in order to be able to submerse the container opening under water while still collecting an adequate sample size to make a correct visual inspection. In most cases the sample container can be held in hand while the sample is collected. Less accessible outfalls may require the use of poles and buckets to collect grab samples. Take the grab from the horizontal and vertical center of the outfall. If sampling in a channel, (i.e., ditch, trench, rill) avoid stirring up bottom sediments. Avoid touching the inside of the container to prevent contamination. Transfer sample to a clear glass or plastic container if using another container such as a bucket to collect a sample from a less accessible location. If taking samples from multiple outfalls, label containers with outfall identification prior to taking samples. Make sure samples are securely capped until examination.

5.4.2. COLLECTION OF GRAB SAMPLES BY AUTOMATIC SAMPLER. Facilities which use automatic samplers for stormwater sampling may collect grab samples for visual examination by this method. Programming for collecting grab samples is specific to the type of automatic sampler. All facility personnel who collect stormwater samples using automatic samplers should be properly trained in operation of the sampler before doing so. Several different types of automatic samplers are available for stormwater sampling. However, the following guidelines should be followed when sampling regardless of the type of sampler used. All equipment must be properly cleaned, particularly the tubing and sample containers. Deionized water should be drawn through the sampler to remove any residuals prior to taking samples. Tubing should also be periodically replaced to avoid algae or bacterial growth. Additionally, a distilled/deionized water blank sample should be taken at each outfall sampled to determine if contamination of stormwater samples by the sampling equipment has occurred. Samplers should be used in exact accordance with the manufacturers' instructions. All sampler calibration and maintenance data should be kept on site with the SWPPP.

5.5. SAMPLE EXAMINATION. Visual examination of all grab samples collected must be performed within the first sixty (60) minutes (or as soon thereafter as practicable, but not to exceed 2.25 hours) of when the runoff or snowmelt begins discharging from the facility. Collect the samples and bring them to a well lit indoor area. Pour each sample into a separate 1 L polycarbonate plastic graduated Imhoff cone. The cone should have graduations that allow volume measurement to the nearest milliliter. Record the total sample volume to the nearest milliliter on the visual monitoring form. Examine the samples for the following criteria according to the instructions provided with the visual monitoring form: Foam, odor, clarity, floating solids, suspended solids, color, oil sheen, settled solids, and any other obvious indicators of stormwater pollution. Read the settled solids 1 hour after pouring the sample into the cone, this assures all solids are settled out of the water. Settled solids in the bottom of the cone should be measured to the nearest milliliter. It is also recommended that a sample of tap water be collected in the same type of container used to collect the samples and used as a comparison to aid in evaluating the samples for the criteria stated above.

*Note: Clear polycarbonate plastic Imhoff cones are available from several scientific supply companies. See section 6 for a list of suppliers.

5.6. SAMPLE DATA RECORDING. Record all sample data on the visual monitoring form (Attachment B) after examining the sample for all of the criteria listed in the instructions (Attachment A). The form should include the examination date and time, examination personnel, the nature of the discharge (i.e., rain or snowmelt), identification of outfall sampled, quality of the stormwater discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and any other obvious indicators of stormwater pollution), and probable sources of any observed contamination. The permittee must sign and certify the documentation in accordance with Part VII (E) of the Maine MSGP. All visual examination reports must be maintained on site with the SWPPP.

5.7. RECOMMENDATIONS FOR SOLVING SAMPLE LOCATION PROBLEMS. Consult guidelines listed below when it is necessary to sample an outfall located at a less than ideal location for sampling.

- PROBLEM: Sampling where stormwater comingles with process or non process water.
  RECOMMENDATION: Attempt to sample the stormwater discharge before it mixes with the non-stormwater discharge. If this is impossible, sample the discharge both during dry and wet weather and maintain a record of the visual examination data observed under both conditions on site with the SWPPP. This will provide an indication of the contribution of any observable contamination from each source.

- PROBLEM: Numerous small point channels make up an outfall from which it is difficult to collect a sample.

RECOMMENDATION: Impound channels or join their flow together by building a weir or digging a ditch to collect discharge at a low point for sampling. This artificial collection point should be lined with plastic to prevent infiltration and/or high levels of sediment.

- PROBLEM: Inaccessible discharge point (examples include underwater discharges or unreachable discharges (e.g., out of a cliff).
  RECOMMENDATION: Go up the pipe to sample (i.e., to the nearest manhole or inspection point). If these are not available, tap into the pipe, or sample at several locations upstream of the pipe if the pipe is the only outfall for the facility.

- PROBLEM: Managing multiple sampling sites to collect grab samples during the first 60 minutes of a measurable storm event.
  RECEMMONDATION: Have a sampling crew ready for mobilization when forecasts indicate a measurable storm event is likely to occur. If this is not possible, sample missed outfall locations during other measurable storm events.

- PROBLEM: Commingling of parking lot runoff with discharge associated with industrial activity.
  RECOMMENDATION: The combined runoff must be sampled at the discharge point as near as possible to the industrial activity or at the parking lot drain inlet if there is one.

- PROBLEM: Sampling in manholes
  RECOMMENDATION: Sample with a collection device on the end of a pole to reach stormwater. Personnel sampling in manholes should have confined space safety training if manhole has to be entered.

- PROBLEM: Run-on from other property.
  RECOMMENDATION: If possible, collect and examine a sample of the stormwater at the border of the property where the run-on occurs. Then, collect and examine a sample of the stormwater at a facility outfall downstream of the run-on point. Note any observable differences between the samples and maintain the documentation with the SWPPP.

- When confronted with other difficult sampling scenarios not addressed above, the permittee should consult DEP for guidance on how to best address the situation.

6. REFERENCES

6.1. GUIDANCE MANUAL FOR THE MONITORING AND REPORTING REQUIREMENTS OF THE NPDES MULTI-SECTOR STORM WATER GENERAL PERMIT
United States Environmental Protection Agency, Office of Water (EN-336), EPA 833-B-99-001(January, 1999)

6.2. NPDES STORM WATER SAMPLING GUIDANCE DOCUMENT
United States Environmental Protection Agency, Office of Water (EN-336), EPA 833-8-92-001 (July, 1992)

6.3. STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION MULTI-SECTOR GENERAL PERMIT MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM STORMWATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY
Maine Department of Environmental Protection, Bureau of Land and Water Quality, Waste Discharge License # W-008227-5Y-A-N (October 11, 2005)

***Notes: List of Vendors that Supply One Liter (1L) Clear Polycarbonate Imhoff Cones**

Forestry Suppliers Inc.
PO Box 8397
Jackson, MS 39284
(800) 752-8460
www.forestry-suppliers.com

Lab Safety Supply Inc.
PO Box 1368
Janesville, WI 53547-1368
(800) 356-0783
www.labsafety.com

Nalge Nunc International
International Dept.
75 Panorama Creek Dr.
Rochester, NY 14625
(800) 625-4327
www.nalgenelabware.com

Pollard Water
200 Atlantic Ave.
Hyde Park, NY 11040
800-437-1146
www.pollardwater.com

Standard Operating Procedure
Bureau of Land and Water Quality
Attachment B
Date: April 20, 2006
Doc num: DEPLW0768

Visual Monitoring Form

Facility Name _____ Sampler's Name _____

Facility Address _____ MSGP Permit Number _____

OUTFALL NUMBER						
OBSERVATION TIME						
EST. TIME FROM ONSET OF RUNOFF						
DISCHARGE TYPE Rain or Snowmelt						
COLOR						
ODOR						
CLARITY						
FLOATING SOLIDS*						
SETTLED SOLIDS*						
SUSPENDED SOLIDS*						
FOAM						
OIL SHEEN						
Probable source of any observed contamination						

*Enter description of these criteria in the general comments section for each outfall on the back of this page.

Sampler's Signature _____ Date _____

Standard Operating Procedure
Bureau of Land and Water Quality
Attachment B
Date: April 20, 2006
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General Comments

In the comments section, enter physical description of floating, settled, and suspended solids for each outfall sampled. Enter general comments on the condition and appearance of each outfall in the comments section also as indicated in the instructions.	
Outfall 1	Comments:
Outfall 2	Comments:
Outfall 3	Comments:
Outfall 4	Comments:
Outfall 5	Comments:
Outfall 6	Comments:

Standard Operating Procedure
Attachment A
Bureau of Land and Water Quality
Date: April 20, 2006
Doc num: DEPLW0768

Instructions for Completing the Visual Monitoring Form

1. Completely fill out all required information on the top of the visual monitoring form.

2. Pour the sample into a 1 L clear polycarbonate Imhoff cone. Record the total sample volume measured in the cone to the nearest milliliter. Evaluate the sample for the following parameters according to the following instructions.

   - **Foam:** This must be done first. Examine the sample for foam immediately after pouring it into the cone. Record foam results on the visual monitoring form as they most closely match one of the descriptions listed below.

     i. **None**-Most bubbles break down within ten (10) seconds of pouring; only a few large bubbles persist longer than ten (10) seconds.

     ii. **Moderate**-Many small bubbles are present but these bubbles persist for less than two (minutes) after pouring.

     iii. **High**-Many small bubbles are present and they persist longer than two (2) minutes after pouring.

3. Examine the sample for the following criteria after it has settled for ten (10) minutes. Record the results on the visual monitoring form as they most closely match the descriptions listed below.

   - **Color:** Record the best description of the sample color in the appropriate space on the visual monitoring form.

   - **Odor:** If sample has no odor other than natural rainwater or snowmelt write "normal" on the visual monitoring form. Note the presence of any of the following odors if detected: Gasoline, diesel, oil, solvents (WD-40, other petroleum products, etc.), landfill, fishy, glycol, any other unusual odors not normally present in clean runoff from the area sampled.

   - **Clarity:** Record sample clarity results as they most closely match one of the descriptions listed below.

     i. **Clear**-Sample doesn't filter out any light, can be seen through regardless of color.

     ii. **Cloudy**-Sample filters out some light; not clear but objects can still be identified when looking through the cone.

     iii. **Very Cloudy**-Sample filters out most light; objects are indiscernible when looking through the cone.

     iv. **Opaque**-Sample doesn't allow any light to pass through; objects cannot be seen when looking through the cone.

- **Floating Solids:** Give a general description of the type of floating solids present (wood chips, leaf debris, algae, etc) in the general comments section for each sample. Record results for amount floating solids present as they most closely match the descriptions listed below. Record amount data in the appropriate box on page 1 of the visual monitoring form.

    i. **None**- No floating solids present on the surface of the sample.

    ii. **Slight**-Only a few floating particles observed on the surface of the sample.

    iii. **Moderate**- Less than 20% of the surface of the sample is covered with floating solids.

    iv. **High**- More than 20% of the surface of the sample is covered with floating solids.

- **Settled Solids:** Give a general description of the type of settled solids present (sand, decayed plant matter, rust particles etc) in the general comments section for each sample. Allow settle for one hour. Measure the settled solids in the bottom of the cone to the nearest milliliter and record the results in the appropriate box on page 1 of the visual monitoring form.

- **Suspended solids:** In the general comments section for each sample, give a general description of the type of solids present if any are observed suspended below the sample surface. Record whether or not settled solids were present in the appropriate box on page 1 of the visual monitoring form.

- **Oil Sheen:** Record whether or not an oil sheen is present in the sample.

- **General Comments Section on Page 2:** Make sure you have described the type of floating, settled and suspended solids observed in the samples in the general comments section provided for each outfall sample. Also note the following conditions at each outfall during the time sampled: General volume of water and flow, algae (if any is present), odor, color, and any other unusual characteristics noticed at the sampling location. Record the number of days since the last known measurable storm or runoff event.

4. Ensure that all visual monitoring forms are filed on site with the Stormwater Pollution Prevention Plan (SWPPP) each time visual monitoring is done.