# AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act, as amended, (33 U.S.C. §§1251 et seq.; the "CWA"), and the Massachusetts Clean Waters Act, as amended, (M.G.L. Chap. 21, §§ 26-53)

Distrigas of Massachusetts LLC 80 Everett Avenue Suite 313 Chelsea, MA 02150

is authorized to discharge from the facility located at

18 Rover Street Everett, MA 02149

to receiving water named

**Mystic River** (Mystic River Basin, Segment MA71-03)

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on the first day of the calendar month immediately following sixty (60) days after signature.

This permit and the authorization to discharge expire at midnight, five (5) years from the last day of the month preceding the effective date.

This permit supersedes the permit issued on September 19, 2001.

This permit consists of 9 pages in Part I including effluent limitations, monitoring requirements, and state permit conditions, and 25 pages in Part II Standard Conditions.

Signed this 28<sup>th</sup> day of September, 2009

## /S/ SIGNATURE ON FILE

Ken Moraff, Acting Director Office of Ecosystem Protection Environmental Protection Agency Boston, MA

Glenn Haas, Director Division of Watershed Management Department of Environmental Protection Commonwealth of Massachusetts Boston, MA

## A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date of the permit and lasting through expiration, the Permittee is authorized to discharge through **Outfall No. 001:** Stormwater, water condensate from LNG vaporizers, fire test water, boiler blowdown, hot water heater drainage, and groundwater infiltration. Such discharge shall: 1) be limited and monitored at slack low tide during a wet weather event, unless specified to be monitored at slack low tide during a dry weather event; and 2) not cause or contribute to a violation of the State Water Quality Standards of the receiving water. Flow rate, temperature, and cyanide shall be monitored during a dry weather event as specified below:

INTERNAL SAMPLING LOCATION: DETENTION BASIN (SD-6)

Effluent Characteristic	Discharge Limitations	Monitoring Requirements <sup>1</sup>	
	Maximum Daily	Measurement Frequency <sup>1</sup>	Sample Type <sup>2</sup>
Flow Rate (MGD)-wet <sup>3,4</sup>	Report	1/quarter	Estimate
Flow Rate (MGD)-dry <sup>3,4</sup>	Report	1/quarter	Estimate
Total Suspended Solids (mg/L) <sup>5</sup>	100 mg/L	1/quarter	Grab
pH range (Standard Units, SU)	6.5 to 8.5 SU	1/quarter	Grab
Temperature (in °F)-dry <sup>3</sup>	Report	1/quarter	Grab
Cyanide (Total, ug/L)-wet <sup>3</sup>	Report	1/quarter	Grab
Cyanide (Total, ug/L)-dry <sup>3</sup>	Report	1/quarter	Grab
Chlorine (Total Residual) (mg/L)	Report	1/quarter	Grab
Priority Pollutants <sup>6</sup>		1/year	Grab
Benzene (ug/L)	Report	1/year	Grab
Ethylbenzene (ug/L)	Report	1/year	Grab
Fluoranthene (ug/L)	Report	1/year	Grab
Naphthalene (ug/L)	Report	1/year	Grab
Benzo(a) anthracene (ug/L)	Report	1/year	Grab
Chrysene (ug/L)	Report	1/year	Grab
Benzo(ghi) perylene (ug/L)	Report	1/year	Grab
Phenanthrene (ug/L)	Report	1/year	Grab
Pyrene (ug/L)	Report	1/year	Grab
Toluene (ug/L)	Report	1/year	Grab
Arsenic (Total) (mg/L)	Report	1/year	Grab
Copper (Dissolved) (mg/L)	Report	1/year	Grab
Total cyanide (as CN) (mg/L)	Report	1/year	Grab
Zinc (Total) (mg/L)	Report	1/year	Grab
Rainfall (Event Total, in inches) <sup>7</sup>	Report	1/quarter	Estimate
Bacteria (Enterococcus) (enterococci per 100 mL) <sup>8</sup>	Report	1/year	Grab

#### Footnotes:

- 1. Samples shall be collected at the detention basin (SD-6) as illustrated in Figure 1 of the Fact Sheet. Any change in sampling location(s) must be reviewed and approved in writing by EPA and MassDEP. EPA considers quarters as follows: January to March; April to June; July to September; and October to December. For this purpose, slack low tide is defined as the period of time during which tidal-influenced waters are relatively still during the turn of the low tide about one hour prior to and about one hour after low tide.
- 2. All samples shall be tested using the analytical methods found in 40 CFR §136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR §136. The Permittee shall submit the results to EPA of any additional testing done to that required herein if it is conducted in accordance with EPA approved methods, consistent with the provisions of 40 CFR §122.41(1)(4)(ii).
- 3. Dry weather samples shall be collected after a minimum of a 24-hour antecedent period of no more than 0.1 inches of precipitation for each quarter. Wet weather samples shall be collected from a storm event that is greater than 0.1 inches in magnitude and produces a discharge within the storm drain system during the first hour of the rain event during slack low tide. The Permittee shall record the date and duration (in hours) of the discharge event(s) sampled, daily rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff, and the end of the previous measurable (greater than 0.1 inch rainfall) storm event.
- 4. Flow rate shall be estimated in accordance with good engineering practices and shall, at a minimum, include measurement of flow velocity and flow depth to calculate flow in millions of gallons per day (MGD).
- 5. After collection of two consecutive quarterly samples exceeding 50 mg/L, the Permittee shall review the selection, design, installation, and implementation of BMPs to control sediment under the SWPPP. If necessary, the Permittee shall make modifications to the SWPPP after implementation of proposed control measures to abate sediment loading as required under Part I.B.7.
- 6. The Permittee shall analyze grab samples for all NPDES Priority Pollutants (PPs) annually within the 4th quarter (October to December). Currently, the PPs include 126 toxic chemicals, which can be found at 40 CFR Part 423, Appendix A. All samples shall be tested using NPDES approved EPA analytical methods found in 40 CFR §136. A grab sample shall be taken at SD-6 (Detention Basin) during a wet weather event (a storm event that is greater than 0.1 inches in magnitude and produces a discharge within the storm drain system during the first hour of the rain event) during slack low tide. The Permittee shall report the analytical results in units of micrograms per liter (ug/l) for each PP by attaching the report to the DMR and report the results for the 14 PPs (listed in the table above) directly on the DMR. The results of the 4th quarter sampling are due before January 15.
- 7. Event total rainfall shall be obtained for the wet weather event during which samples were collected per quarter. Rainfall data shall be obtained from the NOAA KBOS (Boston Logan International Airport) station.
- 8. A sample shall be collected for analysis of Enterococcus (bacteria) in the 3<sup>rd</sup> quarter (July to September) during a wet weather event.

- 2. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- 3. The effluent shall not cause the receiving surface water to contain pollutants in concentrations or combinations that are toxic to humans, aquatic life, or wildlife.
- 4. Discharges to the Mystic River shall be adequately treated to insure that the surface water remains free from pollutants in concentrations or combinations that settle to form harmful deposits, float as foam, debris, scum or other visible pollutants. They shall be adequately treated to insure that the surface waters remain free from pollutants which produce odor, color, taste, or turbidity in the receiving water which is not naturally occurring and would render it unsuitable for its designated uses. Distrigas of Massachusetts LLC (Distrigas) is responsible for the maintenance of the storm drain system that collects discharge condensate from LNG vaporizers (2 sets of units), test water for fire pumps, boiler blowdown, hot water heater drainage, groundwater infiltration into the storm drain system, stormwater runoff from the Distrigas facility, and stormwater runoff from offsite catch basins discharging to Outfall No. 001.
- 5. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe (40 CFR §122.42):
  - a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
    - i. One hundred micrograms per liter (100 ug/l);
    - ii. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR §122.21(g)(7); or
    - iii. Any other notification level established by the Director in accordance with 40 CFR §122.44(f) and Massachusetts regulations.
  - b. That any activity has occurred or will occur which would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
    - i. Five hundred micrograms per liter (500 ug/l);
    - ii. One milligram per liter (1 mg/l) for antimony;
    - iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR §122.21(g)(7); or
    - iv. Any other notification level established by the Director in accordance with 40 CFR §122.44(f) and Massachusetts regulations.
  - c. That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.

## **B. STORMWATER POLLUTION PREVENTION PLAN**

Distrigas is required to insure all measures necessary are in place for: adequate maintenance and operation of equipment, appropriate training of Distrigas staff, and that areas exposed to stormwater or that might result in a discharge are kept clean and free of transportable pollutants. To meet these requirements, Distrigas shall prepare a Stormwater Pollution Prevention Plan (SWPPP) as described below.

- 1. The Permittee shall develop, implement, and maintain a SWPPP designed to reduce, or prevent, the discharge of pollutants through the storm drain system to the receiving waters identified in this permit. The SWPPP shall be a written document that is consistent with the terms of this permit. The SWPPP shall serve as a tool to document the Permittee's compliance with the terms of this permit. Development guidance and a recommended format for the SWPPP are available on the EPA website for the Multi-Sector General Permit (MSGP) for Stormwater Discharges Associated with Industrial Activities (http://cfpub.epa.gov/npdes/stormwater/msgp.cfm).
- 2. The SWPPP shall be completed or updated and certified by the Permittee within 90 days after the effective date of this Permit. The Permittee shall certify that the SWPPP has been completed or updated, that it meets the requirements of the permit including a description of the proposed methodology of the Storm Drain Evaluation (special study) required in Part I.B.5, and that it reduces the pollutants discharged in stormwater to the extent practicable. The certification shall be signed in accordance with the requirements identified in 40 CFR §122.22. A copy of this initial certification and SWPPP document shall be sent to EPA and MassDEP within ninety (90) days of the effective date of the permit to the address listed in Part I.D of this permit.
- 3. The SWPPP shall be prepared in accordance with good engineering practices and shall be consistent with the general provisions for SWPPPs included in the most current version of the MSGP. In the current MSGP (as modified effective May 27, 2009), the general SWPPP provisions are included in Part 5. Specifically, the SWPPP shall document the selection, design, and installation of control measures and contain the elements listed below:
  - a. A pollution prevention team with collective and individual responsibilities for developing, implementing, maintaining, revising, and ensuring compliance with the SWPPP.
  - b. A site description which includes the activities at the facility; a general location map showing the facility, receiving waters, and outfall locations; and a site map showing the extent of significant structures and impervious surfaces, directions of stormwater flows, and locations of all existing structural control measures, stormwater conveyances, pollutant sources (identified in Part I.B.3.c. below), stormwater monitoring points, stormwater inlets and outlets, and industrial activities exposed to precipitation such as, storage, disposal, material handling.
  - c. A summary of all pollutant sources which includes a list of activities exposed to stormwater, the pollutants associated with these activities, a description of where spills have occurred or could occur, a description of non-stormwater discharges, and a summary of any existing stormwater discharge sampling data.
  - d. A description of all stormwater controls, both structural and non-structural.

- e. A schedule and procedure for implementation and maintenance of the control measures described above and for the quarterly inspections and best management practices (BMPs) described below.
- 4. The SWPPP shall include best management practices (BMPs) appropriate for the facility that will minimize the discharge of pollutants in stormwater to waters of the United States, including cyanide as required in Part I.B.5 of this permit. These BMPs shall, at a minimum, be consistent with the control measures described in the most current version of the MSGP. In the current MSGP (as modified effective May 29, 2009), these control measures, which are non-numeric technology-based effluent limitations, are described in Part 2. Specifically, BMPs must include the following elements:
  - a. Minimizing exposure of manufacturing, processing, and material storage areas to stormwater discharges.
  - b. Good housekeeping measures designed to maintain areas that are potential sources of pollutants.
  - c. Preventative maintenance programs to avoid leaks, spills, and other releases of pollutants in stormwater discharged to receiving waters.
  - d. Spill prevention and response procedures to ensure effective response to spills and leaks if or when they occur.
  - e. Erosion and sediment controls designed to stabilize exposed areas and contain runoff using structural and/or non-structural control measures to minimize onsite erosion and sedimentation, and the resulting discharge of pollutants.
  - f. Runoff management practices to divert, infiltrate, reuse, contain, or otherwise reduce stormwater runoff.
- 5. The SWPPP shall specifically address cyanide loading from both overland runoff flow and from groundwater infiltration to the storm drain system. The Permittee shall include in the SWPPP proposed methodologies for the Storm Drain Evaluation (special study) and shall submit the complete, certified SWPPP to EPA and MassDEP within ninety (90) days of the effective date of the Permit. The Storm Drain Evaluation (special study) shall include all studies, sampling and analyses necessary to develop site-specific BMPs necessary to limit and/or prevent the introduction of cyanide into the storm drain system. These site-specific BMPs shall be measures to control, reduce, and/or eliminate cyanide concentrations within the storm drain discharge. In addition, the Storm Drain Evaluation shall require evaluation of a mixing zone/dilution factor within the tidal-influenced Mystic River using an appropriate method or model. The Permittee shall submit the completed the Storm Drain Evaluation (special study) to EPA and MassDEP within one (1) year from the effective date of this Permit, and the Permittee shall begin implementation the BMPs developed in the Storm Drain Evaluation (special study) no later than one (1) year after the effective date of this Permit. The site-specific BMPs shall be prepared in accordance with good engineering practices, identify potential sources of cyanide to the storm drain system that may reasonably be expected to affect the quality of the stormwater discharge, and describe the practices which will be used to reduce cyanide concentrations and assure compliance with this permit. Within three (3) years from the effective date of this Permit, the Permittee shall implement the site-specific BMPs to control, reduce, and/or eliminate cyanide within the storm drains. Within four (4) years from the effective date of this Permit, the Permittee shall validate the effectiveness of these BMPs through sampling and analysis.

- 6. All areas identified in the SWPPP shall be inspected, at least once per quarter, by qualified personnel with one or more members of the stormwater pollution prevention team. Inspections shall begin during the 1<sup>st</sup> full quarter after the effective date of this permit. EPA considers quarters as follows: January to March; April to June; July to September; and October to December. Each inspection must include a visual assessment of stormwater samples (collected from SD-6, the detention basin), which shall be collected during the first hour of discharge from a storm event during slack low tide, stored in a clean, clear glass or plastic container, and examined in a well-lit area for the following water quality characteristics: color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of pollution. The Permittee shall document the following information for each inspection and maintain the records along with the SWPPP:
  - a. The date and time of the inspection and at which any samples were collected;
  - b. The name(s) and signature(s) of the inspector(s)/sample collector(s);
  - c. If applicable, why it was not possible to take samples within the first 30 minutes of discharge from a storm event;
  - d. Weather information and a description of any discharges occurring at the time of the inspection;
  - e. Results of observations of stormwater discharges, including any observed discharges of pollutants and the probable sources of those pollutants;
  - f. Any control measures needing maintenance, repairs or replacement; and,
  - g. Any additional control measures needed to comply with the permit requirements.
- 7. The Permittee shall amend and update the SWPPP within 14 days of any changes at the facility that result in a significant effect on the potential for the discharge of pollutants to the waters of the United States. Such changes may include, but are not limited to: a change in design, construction, operation, or maintenance, materials storage, or activities at the facility; a release of a reportable quantity of pollutants as described in 40 CFR §302; or a determination by the Permittee or EPA that the SWPPP appears to be ineffective in achieving the general objectives of controlling pollutants in stormwater discharges.
- 8. Any amended, modified, or new versions of the SWPPP shall be re-certified and signed by the Permittee in accordance with the requirements identified in 40 CFR §122.22. The Permittee shall also certify, at least annually, that the previous year's inspections and maintenance activities were conducted, results recorded, records maintained, and that the facility is in compliance with this permit. If the facility is not in compliance with any aspect of this permit, the annual certification shall state the non-compliance and the remedies which are being undertaken. Such annual certifications also shall be signed in accordance with the requirements identified in 40 CFR §122.22. The Permittee shall maintain at the facility a copy of its current SWPPP and all SWPPP certifications (the initial certification, re-certifications, and annual certifications) signed during the effective period of this permit, and shall make these available for inspection by EPA and MassDEP. In addition, the Permittee shall document in the SWPPP any violation of numerical or non-numerical stormwater effluent limits with a date and description of the corrective actions taken.

- 9. The Permittee must retain a copy of the current SWPPP required by the permit at the facility. Unless prohibited by law, the SWPPP must be immediately available to EPA; MassDEP; a local agency that reviews stormwater management plans; the operator of an MS4 receiving discharges from the site; and representatives of the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) at the time of an onsite inspection or upon request. EPA may provide access to portions of the Permittee's SWPPP to a member of the public upon request. Confidential Business Information (CBI) may be withheld from the public, but may not be withheld from those staff cleared for CBI review within EPA, USFWS, or NMFS.
- 10. This permit may be modified in accordance with 40 CFR §122.62(a)(2) and Part II.A.4 to incorporate additional requirements, including new and/or additional specific best management practices or numerical effluent limits, based on the results of the Storm Drain Evaluation.

## C. MONITORING AND REPORTING

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate discharge monitoring report (DMR) forms postmarked no later than the 15th day of the month following the effective date of the permit. The results of the annual Priority Pollutant monitoring shall be attached to the DMR for the month of December.

Signed and dated originals of these, and all other reports required herein, shall be submitted to the Director and the State at the following addresses:

U.S. Environmental Protection Agency Water Technical Unit (SEW) P.O. Box 8127 Boston, Massachusetts 02114

The State Agency is:

Massachusetts Department of Environmental Protection Bureau of Waste Prevention 205A Lowell Street Wilmington, MA 01887

In addition, copies of all Discharge Monitoring Reports shall be submitted to the following address:

Massachusetts Department of Environmental Protection
Division of Watershed Management
Surface Water Discharge Permit Program
627 Main Street
Worcester, MA 01608

## D. STATE PERMIT CONDITIONS

This discharge permit is issued jointly by the U. S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP) under federal and state

law, respectively. As such, all the terms and conditions of this permit are hereby incorporated into and constitute a discharge permit issued by the Commissioner of the Massachusetts DEP pursuant to M.G.L. Chap. 21, §43.

Each agency shall have the independent right to enforce the terms and conditions of this permit. Any modification, suspension or revocation of this permit shall be effective only with respect to the agency taking such action, and shall not affect the validity or status of this permit as issued by the other agency, unless and until each agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this permit is declared, invalid, illegal or otherwise issued in violation of state law such permit shall remain in full force and effect under federal law as an NPDES permit issued by the U.S. Environmental Protection Agency. In the event this permit is declared invalid, illegal or otherwise issued in violation of federal law, this permit shall remain in full force and effect under state law as a permit issued by the Commonwealth of Massachusetts.