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)

Weaver's Cove Energy, LLC

is authorized to discharge from the facility located at

One New Street
Fall River, MA 02720

to receiving water named **Taunton River (MA62-04),** a Class SB water, 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 following sixty (60) days after signature if comments are received. If no comments are received, this permit shall become effective upon signature.

This permit supersedes the permit issued on November 20, 1978.

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 consists of 11 pages in Part I including effluent limitations and monitoring requirements, and 25 pages in Part II including General Conditions and Definitions.

Signed this day of , 2011

Stephen S. Perkins, Director
Office of Ecosystem Protection
Environmental Protection Agency
Region I
Boston, MA

David Ferris, Director
Massachusetts Wastewater Management Program
Department of Environmental Protection
Commonwealth of Massachusetts
Boston, MA

PART I.A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date and lasting through expiration the permittee is authorized to discharge treated stormwater runoff from **Outfall Serial Number 001** to the Taunton River. Such discharge shall be limited and monitored by the permittee as specified below and apply during wet weather conditions[1]:

Effluent Characteristic	Units	Discharge Limitation		Monitoring Requirements [1]	
		Average Monthly	Maximum Daily	Measurement Frequency	Sample Type
Flow	MGD	*****	0.36 [2]	1/Quarter	Estimate
pH range [3, 4]	s.u.	6.0- 8.5		1/Quarter	Grab
Total Suspended Solids (TSS)	mg/L	Report	Report	1/Quarter	Grab
Oil and Grease [5]	mg/L	*****	15	1/Quarter	Grab
Fecal coliform bacteria	cfu/100ml	*****	Report	1/Quarter[6]	Grab
Enterococcus bacteria	cfu/100ml	*****	Report	1/Quarter[6]	Grab
Total Petroleum Hydrocarbons	mg/l	*****	Report	1/Year	Grab
Total BTEX	mg/l	*****	Report	1/Year	Grab
Naphthalene	mg/l	*****	Report	1/Year	Grab
Ethylene Dibromide	mg/l	*****	Report	1/Year	Grab
Methyl-tert-butyl ether (MtBE)	ug/l	*****	Report	1/Year	Grab
Total Group I Polycyclic Aromatic Hydrocarbons(PAH)	ug/l	*****	Report	1/Year	Grab
Total Group II Polycyclic Aromatic Hydrocarbons(PAH)	ug/l	*****	Report	1/Year	Grab
Chromium III, Trivalent	ug/l	*****	Report	1/Year	Grab
Chromium VI, Hexavalent	ug/l	*****	Report	1/Year	Grab
Iron, Total	ug/l	*****	Report	1/Year	Grab
Lead, Total	ug/l	*****	Report	1/Year	Grab
Nickel, Total	ug/l	*****	Report	1/Year	Grab
Zinc, Total	ug/l	*****	Report	1/Year	Grab

Footnotes:

1. Sampling in compliance with the monitoring requirements specified above shall be conducted at the outlet of the Oil/Water (O/W) Separator and shall be taken during wet weather conditions. Wet weather conditions are defined as periods with effluent resulting from a storm event that is greater than 0.10 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.10 inch rainfall) storm event. Wet weather sampling shall be conducted within the first 60 minutes after water is discharged from the O/W separator, if feasible, or as soon as practicable after 60 minutes has elapsed. In the latter case, the permittee

shall submit with the monitoring report a description of why the collection of the grab sample(s) during the first sixty minutes was impracticable. When the permittee is unable to collect grab sample(s) due to adverse climatic conditions, the permittee must submit, in lieu of sampling data, a description of why the grab sample(s) could not be collected, including available documentation of the event. A no discharge (NODI) code of "9" shall be reported on the discharge monitoring report (DMR) for any sampling periods in which there is no discharge. Any change in sampling location must be reviewed and approved in writing by EPA and MassDEP, unless otherwise specified in this permit. 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, if it is conducted in accordance with EPA approved methods consistent with the provisions of 40 CFR § 122.41(l)(4)(ii).

2. For Flow, the maximum daily limit represents the estimated maximum daily flow that would pass through the O/W Separator for each day that stormwater is discharged during the reporting period, based on the flow rate of 250 gallons per minute (gpm).

3. The pH of the effluent shall not be less than 6.0 standard units (s.u.), nor greater than 8.5 s.u. at any time, unless these values are exceeded due to natural causes. The pH shall be no more than 0.2 units outside the natural background range. If the pH results of the discharge are outside the range of 6.0 – 8.5 s.u. due to background conditions, the pH must be within 0.2 s.u. of the rainfall's pH level. There shall be no change from natural background conditions that would impair any use assigned to this Class.

4. Required for State Certification.

5. EPA Method 1664A shall be used as defined at 40 CFR Part 136 for the determination of the Oil and Grease parameter.

6. Bacteria sampling shall be conducted once per calendar quarter. If the results of the first four consecutive samples are below 88 organisms per 100 ml for fecal coliform and below 104 cfu for *Enterococcus*, the permittee may request that monitoring be required only annually thereafter. This change will occur upon EPA's written approval.

PART I.A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. During the period beginning on the effective date and lasting through expiration the permittee is authorized to discharge untreated stormwater runoff from **Outfall Serial Number 004** to the Taunton River Such discharge shall be limited and monitored by the permittee as specified below and apply during wet weather conditions:

Effluent Characteristic	Units	Discharge Limitation		Monitoring Requirements [1]	
		Average Monthly	Maximum Daily	Measurement Frequency	Sample Type
Flow	MGD	*****	Report	1/Quarter	Estimate
pH range [2, 3]	s.u.	6.0 - 8.5		1/Quarter	Grab
Total Suspended Solids (TSS)	mg/L	Report	Report	1/Quarter	Grab
Oil and Grease [4]	mg/L	*****	15	1/Quarter	Grab
Fecal coliform bacteria	cfu/100 ml	*****	Report	1/Quarter[5]	Grab
Enterococcus bacteria	cfu/100 ml	*****	Report	1/Quarter[5]	Grab
Total Petroleum Hydrocarbons	mg/l	*****	Report	1/Year	Grab
Total BTEX	mg/l	*****	Report	1/Year	Grab
Naphthalene	mg/l	*****	Report	1/Year	Grab
Ethylene Dibromide	mg/l	*****	Report	1/Year	Grab
Methyl-tert-butyl ether (MtBE)	ug/l	*****	Report	1/Year	Grab
Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	ug/l	*****	Report	1/Year	Grab
Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	ug/l	*****	Report	1/Year	Grab
Chromium III, Trivalent	ug/l	*****	Report	1/Year	Grab
Chromium VI, Hexavalent	ug/l	*****	Report	1/Year	Grab
Iron, Total	ug/l	*****	Report	1/Year	Grab
Lead, Total	ug/l	*****	Report	1/Year	Grab
Nickel, Total	ug/l	*****	Report	1/Year	Grab
Zinc, Total	ug/l	*****	Report	1/Year	Grab

Footnotes**:**

1. Sampling in compliance with the monitoring requirements specified above shall be conducted before the effluent is discharged to the Taunton River and taken during wet weather conditions as defined in Footnote 1 on Page 2. Wet weather sampling shall be conducted within the first 60 minutes after water is discharged from this outfall, or as soon as practicable after 60 minutes has elapsed. In the latter case, the permittee shall submit with the monitoring report a description of why the collection of the grab sample(s) during the first sixty minutes was impracticable. When the permittee is unable

to collect grab sample(s) due to adverse climatic conditions, the permittee must submit, in lieu of sampling data, a description of why the grab sample(s) could not be collected, including available documentation of the event. A no discharge (NODI) code of "9" shall be reported on the DMR for any sampling periods in which there is no discharge. Any change in sampling location must be reviewed and approved in writing by EPA and MassDEP, unless otherwise specified in this permit. 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, if it is conducted in accordance with EPA approved methods consistent with the provisions of 40 CFR § 122.41(l)(4)(ii).

2. The pH of the effluent shall not be less than 6.0 standard units (s.u.), nor greater than 8.5 s.u. at any time, unless these values are exceeded due to natural causes. The pH shall be no more than 0.2 units outside the natural background range. If the pH results of the discharge are outside the range of 6.0 – 8.5 s.u. due to background conditions, the pH must be within 0.2 s.u. of the rainfall's pH level. There shall be no change from natural background conditions that would impair any use assigned to this Class.

3. Required for State Certification.

4. EPA Method 1664A shall be used as defined at 40 CFR Part 136 for the determination of the Oil and Grease parameter.

5. Bacteria sampling shall be conducted once per calendar quarter. If the results of the first four consecutive samples are below 88 organisms per 100 ml for fecal coliform and below 104 cfu for *Enterococcus*, the permittee may request that monitoring be required only annually thereafter. This change will occur upon EPA's written approval.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

3. The discharge shall not cause a violation of the water quality standards of the receiving waters.

4. The discharge shall not cause objectionable discoloration to the receiving waters.

5. The discharge shall not contain a visible oil sheen, foam, or floating solids as any time.

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

7. The discharges shall not impart color, taste, turbidity, toxicity, radioactivity or other properties which cause those waters to be unsuitable for the designated uses and characteristics ascribed to their use.

8. The permittee shall not discharge any sludge and/or bottom deposits from storage tanks, basins and/or diked areas to the receiving water. Examples of storage tanks and/or basins include, but are not limited to primary catch basins and any Oil/Water (O/W) Separator.

9. The permittee shall notify the EPA and MassDEP in writing of any changes in the operations at the facility, including the use of chemical additives and changes which have the potential to cause the maximum design flow rate through the O/W Separator to be exceeded, that may have an effect on the permitted discharge of storm water from the facility.

10. The permittee shall, at a minimum, remove sediment from the O/W Separator associated with Outfall 001 whenever it has accumulated to a depth that would diminish the effectiveness of the separator or cause such sediment to be discharged to the Taunton River.

11. The permittee shall inspect, maintain and operate the O/W Separator associated with Outfall 001 in order to minimize the discharge of oil and solids to assure that the effluent limitations and conditions of this permit are met.

12. At least once per month, the permittee shall inspect the drainage system line to the O/W separator and Outfall 004 for any dry weather flow. This inspection shall be conducted and recorded at least 48 hours after the previously measurable (greater than 0.10 inch rainfall) storm event. If dry weather flow is observed or evidence of dry weather flow is obtained at any time at either of these locations, the permittee shall record the following information and submit with that month's DMR:

    - Date and time of observation
    - Explanation, if any, of the occurrence of this flow
    - Time since last storm event greater that was greater than 0.1 inches in magnitude
    - Whether flow was observed or if there was evidence of flow

13. 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 basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

        (1) One hundred micrograms per liter (100 µg/l);

        (2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrite; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

        (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 C.F.R.§122.21(g)(7); or

        (4) Any other notification level established by the Director in accordance with 40 C.F.R.§122.44(f).

    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":

(1) Five hundred micrograms per liter (500 µg/l);

(2) One milligram per liter (1 mg/l) for antimony;

(3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 C.F.R.§122.21(g)(7);

(4) Any other notification level established by the Director in accordance with 40 C.F.R.§122.44(f).

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.

14. Toxics Control

a. The permittee shall not discharge any pollutant or combination of pollutants in toxic amounts.

b. Any toxic components of the effluent shall not result in any demonstrable harm to aquatic life or violate any state or federal water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be revised or amended in accordance with such standards.

B. UNAUTHORIZED DISCHARGES

1. The permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from the outfalls listed in Part I A.1. and 2. of this permit. The permittee is not authorized to discharge from these outfalls during dry weather. Discharges of wastewater or storm water from any other point sources not authorized by this permit shall be reported in accordance with Part II (Standard Conditions), Section D.1.e.(1) of this permit (Twenty-four hour reporting).

C. STORMWATER POLLUTION PREVENTION PLAN

1. The permittee shall prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) that will be designed to reduce, or prevent, the discharge of pollutants in stormwater to the receiving waters identified in this permit. The SWPPP shall be a written document and be consistent with the terms of this permit. The permittee shall comply with the terms of its SWPPP.

2. The SWPPP shall be prepared and signed by the Permittee within 90 days after the effective date of this permit. The Permittee shall certify that the SWPPP meets the requirements of the permit. The certification shall be signed in accordance with the requirements identified in 40 CFR §122.22. A copy of this certification shall be sent to EPA and MassDEP within one hundred and twenty (120) days of the effective date of the Permit.

3. The SWPPP shall be consistent with the general provisions for SWPPPs included in the most current version of the Multi-Sector General Permit (MSGP) for StormWater Discharges Associated with Industrial Activities. (The current version of the MSGP was issued on September 29, 2008) The SWPPP shall include best management practices (BMPs) for on-site activities that will minimize the discharge of pollutants in stormwater to waters of the United States. The permittee shall use the benchmark values provided in the MSGP in conjunction with the ongoing stormwater sampling results to determine whether it is effectively minimizing the discharge of these parameters in its stormwater.

4. The SWPPP shall be revised as necessary to be in accordance with good engineering practices, to identify potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges, and to describe and ensure implementation of practices which will be used to reduce the pollutants and assure compliance with this permit. Specifically, the SWPPP shall contain the elements listed below:

    a. A pollution prevention team responsible for developing, implementing, maintaining, revising and ensuring compliance with the SWPPP.
    b. A site description which includes a list of activities at the facility; a site map showing drainage areas and direction of stormwater flows; receiving waters and outfall location; the location of industrial activities, storage, disposal, material handling; and all structural controls.
    c. A summary of all pollutant sources which includes all areas where spills have occurred or could occur. For each source, identify the expected drainage and the corresponding pollutant.
    d. A summary of any existing stormwater discharge sampling data.
    e. A description of all stormwater controls, both structural and non-structural. BMPs must include good housekeeping measures, preventative maintenance programs, spill prevention and response procedures, runoff management practices, and proper handling of salt or materials containing salt that are used for deicing activities. The SWPPP shall describe how the BMPs are appropriate for the facility. All BMPs shall be properly maintained and be in effective operating condition.

5. All areas identified in the SWPPP shall be inspected, at least on an annual basis. A tracking or follow-up procedure must be used to ensure that all appropriate actions have been taken in response to such inspection. Records documenting significant observations made and actions taken during and after inspections must be retained as part of the SWPPP for a minimum of five (5) years.

6. The permittee shall amend and update the SWPPP within 14 days for any changes at the facility affecting the SWPPP. Changes which may affect the SWPPP include, but are not limited to, the following activities: a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to the waters of the United States; 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 storm water discharges associated with industrial activity. Any amended or new versions of the SWPPP

shall be re-certified by the Permittee. Such re-certifications also shall be signed in accordance with the requirements identified in 40 CFR §122.22.

7. If any effluent samples exceed the MSGP's benchmark value for TSS of 100 mg/l, the permittee shall review the selection, design, installation, and implementation of the site's control measures to determine what modifications are necessary to address these effluent levels. The permittee shall either, (1) make the necessary modifications and continue quarterly monitoring until there have been 4 additional quarters of monitoring conducted for which the average TSS value does not exceed the benchmark; or (2) make a determination that no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice to meet the benchmark value. The permittee must also document its rationale for concluding that no further pollutant reductions are achievable, and retain all records related to this documentation with its SWPPP. If after modifying its control measures and conducting 4 additional quarters of monitoring, the average TSS value still exceeds the benchmark (or if an exceedance of the benchmark by the 4 quarter average is mathematically certain prior to conducting the full 4 additional quarters of monitoring), the permittee must again review its control measures and take one of the two actions above.

8. The permittee shall certify at least annually that the previous year's inspections and maintenance activities were conducted, results were recorded, records were maintained, and that the facility is in compliance with the SWPPP. If the facility is not in compliance with any aspect of the SWPPP, 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 keep a copy of the current SWPPP and all SWPPP certifications (initial certification, re-certifications, and annual certifications) signed during the effective period of this permit at the facility and shall make them available for inspection by EPA and MassDEP.

D. REOPENER CLAUSE

1. This permit shall be modified, or alternately, revoked and reissued, to comply with any applicable standard or limitation promulgated or approved under sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:

    a. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
    b. Controls any pollutants not limited in the permit.

E. MONITORING AND REPORTING

1. **For a period of one year from the effective date of the permit**, the permittee may either submit monitoring data and other reports to EPA in hard copy form or report electronically using NetDMR, a web-based tool that allows permittees to electronically submit discharge monitoring reports (DMRs) and other required reports via a secure internet connection. Specific requirements regarding submittal of data and reports in hard copy form and for submittal using NetDMR are described below:

a. Submittal of Reports Using NetDMR

NetDMR is accessed from: http://www.epa.gov/netdmr. **Within one year of the effective date of this permit**, the permittee shall begin submitting DMRs and reports required under this permit electronically to EPA using NetDMR, unless the facility is able to demonstrate a reasonable basis, such as technical or administrative infeasibility, that precludes the use of NetDMR for submitting DMRs and reports ("opt-out request").

DMRs shall be submitted electronically to EPA no later than the 15th day of the month following the completed reporting period. All reports required under the permit shall be submitted to EPA as an electronic attachment to the DMR. Once a permittee begins submitting reports using NetDMR, it will no longer be required to submit hard copies of DMRs or other reports to EPA and will no longer be required to submit hard copies of DMRs to MassDEP. However, permittees shall continue to send hard copies of reports other than DMRs to MassDEP until further notice from MassDEP.

b. Submittal of NetDMR Opt-Out Requests

Opt-out requests must be submitted in writing to EPA for written approval at least sixty (60) days prior to the date a facility would be required under this permit to begin using NetDMR. This demonstration shall be valid for twelve (12) months from the date of EPA approval and shall thereupon expire. At such time, DMRs and reports shall be submitted electronically to EPA unless the permittee submits a renewed opt-out request and such request is approved by EPA. All opt-out requests should be sent to the following addresses:

Attn: NetDMR Coordinator
U.S. Environmental Protection Agency, Water Technical Unit
5 Post Office Square, Suite 100 (OES04-1)
Boston, MA 02109-3912

and

Massachusetts Department of Environmental Protection
Surface Water Discharge Permit Program
627 Main Street, 2nd Floor
Worcester, Massachusetts 01608

c. Submittal of Reports in Hard Copy Form

Monitoring results shall be summarized for each calendar month and reported on separate hard copy Discharge Monitoring Report Form(s) (DMRs) postmarked no later than the 15th day of the month following the completed reporting period. All reports required under this permit shall be submitted as an attachment to the DMRs. Signed and dated originals of

the DMRs, and all other reports or notifications required herein or in Part II shall be submitted to the Director at the following address:

U.S. Environmental Protection Agency
Water Technical Unit (OES04-SMR)
5 Post Office Square - Suite 100
Boston, MA 02109-3912

Duplicate signed copies of all reports or notifications required above shall be submitted to the State at the following address:

MassDEP – Southeast Region
Bureau of Waste Prevention (Industrial)
20 Riverside Drive
Lakeville, MA 02347

Any verbal reports, if required in **Parts I** and/or **II** of this permit, shall be made to both EPA and to MassDEP.

F. STATE PERMIT CONDITIONS

1. This authorization to discharge includes two separate and independent permit authorizations. The two permit authorizations are (i) a federal National Pollutant Discharge Elimination System permit issued by the U.S. Environmental Protection Agency (EPA) pursuant to the Federal Clean Water Act, 33 U.S.C. §§1251 et seq.; and (ii) an identical state surface water discharge permit issued by the Commissioner of MassDEP pursuant to the Massachusetts Clean Waters Act, MGL c. 21, §§ 26-53, and 314 CMR 3.00. All of the requirements contained in this authorization, as well as the standard conditions contained in 314 CMR 3.19, are hereby incorporated by reference into this state surface water discharge permit.

2. This authorization also incorporates the state water quality certification issued by MassDEP under § 401(a) of the Federal Clean Water Act, 40 CFR 124.53, MGL c. 21, § 27 and 314 CMR 3.07. All of the requirements (if any) contained in MassDEP's water quality certification for the permit are hereby incorporated by reference into this state surface water discharge permit as special conditions pursuant to 314 CMR 3.11.

3. 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 a 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.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND - REGION I
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

FACT SHEET

DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES PURSUANT TO THE CLEAN WATER ACT (CWA)

NPDES PERMIT NUMBER: MA0004871

PUBLIC NOTICE START AND END DATES: May 3, 2011 – June 1, 2011

NAME AND MAILING ADDRESS OF APPLICANT:

Weaver's Cove Energy, LLC
1 New Street
Fall River, MA 02720

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Weaver's Cove Energy, LLC
1 New Street
Fall River, MA 02720

RECEIVING WATER: Taunton River
(USGS Hydrologic Code #01090004 – Narragansett Bay Watershed)

RECEIVING WATER CLASSIFICATION(S): Class SB - Warm water fishery, shellfishing (restricted), CSO

SIC CODES: 8748 - Business Consulting Services; 8711 - Engineering Services
8741 - Management Services; 8742 - Management Consulting Services

Table of Contents

I. Proposed Action, Type of Facility and Discharge Location

Weaver's Cove Energy, LLC ("Weaver's Cove") is the current owner of this approximately 73 acre site, which is situated along the banks of the Taunton River in Fall River, Massachusetts and is characterized as a brownfields site. This site is currently operating as an engineering and project development office in preparation for the construction of a Liquefied Natural Gas (LNG) offloading, processing, and sendout facility. This site had formerly been owned by the Shell Oil Company and operated as a bulk petroleum storage facility with multiple storage tanks. Petroleum products including gasoline, distillate oil, kerosene, and naphtha were delivered to this site by ocean-going tanker or barge, stored in an array of on-site tanks, and then transported to market by truck, pipeline, and rail. Prior to Shell's purchase of the site in the 1920's, the New England Oil and Refining Company conducted petroleum refining and storage operations at the site. This site is permitted for the storage of up to 64 million gallons of petroleum product, but most of these operations were discontinued in the late 1990's, as the decommissioning and dismantling of storage tanks occurred. All petroleum products were removed from the storage tanks on this site and all but 8 of these storage tanks have been removed from the property. The permittee is planning to remove all remaining storage tanks and associated piping as well as a pier structure after all permitting for the proposed LNG project is complete and major site work begins.

There is currently a groundwater remediation system on site treating contaminated groundwater that is being operated by Shell Oil, a former owner of this site. This cleanup is being conducted under the Massachusetts Contingency Plan (MCP) guidelines and Shell Oil is currently the responsible party for the operation and maintenance of this treatment system. This discharge of treated groundwater, through Outfall 001A, is permitted and limited separately by EPA's Remediation General Permit (RGP).

In 1978, NPDES permit #MA0004871, specifically authorizing the storm water discharge from Outfalls 001 and 004, was issued to Shell Oil. This permit was transferred to Jay Cashman, Inc. in 2003, and was subsequently transferred to Weaver's Cove in 2007. This permit expired on November 20, 1983, but was administratively continued at that time, due to Shell Oil's submittal of a completed NPDES re-application in 1983. As a result, Weaver's Cove remains subject to the existing (1978) permit until EPA issues a new one.

The permittee plans to construct a state-of-the-art LNG Terminal, which will include LNG transfer piping, a 200,000 cubic meter LNG storage tank, vaporization equipment, an LNG truck loading area, and other ancillary equipment. Other improvements will also be made to the site relative to the waterfront area. This terminal is expected to provide about 20% of the area's natural gas supply.

Since large LNG ships are prohibited by the presence of the old Brightman Street bridge from navigating the Taunton River to and from this location, Weaver's Cove has applied to the Federal Energy Regulatory Commission (FERC) for approval to construct, own, and operate an offshore berth in Mount Hope Bay in Massachusetts

waters; as well as an approximately 4.25-mile-long LNG transfer system, which will include buried submarine LNG transfer lines. It is proposed that LNG delivered by LNG ships will be unloaded at the offshore berth and transferred through the LNG transfer system to the LNG storage tank at the LNG terminal site in Fall River. The project will include development of a turning basin, to accommodate LNG tanker turning maneuvers where the tankers leave the existing federal navigation channel and enter a proposed new approach channel providing access to the offshore berth site.

This proposed permit does not cover discharges associated with the planned LNG terminal but rather covers the discharge of storm water that may contain pollutants associated with the previous and current site uses.

See **Figure 1** for a map of the site location and outfalls and **Figure 2** for a map showing the drainage areas for these outfalls, which will be authorized by this draft permit.

II. Description of Treatment System and Discharges

Outfall 001

As shown in Figures 1 and 2, Outfall 001 is located on the north side of the property and collects storm water from the portion of the site labeled "Area 3". This outfall comprises storm water runoff which is treated through an oil/water (O/W) separator prior to being discharged to the Taunton River. The current site is characterized primarily by sand and gravel around the previous and existing tank farm areas, vegetation around most of the perimeter of the site, and paved areas near the entrance to the site where the offices are located. According to the permittee, all storm water from the portion of the property labeled "Area 2" either runs off the site or infiltrates into the ground, with no discrete outfalls.

Outfall 004

As seen in the attached figures, Outfall 004 is located on the south side of this property and collects storm water from the portion of the site labeled "Area 1". Previously, Outfall 004 was located closer to the southern edge of the property and included treatment through a now abandoned O/W separator.

III. Receiving Water Description

Under the state water use classification system, the Massachusetts Department of Environmental Protection (MassDEP) has designated this stretch of the Taunton River, classified as Segment MA62-04, as a Class SB water warm fishery, with shellfishing (Restricted) and combined sewer overflow (CSO) discharges. Shellfishing is restricted in this vicinity due to elevated bacteria levels.

Class SB waters are designated as a habitat for fish, other aquatic life and wildlife and for primary and secondary contact recreation. In approved areas they shall be suitable for shellfish harvesting with depuration (Restricted Shellfish Areas). These waters shall have consistently good aesthetic value (314 CMR 4.05(4)(b)).

Restricted shellfishing areas are designated as "(R)". These waters are subject to more stringent regulation in accordance with the rules and regulations of the Massachusetts Division of Marine Fisheries pursuant to M.G.L. c. 130, § 75. These include applicable criteria of the National Shellfishing Sanitation Program.

Sections 305(b) and 303(d) of the CWA require that States complete a water quality inventory and develop a list of impaired waters. Specifically, Section 303(d) of the CWA requires States to identify those water bodies that are not expected to meet surface water quality standards after the implementation of technology-based controls, and as such, require the development of a Total Maximum Daily Load (TMDL) for each pollutant that is prohibiting a designated use(s) from being attained. In Massachusetts, these two evaluations have been combined into an Integrated List of Waters. The integrated list format provides the status of all assessed waters in a single, multi-part list. The MassDEP submitted to EPA its Final 2008 Integrated List of Waters, also called the "303(d) list", which was approved by EPA on May 4, 2009. This stretch of the Taunton River does not always meet the state water quality standards prescribed for Class SB waters, and is included on the 2008 303(d) list of impaired waters for organic enrichment/low dissolved oxygen, pathogens, as well as from unknown causes. See *Final Massachusetts Year 2008 Integrated List of Waters*[1] and on the *Proposed Massachusetts Year 2010 Integrated List of Waters*[2] which list this segment as a Category 5 waterbody: "Waters requiring a TMDL."

MassDEP is required under the CWA to develop a TMDL for a waterbody once it is identified as impaired. A TMDL is essentially a pollution budget designed to restore the health of a water body. A TMDL first identifies the source(s) of the pollutant from direct and indirect discharges in order to next determine the maximum amount of pollutant (including a margin of safety) that can be discharged to a specific water body while maintaining water quality standards for designated uses. It then outlines a plan to meet the goal. As of the date of this Draft Permit, no TMDLs have been drafted or finalized for the Taunton River watershed. Since this segment of the Taunton River is impaired for bacteria, the draft permit has established quarterly bacteria sampling for the first year of the permit and annual sampling thereafter to assess whether this discharge may be contributing to this water quality impairment.

IV. Limitations and Conditions

The effluent limitations and all other requirements described in Part VI of this Fact Sheet may be found in the draft permit.

[1] http://www.mass.gov/dep/water/resources/08list2.pdf
[2] http://www.mass.gov/dep/water/resources/10list3.pdf

V. Permit Basis: Statutory and Regulatory Authority

General Requirements

The Clean Water Act (CWA) prohibits the discharge of pollutants to waters of the United States without a National Pollutant Discharge Elimination System (NPDES) permit unless such a discharge is otherwise authorized by the CWA. The NPDES permit is the mechanism used to implement technology and water quality-based effluent limitations and other requirements including monitoring and reporting. This draft NPDES permit was developed in accordance with various statutory and regulatory requirements established pursuant to the CWA and any applicable State regulations. The regulations governing the EPA NPDES permit program are generally found at 40 CFR Parts 122, 124, 125, and 136.

When developing permit limits, EPA must consider the most recent technology-based treatment and water quality-based requirements. Subpart A of 40 CFR Part 125 establishes criteria and standards for the imposition of technology-based treatment requirements in permits under Section 301(b) of the CWA, including the application of EPA-promulgated effluent limitations and case-by-case determinations of effluent limitations under Section 402(a)(1) of the CWA. EPA is required to consider technology and water quality-based requirements as well as all limitations and requirements in the existing permit when developing permit limits.

Technology-Based Requirements

Technology-based treatment requirements represent the minimum level of control that must be imposed under Sections 301(b) and 402 of the CWA (see 40 CFR §125 Subpart A) to meet best practicable control technology currently available (BPT) for conventional pollutants and some metals, best conventional control technology (BCT) for conventional pollutants, and best available technology economically achievable (BAT) for toxic and non-conventional pollutants. Although previous owners of the Weaver's Cove property were operating a bulk petroleum storage terminal, most of the oil tanks on this site have been removed and the 8 remaining tanks have been emptied. There are currently no plans to use the remaining tanks again and they will eventually be dismantled during the preparation of the site for LNG operations. Therefore, this facility is not subject to any effluent limitation guidelines (ELGs).

In general, the statutory deadline for non-POTW, technology-based effluent limitations must be complied with as expeditiously as practicable but in no case later than three years after the date such limitations are established and in no case later than March 31, 1989 (see 40 CFR §125.3(a)(2)). Compliance schedules and deadlines not in accordance with the statutory provisions of the CWA can not be authorized by a NPDES permit.

In the absence of published technology-based effluent guidelines, the permit writer is authorized under Section 402(a)(1)(B) of the CWA to establish effluent limitations on a case-by-case basis using best professional judgment (BPJ).

The effluent monitoring requirements have been established to yield data representative of the discharges under the authority of Section 308(a) of the CWA, according to regulations set forth at 40 CFR § 122.41(j), 122.44(i) and 122.48. The monitoring program in the permit specifies routine sampling and analysis which will provide continuous information on the reliability and effectiveness of the installed pollution abatement equipment. The approved analytical procedures are to be found in 40 CFR 136 unless other procedures are explicitly required in the permit.

Water Quality-Based Requirements

Water quality-based limitations are required in NPDES permits when EPA and the State determine that effluent limits more stringent than technology-based limits are necessary to maintain or achieve state or federal water quality standards (WQS). See Section 301(b)(1)(C) of the CWA.

Receiving water requirements are established according to numerical and narrative standards adopted under state law for each water quality classification. When using chemical-specific numeric criteria to develop permit limits, both the acute and chronic aquatic-life criteria, expressed in terms of maximum allowable in-stream pollutant concentration, are used. Acute aquatic-life criteria are considered applicable to daily time periods (maximum daily limit) and chronic aquatic-life criteria are considered applicable to monthly time periods (average monthly limit). Chemical-specific limits are allowed under 40 CFR § 122.44(d)(1) and are implemented under 40 CFR § 122.45(d).

A facility's design flow is used when deriving constituent limits for daily and monthly time periods as well as weekly periods where appropriate. Also, the dilution provided by the receiving water is factored into this process where appropriate. Narrative criteria from the state's water quality standards are often used to limit toxicity in discharges where (a) a specific pollutant can be identified as causing or contributing to the toxicity but the state has no numeric standard; or (b) toxicity cannot be traced to a specific pollutant.

EPA regulations require NPDES permits to contain effluent limits more stringent than technology-based limits where more stringent limits are necessary to maintain or achieve state or federal WQS. The permit must address any pollutant or pollutant parameter (conventional, non-conventional, toxic and whole effluent toxicity) that is or may be discharged at a level that causes or has "reasonable potential" to cause or contribute to an excursion above any water quality criterion. See 40 CFR Section 122.44(d)(1). An excursion occurs if the projected or actual in-stream concentration exceeds the applicable criterion. In determining reasonable potential, EPA considers (a) existing controls on point and non-point sources of pollution; (b) pollutant concentration and variability in the effluent and receiving water as determined from the permit application, monthly

Discharge Monitoring Reports (DMRs), and State and Federal Water Quality Reports; (c) sensitivity of the species to toxicity testing; (d) known water quality impacts of processes on wastewater; and, where appropriate, (e) dilution of the effluent in the receiving water.

WQS consist of three parts: (a) beneficial designated uses for a water body or a segment of a water body; (b) numeric and/or narrative water quality criteria sufficient to protect the assigned designated use(s); and (c) antidegradation requirements to ensure that once a use is attained it will not be degraded. The Massachusetts Surface Water Quality Standards (MA SWQS), found at 314 CMR 4.00, include these elements. The state will limit or prohibit discharges of pollutants to surface waters to assure that surface water quality standards of the receiving waters are protected and maintained or attained. These standards also include requirements for the regulation and control of toxic constituents and require that EPA criteria, established pursuant to Section 304(a) of the CWA, shall be used unless a site-specific criterion is established. The conditions of the permit reflect the goal of the CWA and EPA to achieve and then to maintain WQS.

Antibacksliding

A permit may not be renewed, reissued or modified with less stringent limitations or conditions than those contained in the previous permit unless in compliance with the anti-backsliding requirements of the CWA [see Sections 402(o) and 303(d)(4) of the CWA and 40 CFR §122.44(l)(1 and 2)]. EPA's antibacksliding provisions prohibit the relaxation of permit limits, standards, and conditions except under certain circumstances. Effluent limits based on BPJ, water quality, and state certification requirements must also meet the antibacksliding provisions found at Section 402(o) and 303(d)(4) of the CWA. The only parameter of this permit that is being made less stringent is the lower end of the pH range to account for the low pH storm water that is occasionally discharged through the outfalls. This change is allowed consistent with the “new information” exception of the antibacksliding regulations.

Antidegradation

Federal regulations found at 40 CFR Section 131.12 require states to develop and adopt a statewide antidegradation policy which maintains and protects existing instream water uses and the level of water quality necessary to protect the existing uses, and maintains the quality of waters which exceed levels necessary to support propagation of fish, shellfish, and wildlife and to support recreation in and on the water. The Massachusetts Antidegradation Regulations are found at Title 314 CMR 4.04. There are no new or increased discharges being proposed with this permit reissuance. Therefore, EPA does not believe that the MassDEP is required to conduct an antidegradation review regarding this permit reissuance.

State Certification

Under Section 401 of the CWA, EPA is required to obtain certification from the state in which the discharge is located that all water quality standards or other applicable requirements of state law, in accordance with Section 301(b)(1)(C) of the CWA, are satisfied. EPA permits are to include any conditions required in the state's certification as being necessary to ensure compliance with state water quality standards or other applicable requirements of state law. See CWA Section 401(a) and 40 CFR §124.53(e). Regulations governing state certification are set out at 40 CFR §124.53 and §124.55. EPA regulations pertaining to permit limits based upon water quality standards and state requirements are contained in 40 CFR §122.44(d).

VI. Explanation of Permit's Effluent Limitations

The discharge monitoring report (DMR) data for Outfalls 001 and 004 for the reporting period of January 2004 to June 2010 were reviewed for this permit reissuance. This time span covers discharges authorized to the former permittee, Jay Cashman, as well as to Weaver's Cove. There were many months where there were no data reported, either when the permittee indicated there was no flow, or in other instances when no DMRs were submitted. These data were taken into consideration when determining whether the existing permit limits need to be maintained, reduced, or eliminated. In the following discussion, this period is referred to as the "monitoring period". The current permit that was issued in 1978 required flow monitoring, once per month pH sampling, and oil & grease sampling four times each during two or more storm events per month. Due to the fact that all industrial activity on this site has ceased, EPA has determined that the frequency of monitoring in the 1978 permit is no longer appropriate. Therefore, monitoring under this reissued permit is proposed for once per quarter. However, this permit has added a total suspended solids (TSS) monitoring requirement, as well as sampling for various constituents associated with the former operations at the site, for which the rationale is provided below.

In its 1983 re-application, Shell Oil estimated that there was groundwater infiltrating into the storm sewer system. In preparation for initiation of the groundwater remediation system at this site, Shell Oil redirected the contaminated groundwater flows to its treatment system location, which is within the portion in Figure 2 designated as "Area 3". However, due to the significant portions of the site that drain to Outfalls 001 and 004, there may still be groundwater at the site which infiltrates into subsurface storm drains and then to Outfalls 001 and 004.

Pursuant to a Section 308(a) information request letter from EPA in 2009, the permittee conducted sampling for Outfalls 001 and 004 and analyzed for the parameters in EPA's Form 2C application. The parameters that were detected for Outfall 001 were oil & grease (6.9 mg/l), zinc (55 ug/l), and MtBE (1.2 ug/l). For Outfall 004, oil & grease (2 mg/l) and lead (15 ug/l) were detected.

Based on these limited data, EPA has made the determination that there is no reasonable potential for the discharge of these parameters to cause or contribute to WQS violations in the receiving water. However, in order to assess whether there are still contaminants being discharged from this site that are associated with the previous activities of this site (loading, unloading, and transfer of a variety petroleum products), this permit has established annual monitoring for certain pollutants. The list of pollutants for which monitoring has been established is consistent with the relevant list found in EPA's Remediation General Permit (RGP), which was issued on September 10, 2010. The products that were previously stored at this site are consistent with those listed in Category I of Appendix III of the RGP, which covered Petroleum Related Site Remediation. Within this Category, both Sub-Category A listing the appropriate parameters for "Gasoline-Only Sites" and Sub-Category B listing the appropriate parameters for "Fuel Oils and Other Oils" apply. When the first RGP was issued in 2005, EPA drew upon years of monitoring results from a variety of remediation sites to determine which parameters were likely to be present for specific categories of remediation. This data set formed the basis in the RGP for which lists of parameters needed to be monitored in the influent and limited in the effluent of these remediation systems. The parameters for which there are limits in the RGP for these 2 Sub-Categories are included in this permit and shall be monitored once per year for both outfalls. Based upon the results of this monitoring, the permit may be reopened to either include permit limits or other requirements.

In order to confirm that only stormwater is being discharged through Outfalls 001 and 004, the draft permit has established a monthly dry weather monitoring and recording requirement. Since the O/W separator associated with Outfall 001 collects stormwater and discharges to Outfall 001 periodically based on the level of water in the separator, the permittee shall inspect the drainage system line that discharges to the O/W separator for the presence of dry weather flow. For Outfall 004, the actual outfall point shall be inspected.

Outfall 001

Flow

The 1978 permit required flow monitoring only. The permittee has noted that the capacity of the O/W separator is 40,000 to 60,000 gallons and that flow from this outfall has been estimated to be up to 250 gallons per minute (gpm). Water is discharged near the bottom of the separator by gravity and the separator discharges when there is sufficient flow generated by a storm event. DMR data shows flows estimated at between 10,000 and 360,000 gallons per day (gpd). The draft permit has established a daily maximum flow limit of 360,000 gpd, or 0.36 million gallons per day (MGD). This is the maximum amount of water that can be discharged from the O/W separator, at a rate of 250 gpm, and is consistent with the design specifications of the O/W separator.

pH

The pH range of the previous permit was limited to the Class SB range of 6.5 to 8.5 standard units (su) which is the range required by the MA SWQS and which can be found at 314 CMR 4.05(4)(b)(3). During the monitoring period, the pH range was between 6.3 and 7.82 s.u., with 3 readings below the limit of 6.5 s.u. As noted in the anti-backsliding discussion, the lower end of the pH range has been changed to 6.0 s.u. as the permittee has provided documentation that background levels of pH have often been below 6.0 s.u. Although this level is lower than the State standard of 6.5 s.u., there is considerable dilution available to the effluent in the receiving water which would be expected to result in the water in the immediate vicinity of the outfall to be in compliance with the State standard. Thus, EPA does not believe lowering the pH range to 6.0 would have any measurable impact on the pH in the receiving water.

If an effluent sampling result for pH were to show a pH level below 6.0 s.u., the permittee could sample the rainfall pH at the same time to ascertain whether the effluent pH is within 0.2 s.u. of the rainfall pH and therefore in compliance with the permit language, which is reflective of the State WQS.

Oil and Grease

The DMRs for the period of January 2004 to June 2010 have shown oil and grease levels to be below the detection level of 4 to 5 mg/l, up to a recorded reading of 9 mg/l, all within the limit of 15 mg/l.

The oil and grease maximum daily limit of 15 mg/l for is derived from the narrative water quality criteria in the state water quality standards [see 314 CMR 4.05(3)(b)(7) and (4)(b)7]. For discharges to Class SB waters in Massachusetts, the narrative criteria require, among other things, that no oil and grease is present that would produce a visible film on the surface of the receiving water. The Region interprets this narrative criterion as prohibiting a discharge to these waters that would cause an oil sheen. EPA has maintained the oil and grease limit of 15 mg/l for this draft permit for both outfalls based on the Region's long standing use of the 15 mg/l standard to represent the concentration at which a visible oil sheen is likely to occur. This limit will ensure the narrative water quality standard for oil and grease is protected.

Total Suspended Solids (TSS)

This Draft Permit establishes a TSS monitoring requirement for Outfall 001. This monitoring is consistent with the requirement to meet the narrative standard which requires that "the discharge shall not contain a visible oil sheen, foam, or **floating solids** at any time." Heavy metals and hydrocarbons are readily adsorbed onto particulate matter and the release of these compounds into the environment can be reduced by regulating the amount of suspended solids discharged. Due to the history of this site as a petroleum storage facility, the ongoing remediation at the site, and the presence of some

metals (lead, zinc) and hydrocarbons (oil & grease, MtBE) in recent sampling, EPA has determined that it is appropriate to establish this TSS monitoring requirement. The presence of high TSS levels may also signal the necessity to clean out the solids that have settled at bottom of the O/W separator and require that the permittee review its site conditions and practices, to assure that excessive solids are not being discharged from the O/W separator.

To determine whether the levels of TSS in the effluent are high enough to warrant more frequent sampling or limits, EPA's multi-sector general permit (MSGP) for storm water was reviewed for guidance. The MSGP was reissued in 2008 and established "benchmark values" for certain parameters in storm water discharges, which were established based on a variety of factors, including water quality criteria, hardness values and historical storm water data. For TSS, the benchmark value is 100 mg/l. EPA determined that concentrations of pollutants in storm water above these "benchmark values" represented a level of concern. Therefore, these benchmark values were seen as levels above which could impairments to water quality could be occurring. Essentially, the benchmark values have been used as surrogates to determine whether a facility's storm water pollution prevention plan (SWPPP) measures are being adequately implemented. These values were not seen as limits but rather as levels above which further monitoring and an evaluation of the efficacy of storm water controls was required. Therefore, this benchmark value will be one measure against which to assess whether the discharge of solids from this outfall is being adequately controlled and the SWPPP will require the permittee to assess its storm water controls and make necessary modifications if an effluent TSS level of 100 mg/l is exceeded.

Bacteria

As noted earlier, the receiving water is currently impaired for pathogens and also has restricted shellfishing use. The entire stretch of the Taunton River in Fall River is currently prohibited for shellfishing. Therefore, EPA has determined that limited bacteriological monitoring with no effluent limits will be established in order to assure that discharges from this site are not contributing to this impairment. The State's water quality standards (WQS) for Class SB waters have different indicator bacteria for recreational uses and for shellfishing use. See 314 CMR 4.05(4)(b).

For Class SB waters, fecal coliform is the applicable standard for shellfishing uses. The State WQS limit fecal coliform to a geometric mean MPN (most probable number) of 88 organisms per 100 ml and to not more than 10% of the samples exceeding an MPN of 260 organisms per 100 ml. These levels are typically used as monthly average and daily maximum limits in NPDES permits.

The *Enterococcus* bacteria criteria replaced the former fecal coliform criteria as the preferred indicator for recreational uses. These bacteria criteria were promulgated by the Commonwealth on December 29, 2006 and the EPA approved these criteria on September 19, 2007. For Class SB waters, the Commonwealth of Massachusetts criteria for *Enterococcus* are expressed as "no single enterococci sample shall exceed 104 colony

forming units (cfu) per 100 ml and the geometric mean of all of the samples taken during the most recent six months typically based on a minimum of five samples shall not exceed 35 cfu per 100 ml."

Monitoring for fecal coliform and *Enterococcus* bacteria shall be conducted quarterly. If the results of the first four consecutive samples are below 88 organisms per 100 ml for fecal coliform and below 104 cfu for *Enterococcus*, the permittee may request that monitoring be required only annually thereafter. This change will occur upon EPA's written approval. These are monitor only requirements with no limits.

Outfall 004

Flow

The 1978 permit had a monitor only requirement for flow and flows have ranged between 10,000 and 170,000 gallons per day (GPD) during the monitoring period. The flow will continue to be estimated during storm events that are sampled, which now will be at a frequency of once per quarter.

pH

The pH range in the 1978 permit was limited to the Class SB range of 6.5 to 8.5 standard units (su) similar to Outfall 001. During the monitoring period, the pH has ranged between 6.33 – 7.76 s.u., with one exceedence below 6.5 s.u. Similar to the revised pH limit range for Outfall 001, this permit has changed the lower end of the pH range to 6.0 s.u. to account for the occasionally low pH storm water that has been measured by the permittee.

Oil and Grease

The DMRs for the period of January 2004 to June 2010 have shown oil and grease levels to be below the detection level of 4 and up to a recorded reading of 17 mg/l, which represents the only violation of the 15 mg/l limit. The limit of 15 mg/l will remain in this permit, due to the occasional detection of this parameter, the history of the site and since there is no O/W separator at this outfall. The rationale for this limit is the same as for the Outfall 001 limit.

Total Suspended Solids

This Draft Permit establishes a TSS monitoring requirement for Outfall 004. The rationale provided for the TSS monitoring for Outfall 001 applies to Outfall 004. This TSS monitoring requirement will provide an indication of whether the narrative standard is being met and whether additional controls on the site would be necessary to limit the discharge of solids from this outfall.

Bacteria

Similar to the requirement for Outfall 001 detailed above, monitoring for fecal coliform and *Enterococcus* has been established for this outfall as well. If the results of the first four consecutive samples are below 88 organisms per 100 ml for fecal coliform and below 104 cfu for *Enterococcus*, the permittee may request that monitoring be required only annually thereafter. This change will occur upon EPA's written approval. These are monitor only requirements with no limits.

Other Conditions

The remaining conditions of the permit are based on the NPDES regulations, 40 CFR Parts 122 though 125, and consist primarily of management requirements common to all permits.

VII. Storm Water Pollution Prevention Plan (SWPPP)

This facility had previously engaged in activities which have been shown to result in the discharge of pollutants to waters of the United States either directly or indirectly through storm water runoff. These operations included at least one of the following in an area potentially exposed to precipitation or storm water: material storage, in-facility transfer, material processing, material handling, or loading and unloading. To control the activities and operations which could contribute pollutants to waters of the United States, potentially violating the State's WQS, the Draft Permit requires the permittee to implement and maintain a SWPPP containing best management practices (BMPs) appropriate for this facility (See Sections 304(e) and 402(a)(1) of the CWA and 40 CFR §125.103(b)). Although loading and unloading of petroleum products in no longer occurring at this site, leftover infrastructure, unknown sources of residual contamination, and operations related to the on-site groundwater remediation may still be contributing pollutants to the receiving water in storm water runoff.

The goal of the SWPPP is to reduce, or prevent, the discharge of pollutants through the storm water drainage system. The SWPPP requirements in the Draft Permit are intended to provide a systematic approach by which the permittee shall at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of the permit. The SWPPP shall be prepared in accordance with good engineering practices and identify potential sources of pollutants, which may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility. The SWPPP, upon implementation, becomes a supporting element to any numerical effluent limitations in the Draft Permit. Consequently, the SWPPP is an enforceable element of this permit.

Implementation of the SWPPP involves the following four main steps:

(1) Forming a team of qualified facility personnel who will be responsible for developing and updating the SWPPP and assisting the site manager in its implementation;

(2) Assessing the potential storm water pollution sources;
(3) Selecting and implementing appropriate management practices and controls for these potential pollution sources; and
(4) Periodically re-evaluating the effectiveness of the SWPPP in preventing storm water contamination and in complying with the various terms and conditions of the Draft Permit.

As noted in the TSS discussion above, this permit will assess whether the TSS levels in the permitted discharges are below the benchmark value of 100 mg/l. If there is a sampling result that exceeds this level, the permittee shall review the selection, design, installation, and implementation of the site's control measures to determine what modifications are necessary to address these effluent levels.

To minimize preparation time of the SWPPP, the permittee may, for example, reflect requirements for Spill Prevention Control and Countermeasure (SPCC) plans [under Section 311 of the CWA and 40 CFR Part 112], Corporate Management Practices, etc.; and may incorporate any part of such plans into the SWPPP by reference. Provided these references address specific pollution prevention requirements and the goals of the SWPPP, they can be attached to the SWPPP for review and inspection by EPA and MassDEP personnel. Although relevant portions of other environmental plans, as appropriate, can be built into the SWPPP, ultimately however, it is important to note that the SWPPP should be a comprehensive, stand-alone document.

Pursuant to Section 304(e) of the CWA and 40 CFR §125.103(b), best management practices (BMP) may be expressly incorporated into a permit on a case-by-case basis where necessary to carry out Section 402(a)(1) of the CWA.

Generally, BMPs should include processes, procedures, schedules of activities, prohibitions on practices, and other management practices that prevent or reduce the discharge of pollutants in storm water runoff. A copy of the most recent SWPPP shall be kept at the facility and be available for inspection by EPA and MassDEP. The draft permit requires the permittee to continue to implement the current SWPPP and revise it as necessary no later than ninety (90) days after the permit's effective date. The SWPPP is a supporting element to any numerical effluent limitations which minimizes the discharge of pollutants through the proper operation of the facility. Consequently, the SWPPP is as equally enforceable as the numerical limits and other requirements of this permit. See **Part I.C.** of the permit for specific SWPPP requirements.

VIII. Essential Fish Habitat Determination (EFH)

"Under the 1996 Amendments (PL 104-267) to the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. § 1801 et seq. (1998)), EPA is required to consult with the National Marine Fisheries Service (NMFS) if EPA's actions or proposed actions that it funds, permits, or undertakes, may adversely impact any essential fish habitat, such as: waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity (16 U.S.C. § 1802(10)). "Adversely impact" means any impact which

reduces the quality and/or quantity of EFH (50 C.F.R. § 600.910(a)). Adverse effects may include direct (e.g., contamination or physical disruption), indirect (e.g., loss of prey, reduction in species' fecundity), site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions.

Essential fish habitat is only designated for species for which federal fisheries management plans exist (16 U.S.C. §1855(b)(1)(A)). EFH designations for New England were approved by the U.S. Department of Commerce on March 3, 1999. Although the Taunton River in the vicinity of these discharges is not covered by the EFH designation for riverine systems, the Taunton River is tributary to Narragansett Bay, which is considered EFH for the following species:

Species	Eggs	Larvae	Juveniles	Adults
Atlantic cod *(Gadus morhua)*				
haddock *(Melanogrammus aeglefinus)*		X		
pollock *(Pollachius virens)*				
whiting *(Merluccius bilinearis)*				
red hake *(Urophycis chuss)*		X	X	X
white hake *(Urophycis tenuis)*				
redfish *(Sebastes fasciatus)*	n/a			
witch flounder *(Glyptocephalus cynoglossus)*				
winter flounder *(Pleuronectes americanus)*	X	X	X	X
yellowtail flounder *(Pleuronectes ferruginea)*				
windowpane flounder *(Scopthalmus aquosus)*	X	X	X	X
American plaice *(Hippoglossoides platessoides)*		X	X	X
ocean pout *(Macrozoarces americanus)*				
Atlantic sea scallop *(Placopecten magellanicus)*				
Atlantic sea herring *(Clupea harengus)*		X	X	X
monkfish *(Lophius americanus)*				
bluefish *(Pomatomus saltatrix)*			X	X

long finned squid *(Loligo pealei)*	n/a	n/a		
short finned squid *(Illex illecebrosus)*	n/a	n/a		
Atlantic butterfish *(Peprilus triacanthus)*				
Atlantic mackerel *(Scomber scombrus)*	X	X	X	X
summer flounder *(Paralicthys dentatus)*		X	X	X
scup *(Stenotomus chrysops)*	X	X	X	X
black sea bass *(Centropristus striata)*	n/a		X	X
surf clam *(Spisula solidissima)*	n/a	n/a		
ocean quahog *(Artica islandica)*	n/a	n/a		
spiny dogfish *(Squalus acanthias)*	n/a	n/a		
tilefish *(Lopholatilus chamaeleonticeps)*				
king mackerel *(Scomberomorus cavalla)*	X	X	X	X
Spanish mackerel *(Scomberomorus maculatus)*	X	X	X	X
cobia *(Rachycentron canadum)*	X	X	X	X

It is well established and documented that Mount Hope Bay and the Taunton River provide valuable habitat for a diverse assemblage of finfish and invertebrates. Winter flounder and many diadromous fish species use all or part of the Taunton River for passage, spawning, nursery, and forage habitat, in turn providing forage for other predatory species and helping to support important recreational fisheries. Various life stages of numerous other finfish species transit and/or inhabit the river during the year.

As described earlier, the only discharge from this site is storm water runoff. This permit has established additional monitoring requirements for bacteria and pollutants associated with petroleum storage operations in addition to requiring the implementation of a SWPPP for the entire site. These requirements are expected to result in discharges that would not adversely impact any listed species. Therefore, EPA has determined that EFH consultation with NMFS is not required.

IX. **Endangered Species Act (ESA)**

Section 7(a) of the Endangered Species Act (ESA) of 1973, as amended grants authority to and imposes requirements upon Federal agencies regarding endangered or threatened species of fish, wildlife, or plants (“listed species”) and habitat of such species that has

been designated as critical (a "critical habitat"). The ESA requires every Federal agency, in consultation with and with the assistance of the Secretary of Interior, to insure that any action it authorizes, funds, or carries out, in the United States or upon the high seas, is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat. The United States Fish and Wildlife Service (USFWS) typically administers Section 7 consultations for bird, terrestrial, and freshwater aquatic species. NMFS typically administers Section 7 consultations for marine species and anadromous fish.

EPA has reviewed the listing of federal endangered or threatened species of fish, wildlife, and plants to see if any such listed species might potentially be impacted by the reissuance of this NPDES permit and has not found any such listed species. Therefore, EPA does not need to formally consult with NMFS or USFWS in regard to the provisions of the ESA. During the public comment period, EPA has provided a copy of the Draft Permit and Fact Sheet to both NMFS and USFWS.

X. State Certification Requirements

EPA may not issue a permit unless the State Water Pollution Control Agency with jurisdiction over the receiving waters certifies that the effluent limitations contained in the permit are stringent enough to assure that the discharge will not cause the receiving water to violate State WQS. The staff of MassDEP has reviewed the draft permit and advised EPA that the limitations are adequate to protect water quality. EPA has requested permit certification by the State pursuant to 40 CFR 124.53 and expects that the draft permit will be certified.

XI. Public Comment Period, Public Hearing, and Procedures for Final Decision

All persons, including applicants, who believe any condition of the Draft Permit is inappropriate must raise all issues and submit all available arguments and all supporting material for their arguments in full by the close of the public comment period, to George Papadopoulos, U.S. EPA, Office of Ecosystem Protection**,** Industrial Permits Branch, Mailcode OEP 06-1, 5 Post Office Square, Suite 100, Boston, Massachusetts 02109-3912. Any person, prior to such date, may submit a request in writing for a public hearing to consider the Draft Permit to EPA and the State Agency. Such requests shall state the nature of the issues proposed to be raised in the hearing. A public meeting may be held if the criteria stated in 40 C.F.R. § 124.12 are satisfied. In reaching a final decision on the Draft Permit, the EPA will respond to all significant comments and make these responses available to the public at EPA's Boston office.

Following the close of the comment period, and after any public hearings, if such hearings are held, the EPA will issue a Final Permit decision and forward a copy of the final decision to the applicant and each person who has submitted written comments or requested notice. Within 30 days following the notice of the Final Permit decision, any interested person may submit a petition for review of the permit to EPA's Environmental Appeals Board consistent with 40 C.F.R. § 124.19.

XII. EPA and MassDEP Contacts

Additional information concerning the draft permit may be obtained between the hours of 9:00 a.m. and 5:00 p.m., Monday through Friday, excluding holidays, from the EPA and MassDEP contacts below:

George Papadopoulos, Industrial Permits Branch
5 Post Office Square - Suite 100 - Mailcode OEP 06-1
Boston, MA 02109-3912
Papadopoulos.george@epa.gov
Telephone: (617) 918-1579 FAX: (617) 918-1505

Cathy Vakalopoulos, Massachusetts Department of Environmental Protection
Division of Watershed Management, Surface Water Discharge Permit Program
1 Winter Street, 5th Floor, Boston, Massachusetts 02108
catherine.vakalopoulos@state.ma.us
Telephone: (617) 348-4026; FAX: (617) 292-5696

April 26, 2011
Date

Stephen S. Perkins, Director
Office of Ecosystem Protection
U.S. Environmental Protection Agency

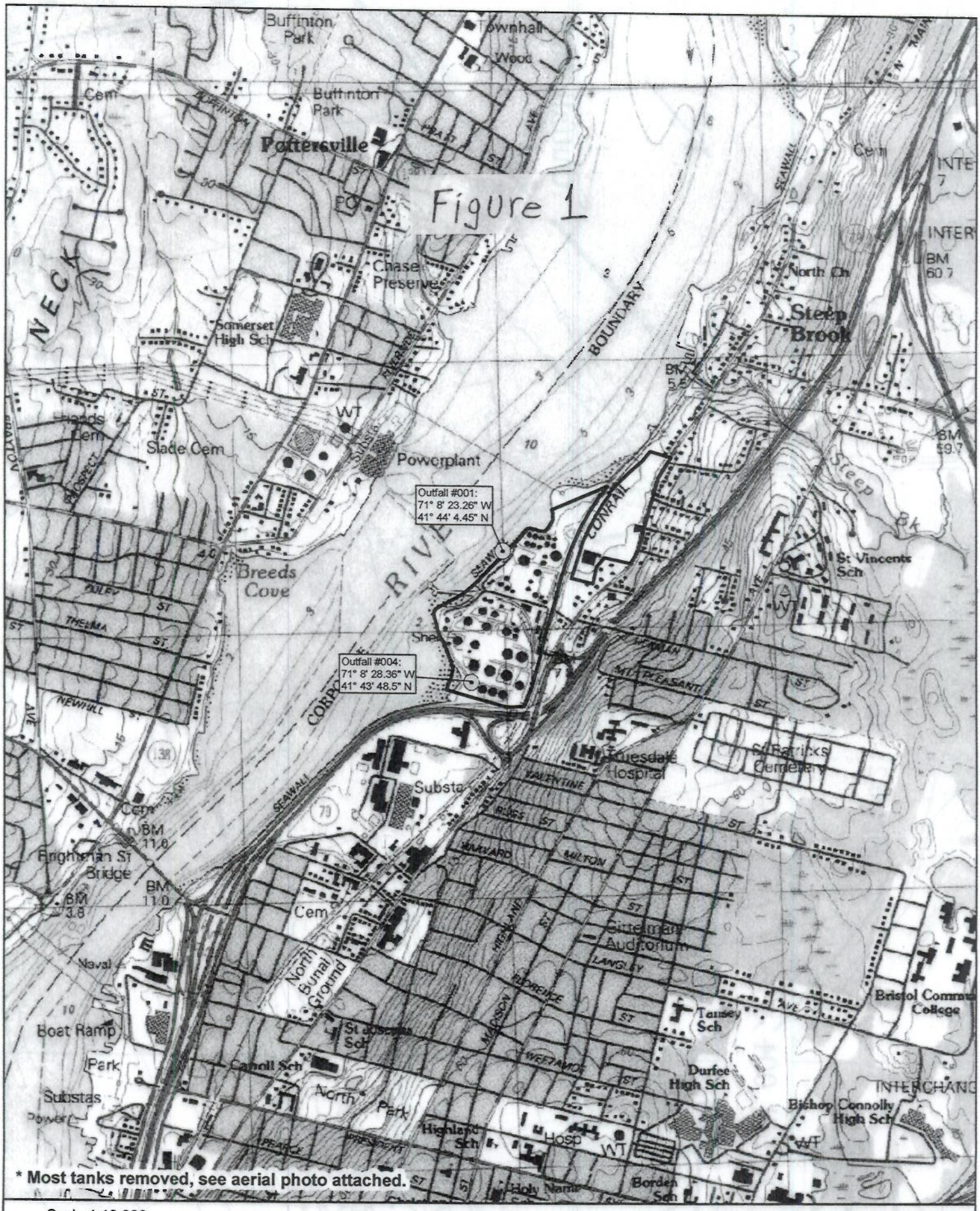
Figure 1
Outfall #001:
71° 8' 23.26" W
41° 44' 4.45" N
Outfall #004:
71° 8' 28.36" W
41° 43' 48.5" N
* Most tanks removed, see aerial photo attached.
Scale 1:18,000
1 inch = 1,500 feet
0 750 1,500
Feet
Project Site
Outfall Locations
Weaver's Cove Energy, LLC
Basemap: USGS Quadrangles, MassGIS
Epsilon
G:\Projects\Fall_Riv\79001\NPDES\FR_site_outfalls.mxd

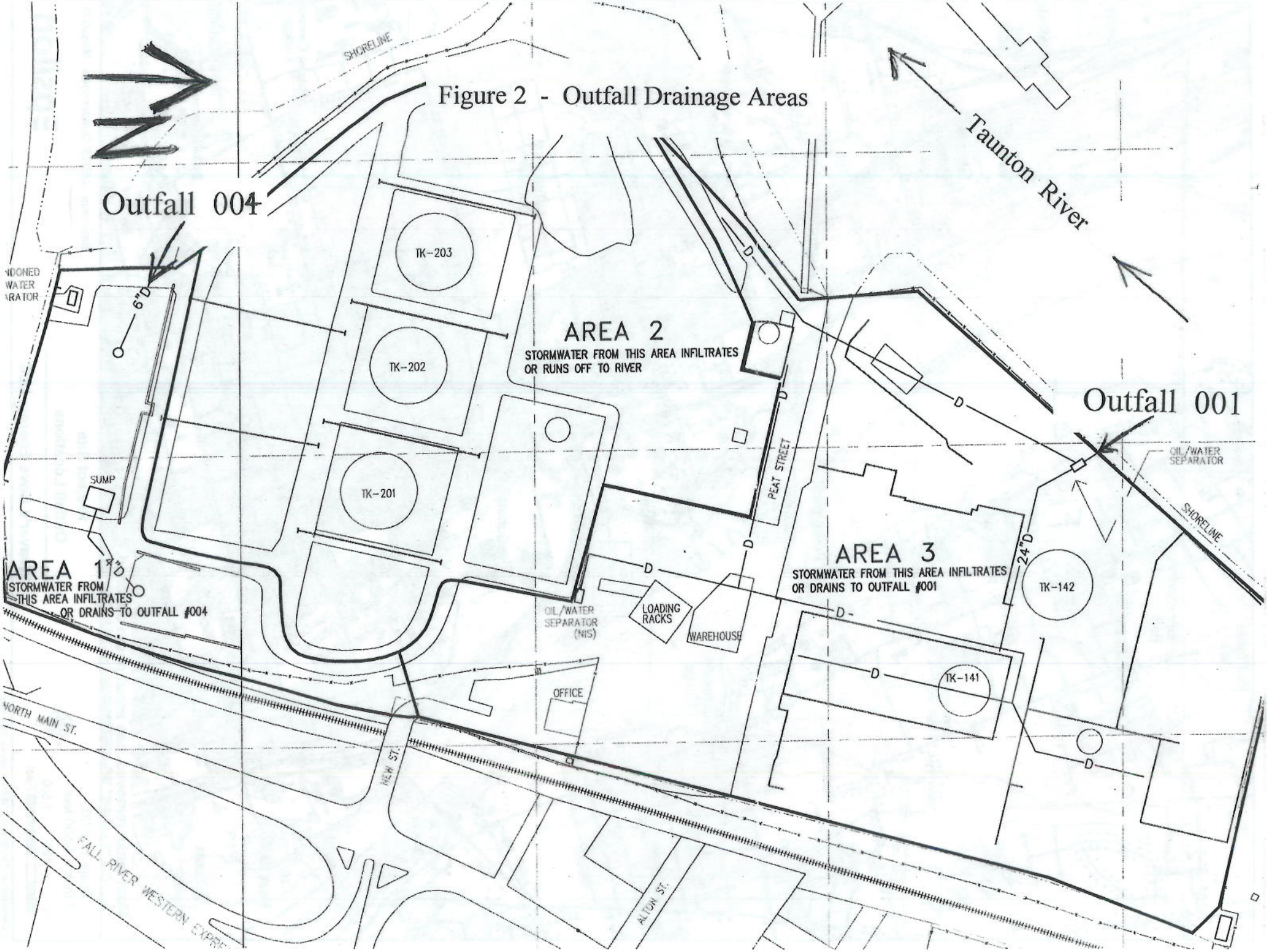
Figure 2 - Outfall Drainage Areas
Taunton River
Outfall 004
Outfall 001
SHORELINE
TK-203
TK-202
TK-201
AREA 2
STORMWATER FROM THIS AREA INFILTRATES OR RUNS OFF TO RIVER
AREA 1
STORMWATER FROM THIS AREA INFILTRATES OR DRAINS TO OUTFALL #004
AREA 3
STORMWATER FROM THIS AREA INFILTRATES OR DRAINS TO OUTFALL #001
6"D
24"D
D
SUMP
PEAT STREET
OIL/WATER SEPARATOR (NIS)
OIL/WATER SEPARATOR
LOADING RACKS
WAREHOUSE
OFFICE
TK-142
TK-141
NORTH MAIN ST.
HEW ST.
ALTON ST.
FALL RIVER WESTERN EXPRE

MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION
COMMONWEALTH OF MASSACHUSETTS
1 WINTER STREET
BOSTON, MASSACHUSETTS 02108

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF ECOSYSTEM PROTECTION
REGION I
BOSTON, MASSACHUSETTS 02109

JOINT PUBLIC NOTICE OF A DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO DISCHARGE INTO THE WATERS OF THE UNITED STATES UNDER SECTION 301 AND 402 OF THE CLEAN WATER ACT (THE "ACT"), AS AMENDED, AND REQUEST FOR STATE CERTIFICATION UNDER SECTION 401 OF THE ACT.

DATE OF NOTICE: **May 3, 2011**

PERMIT NUMBER: **MA0004871**

PUBLIC NOTICE NUMBER: **MA-018-11**

NAME AND MAILING ADDRESS OF PERMITTEE:

Weaver's Cove Energy, LLC
1 New Street
Fall River, MA 02720

NAME AND ADDRESS OF THE FACILITY WHERE DISCHARGE OCCURS:

Weaver's Cove Energy, LLC
1 New Street
Fall River, MA 02720

RECEIVING WATER: **Taunton River**
(USGS Hydrologic Code #01090004 – Narragansett Bay Watershed)

PREPARATION OF THE DRAFT PERMIT:

The U.S. Environmental Protection Agency, (EPA) and the Massachusetts Department of Environmental Protection (MassDEP) have cooperated in the development of a permit for the above identified facility. The effluent limits and permit conditions imposed have been drafted to assure that State Water Quality Standards and provisions of the Clean Water Act will be met. EPA has formally requested that the State certify this draft permit pursuant to Section 401 of the Clean Water Act and expects that the draft permit will be certified.

INFORMATION ABOUT THE DRAFT PERMIT:

A fact sheet or a statement of basis (describing the type of facility; type and quantities of wastes; a brief summary of the basis for the draft permit conditions; and significant factual, legal and policy questions considered in preparing this draft permit) and the draft permit may be obtained at no cost at: http://www.epa.gov/region1/npdes/draft_permits_listing_ma.html or by writing or calling EPA's contact person named below:

George Papadopoulos, US EPA
5 Post Office Square
Suite 100 (OEP 06-1)
Boston, MA 02109-3912
Telephone: (617) 918-1579

The administrative record containing all documents relating to this draft permit is on file and may be inspected at the EPA Boston office mentioned above between 9:00 a.m. and 5:00 p.m., Monday through Friday, except holidays.

PUBLIC COMMENT AND REQUEST FOR PUBLIC HEARING:

All persons, including applicants, who believe any condition of this draft permit is inappropriate, must raise all issues and submit all available arguments and all supporting material for their arguments in full by **June 1, 2011**, to the U.S. EPA, George Papadopoulos, 5 Post Office Square, Suite 100, Mailcode OEP 06-1, Boston, Massachusetts 02109-3912. Any person, prior to such date, may submit a request in writing to EPA and the MassDEP for a public hearing to consider this draft permit. Such requests shall state the nature of the issues proposed to be raised in the hearing. A public hearing may be held after at least forty five days public notice whenever the Regional Administrator finds that response to this notice indicates significant public interest. In reaching a final decision on this draft permit the Regional Administrator will respond to all significant comments and make the responses available to the public at EPA's Boston office.

FINAL PERMIT DECISION AND APPEALS:

Following the close of the comment period, and after a public hearing, if such hearing is held, the Regional Administrator will issue a final permit decision and forward a copy of the final decision to the applicant and each person who has submitted written comments or requested notice. Within 30 days following the notice of the final permit decision any interested person may submit petition to the Environmental Appeals Board to reconsider or contest the final decision.

David Ferris, Director
MASACHUSETTS WASTE WATER PROGRAM
MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION

Stephen S. Perkins, Director
OFFICE OF ECOSYSTEM PROTECTION
ENVIRONMENTAL PROTECTION AGENCY