

DRAFT AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

In compliance with the provisions of the Federal Clean Water Act as amended, (33 USC §§ 1251 et seq.; the "CWA", and the Massachusetts Clean Waters Act, as amended (MGL c. 21, §§ 26-53),

Simon Property Group/ Mayflower Emerald Square LLC

is authorized to discharge from a facility located at:

**Emerald Square Mall
Route 1 and Route I-295
999 South Washington Street
North Attleboro, MA 02760**

to receiving water named:

**Unnamed pond within wetlands system (Outfall 001) & wetlands system (Outfall 002), both of
which are adjacent to Sevenmile River (MA52-07)**

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 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 July 1, 2010.

This permit consists of this cover page, **Part I** (11 pages including effluent limitations and monitoring requirements) and **Part II** (25 pages including Standard Conditions).

Signed this day of , 2017

Lynne Hamjian, Acting Director
Office of Ecosystem Protection
Environmental Protection Agency (EPA)
Region 1, Boston, MA

Lealdon Langley, Director
Massachusetts Wetlands and Wastewater Programs
Department of Environmental Protection
Commonwealth of Massachusetts (MassDEP)
Boston, MA

* Pursuant to 40 C.F.R. § 124.15(b)(3), if no comments are received the permit shall become effective upon the date of signature.

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PART I.A EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date and lasting through the expiration date, the Permittee is authorized to discharge treated stormwater runoff through **Outfall Serial Number 001**. Such discharge shall be limited and monitored by the Permittee as specified below:

Effluent Characteristic	Effluent Limitations	Monitoring Requirements ⁽¹⁾⁽²⁾	
	Maximum Daily	Measurement Frequency ⁽³⁾	Sample Type
Flow	Report	1/Quarter	Estimate ⁽⁴⁾⁽⁵⁾
pH ⁽⁶⁾	6.5 - 8.3 S.U.	1/Quarter	Grab
Total Suspended Solids (TSS)	30 mg/L	1/Quarter	Grab
Oil and Grease ⁽⁷⁾	5 mg/L	1/ Quarter	Grab
Lead, Total Recoverable	20 µg/L	1/Quarter	Grab
Copper, Total Recoverable	7.3 µg/L	1/Quarter	Grab
Zinc, Total Recoverable	65 µg/L	1/Quarter	Grab

See page 4 for explanation of footnotes.

2. During the period beginning on the effective date and lasting through the expiration date, the Permittee is authorized to discharge treated stormwater runoff through **Outfall Serial Number 002**. Such discharge shall be limited and monitored by the Permittee as specified below:

Effluent Characteristic	Effluent Limitations	Monitoring Requirements ⁽¹⁾⁽²⁾	
	Maximum Daily	Measurement Frequency ⁽³⁾	Sample Type
Flow	Report MGD	1/Quarter	Estimate ⁽⁴⁾⁽⁵⁾
pH ⁽⁶⁾	6.5 - 8.3 S.U.	1/Quarter	Grab
Total Suspended Solids (TSS)	30 mg/L	1/Quarter	Grab
Oil and Grease ⁽⁷⁾	5 mg/L	1/Quarter	Grab
Lead, Total Recoverable	20 µg/L	1/Quarter	Grab
Copper, Total Recoverable	7.3 µg/L	1/Quarter	Grab
Zinc, Total Recoverable	65 µg/L	1/Quarter	Grab

See page 4 for explanation of footnotes.

Footnotes for Outfall 001 and 002:

- (1) Discharge samples for Outfall 001 must be taken from the discharge pipe to the unnamed pond on South Washington Street. Discharge samples for Outfall 002 must be taken from the discharge of Wetland Cell 6 into the wetlands. Changes in sampling location must be approved in writing by the U.S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP). Sampling discharges from the facility must yield data representative of the discharge under authority of CWA Section 308(a) and in accordance with 40 Code of Federal Regulations (C.F.R.) § 122.41(j), § 122.44(i), and § 122.48.
- (2) All samples shall be collected during discharge from the outfalls, resulting from a **storm event (rainfall or snow melt) greater than 0.1 inches** in magnitude and that occurs at least 72 hours from the previously measurable (i.e., greater than 0.1 inch) storm event. All samples are to be taken within thirty (30) minutes of the beginning of the discharge. If collection of grab sample(s) during the first thirty minutes is impracticable, grab sample(s) must be taken as soon after that as possible, and the Permittee shall record and keep as part of the Permittee's Stormwater Pollution Prevention Plan (SWPPP) a description of why the collection of the grab sample(s) during the first thirty minutes was impracticable (See Part I.B.6.b).
- (3) Measurement frequency of 1/Quarter is defined as the recording of one measurement for each calendar quarter. Calendar quarters are defined as January through March, inclusive, April through June, inclusive, July through September, inclusive and October through December, inclusive. During quarters when no tests are performed or required, a "no discharge" code shall be entered for that quarter.
- (4) Flow shall be reported in the quarterly DMR as an estimate of the volume of runoff discharging from each outfall in million gallons per day. The Permittee shall also record each quarter's discharge flow along with the following in its Stormwater Pollution Prevention Plan (SWPPP): (1) the date and duration of the storm event, (2) the antecedent dry period (time elapsed in hours since the last measurable storm greater than 0.10 inches), (3) the total precipitation accumulated, in inches, during the wet weather event; and (4) additional comments pertaining to the collection of samples. See Part I.B.
- (5) In accordance with 40 C.F.R. § 122.44(i)(1)(iv), the permittee shall use sufficiently sensitive test procedures (i.e., methods) approved under 40 C.F.R. Part 136 or required under 40 C.F.R. Chapter I, Subchapter N or O, for the analysis of pollutants or pollutant parameters limited in this permit. A method is considered "sufficiently sensitive" when either: (1) the method minimum level (ML) is at or below the level of the effluent limit established in this permit for the measured pollutant or pollutant parameter; or (2) the method has the lowest ML of the analytical methods approved under 40 C.F.R. Part 136 or required under 40 C.F.R. Chapter I, Subchapter N or O for the measured pollutant or pollutant parameter. The ML is not the minimum level of detection, but rather the lowest level at which the test equipment produces a recognizable signal and acceptable calibration point for a pollutant or pollutant parameter, representative of the lowest concentration at which a pollutant or pollutant parameter can be measured with a known level of confidence. For the purposes of this permit, the detection limit is the lowest concentration that can be reliably measured within specified limits of precision

and accuracy for a specific laboratory analytical method during routine laboratory operating conditions (i.e., the level above which an actual value is reported for an analyte, and the level below which an analyte is reported as non-detect).

⁽⁶⁾ See Part I.A.3.b for pH limitations.

⁽⁷⁾ The Oil and Grease effluent limit is zero in accordance with the State's water quality standards. Because the zero limit is below the analytical detection limit for this pollutant, the compliance level is 5.0 mg/L based on EPA Method 1664.

PART I.A. continued.

3. Water quality requirements include:

- a. The discharge shall not cause a violation of the water quality standards of the receiving waters.
- b. The pH of the effluent shall not be less than 6.5 standard units (S.U.) nor greater than 8.3 S.U. and not more than 0.5 units outside of the natural background range.
- c. The effluent shall not contain color and turbidity in concentrations or combinations that are aesthetically objectionable or would impair any use assigned to a Class A waterbody.
- d. The effluent shall be free from oil and grease, petrochemicals and other volatile or synthetic organic pollutants.
- e. The effluent shall not contribute any taste or odor that is not of natural origin
- f. The effluent shall not contain floating, suspended and settleable solids in concentrations or combinations that would impair any use assigned to a Class A waterbody.
- g. The effluent shall not contain materials in concentrations or in combinations that are hazardous or toxic to aquatic life or that would impair the uses designated by a Class A receiving water.

4. The Permittee shall inspect, operate, and maintain the stormwater system at the facility to ensure that the effluent limitations and conditions contained in this permit are met. The Permittee shall ensure compliance with all components of the facility's Stormwater Pollution Prevention Plan (see Part B).

5. EPA may modify this permit in accordance with EPA regulations in 40 C.F.R. § 122.62 and § 122.63 to incorporate more stringent effluent limitations, increase the frequency of analyses, or impose additional sampling and analytical requirements.

6. Effluent and ambient hardness data shall be collected and submitted with the next permit application in order to more accurately evaluate appropriate criteria.

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7. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the EPA as soon as they know or have reason to believe:
- 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":
 - One hundred micrograms per liter (100 µg/L);
 - Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - 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
 - Any other notification level established by EPA 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":
 - Five hundred micrograms per liter (500 µg/L);
 - One milligram per liter (1 mg/L) for antimony;
 - 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); or
 - Any other notification level established by EPA 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.

B. STORMWATER POLLUTION PREVENTION PLAN

1. The Permittee shall implement a Stormwater Pollution Prevention Plan (SWPPP) 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 consistent with the terms of this permit. The Permittee shall comply with the terms of its SWPPP.
2. The SWPPP, including the SWPPP site map, shall be updated and signed by the Permittee within 30 days after the effective date of this Permit. The Permittee shall certify that the SWPPP has been completed or updated and that it meets the requirements of the permit. The certification shall be signed in accordance with the requirements identified in 40 C.F.R. § 122.22. A copy of this certification shall be sent to EPA and MassDEP within thirty (30) days after the certification date.

3. The SWPPP shall be consistent with the general provisions for SWPPPs included in the most current version of the Multi-Sector General Permits for Stormwater Discharges Associated with Industrial Activities (MSGP). In the current MSGP (effective June 4, 2015 and found at https://www.epa.gov/sites/production/files/2015-10/documents/msgp2015_finalpermit.pdf), the general SWPPP provisions are included in Part 5. The SWPPP shall include the site-specific best management practices (BMPs) below for on-site activities that will minimize the discharge of pollutants in stormwater to waters of the United States.
4. The SWPPP shall be prepared in accordance with good engineering practices, identify potential sources of pollution that may reasonably be expected to affect the quality of the stormwater discharges, and 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 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.4.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 control measures, both structural and non-structural chosen or designed to comply with the following non-numeric technology-based effluent limitations found in Part 2.1.2 of the 2015 MSGP:
 - i. Minimizing exposure of manufacturing, processing, and material storage areas to stormwater discharges;
 - ii. Good housekeeping measures designed to maintain areas that are potential sources of pollutants;
 - iii. Preventative maintenance programs to avoid leaks, spills, and other releases of pollutants in stormwater discharged to receiving waters;
 - iv. Spill prevention and response procedures to ensure effective response to spills and leaks if or when they occur;
 - v. 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;
 - vi. Runoff management practices to divert, infiltrate, reuse, contain, or otherwise reduce stormwater runoff; and
 - vii. Proper handling procedures for salt or materials containing chlorides that are used for snow and ice control.
- e. A schedule and procedure for implementation and maintenance of the control measures described above and for the site-specific best management practices (BMPs) described below.
5. The Permittee shall develop and implement site-specific BMPs; including BMPs to achieve the following:
- a. The proper inspection and cleaning of the oil/water separators and catch basins. A log shall be maintained on site and provided to EPA and MassDEP for review upon request. The oil/water separator shall be inspected at least quarterly and cleaned at least annually. The catch basins shall be cleaned at least semiannually;
 - b. The appropriate storage of materials and equipment such that contact with stormwater is limited, and avoided whenever possible; and
 - c. The reduction in the amount of turbidity in the effluent.
6. The Permittee shall collect and maintain records of all SWPPP activities. All records shall be kept at the facility for at least five years and made available for inspection by EPA and MassDEP. Minimum documentation requirements include the following:
- a. Records of operational and preventive maintenance activities, equipment inspections, procedure audits, and personnel training;
 - b. Records of the collection and analysis of samples, including, but not limited to, date and time samples were collected, sample location, name and signatures of sample collectors, if applicable, why it was not possible to take samples within the first 30 minutes, weather information, calculations done at the time of sampling, any sampling or analytical methods used for samples analyzed on site, and sample results;
 - c. Records of the control measures needing maintenance, repairs or replacement; the selection, installation and/or implementation of control measures; and the evaluations, and explanations documented in support of the residuals management control measure above;
 - d. Information regarding all chemical products that could potentially have an impact to stormwater associated with industrial activity as defined in 40 C.F.R. § 122.26(b)(14)(i)-(ix),(xi), including:

- i. Product name, chemical formula, and manufacturer;
 - ii. Purpose or use of the chemical;
 - iii. Safety Data Sheet (SDS) and Chemical Abstracts Service (CAS) Registry number for each chemical;
 - iv. Frequency (e.g., hourly, daily), duration (e.g., hours, days), quantity (e.g., maximum and average), and method of application for the chemical; and
 - v. The vendor's reported aquatic toxicity (NOAEL and/or LC50 in percent for aquatic organism(s)), when available;
 - e. A description of the training to be provided for employees to assure they understand the goals, objectives, and procedures of the SWPPP, the requirements of the NPDES permit, and their individual responsibilities for complying with each BMP of the plan; and
 - f. A copy of the current SWPPP and all SWPPP certifications (the initial certification, and the re-certifications and annual certifications as described below) signed during the effective period of this permit.
7. The Permittee shall amend and update the SWPPP within 14 days for 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 include, but are not limited to: a change in design, construction, operation, maintenance, or materials storage; a release of a reportable quantity of pollutants as described in 40 C.F.R. § 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 associated with industrial activity. Any amended or new versions of the SWPPP shall be re-certified by the Permittee and signed in accordance with the requirements identified in 40 C.F.R. § 122.22.
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 remedies being undertaken. Annual certifications shall be signed in accordance with the requirements identified in 40 C.F.R. § 122.22.

C. MONITORING AND REPORTING

The monitoring program in the permit specifies sampling and analysis, which will provide continuous information on compliance and the reliability and effectiveness of the installed pollution abatement equipment. The approved analytical procedures found in 40 C.F.R. Part 136 are required unless other procedures are explicitly required in the permit. The Permittee is obligated to monitor and report sampling results to EPA and MassDEP within the time specified within the permit.

Unless otherwise specified in this permit, the permittee shall submit reports, requests, and information and provide notices in the manner described in this section.

1. Submittal of DMRs Using NetDMR

The Permittee shall continue to submit its monthly monitoring data in discharge monitoring reports (DMRs) to EPA and MassDEP no later than the 15th day of the month electronically using NetDMR. When the Permittee submits DMRs using NetDMR, it is not required to submit hard copies of DMRs to EPA or MassDEP.

2. Submittal of Reports as NetDMR Attachments

Unless otherwise specified in this permit, the Permittee shall electronically submit reports to EPA as NetDMR attachments rather than as hard copies. Because the due dates for reports described in this permit may not coincide with the due date for submitting DMRs (which is no later than the 15th day of the month), a report submitted electronically as a NetDMR attachment shall be considered timely if it is electronically submitted to EPA using NetDMR with the next DMR due date following the particular report due date specified in this permit.

3. Submittal of Requests and Reports to EPA/OEP

The following requests, reports, and information described in this permit shall be submitted to the EPA/OEP NPDES Applications Coordinator in EPA's Office Ecosystem Protection (OEP).

- a. Transfer of Permit Notice
- b. Request for changes in sampling location

These reports, information, and requests shall be submitted to EPA/OEP electronically at R1NPDES.Notices.OEP@epa.gov or by hard copy mail to the following address:

**U.S. Environmental Protection Agency
Office of Ecosystem Protection
EPA/OEP NPDES Applications Coordinator
5 Post Office Square - Suite 100 (OEP06-03)
Boston, MA 02109-3912**

4. Submittal of Requests in Hard Copy Form

The following notifications and reports shall be submitted as hard copy with a cover letter describing the submission. These reports shall be signed and dated originals submitted to EPA.

- a. Written notifications required under Part II -Standard Conditions
- b. Initial certification required by the SWPPP

This information shall be submitted to EPA/OES at the following address:

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

5. State Reporting

Unless otherwise specified in this permit, duplicate signed copies of all reports, information, requests or notifications described in this permit, including the reports, information, requests or notifications described in Parts I.C.3 and I.C.4 also shall be submitted to the State at the following addresses:

**MassDEP – Southeast Region
Bureau of Water Resources
20 Riverside Drive
Lakeville, MA 02347**

6. Verbal Reports and Verbal Notifications

Any verbal reports or verbal notifications, if required in Parts I and/or II of this permit, shall be made to both EPA and to MassDEP. This includes verbal reports and notifications which require reporting within 24 hours. (As examples, see Part II.B.4.c. (2), Part II.B.5.c. (3), and Part II.D.1.e.) Verbal reports and verbal notifications shall be made to:

EPA's Office of Environmental Stewardship: **617-918-1510**

and to

MassDEP's Emergency Response: **888-304-1133**

Part I.E. STATE PERMIT CONDITIONS

1. This authorization to discharge includes two separate and independent permit authorizations. The two permit authorizations are: (1) a federal NPDES permit issued by EPA pursuant to the Federal Clean Water Act, 33 USC §§1251 et seq.; and (2) 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 C.F.R. § 124.53, MGL c. 21,

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§ 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.

NPDES PART II STANDARD CONDITIONS

(January, 2007)

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NPDES PART II STANDARD CONDITIONS

(January, 2007)

PART II. A. GENERAL REQUIREMENTS

1. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

- a. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirements.
- b. The CWA provides that any person who violates Section 301, 302, 306, 307, 308, 318, or 405 of the CWA or any permit condition or limitation implementing any of such sections in a permit issued under Section 402, or any requirement imposed in a pretreatment program approved under Section 402 (a)(3) or 402 (b)(8) of the CWA is subject to a civil penalty not to exceed \$25,000 per day for each violation. Any person who negligently violates such requirements is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than 1 year, or both. Any person who knowingly violates such requirements is subject to a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than 3 years, or both.
- c. Any person may be assessed an administrative penalty by the Administrator for violating Section 301, 302, 306, 307, 308, 318, or 405 of the CWA, or any permit condition or limitation implementing any of such sections in a permit issued under Section 402 of the CWA. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000.

Note: See 40 CFR §122.41(a)(2) for complete “Duty to Comply” regulations.

2. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or notifications of planned changes or anticipated noncompliance does not stay any permit condition.

3. Duty to Provide Information

The permittee shall furnish to the Regional Administrator, within a reasonable time, any information which the Regional Administrator may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Regional Administrator, upon request, copies of records required to be kept by this permit.

NPDES PART II STANDARD CONDITIONS

(January, 2007)

4. Reopener Clause

The Regional Administrator reserves the right to make appropriate revisions to this permit in order to establish any appropriate effluent limitations, schedules of compliance, or other provisions which may be authorized under the CWA in order to bring all discharges into compliance with the CWA.

For any permit issued to a treatment works treating domestic sewage (including “sludge-only facilities”), the Regional Administrator or Director shall include a reopener clause to incorporate any applicable standard for sewage sludge use or disposal promulgated under Section 405 (d) of the CWA. The Regional Administrator or Director may promptly modify or revoke and reissue any permit containing the reopener clause required by this paragraph if the standard for sewage sludge use or disposal is more stringent than any requirements for sludge use or disposal in the permit, or contains a pollutant or practice not limited in the permit.

Federal regulations pertaining to permit modification, revocation and reissuance, and termination are found at 40 CFR §122.62, 122.63, 122.64, and 124.5.

5. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from responsibilities, liabilities or penalties to which the permittee is or may be subject under Section 311 of the CWA, or Section 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

6. Property Rights

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges.

7. Confidentiality of Information

- a. In accordance with 40 CFR Part 2, any information submitted to EPA pursuant to these regulations may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission in the manner prescribed on the application form or instructions or, in the case of other submissions, by stamping the words “confidential business information” on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the information will be treated in accordance with the procedures in 40 CFR Part 2 (Public Information).
- b. Claims of confidentiality for the following information will be denied:
 - (1) The name and address of any permit applicant or permittee;
 - (2) Permit applications, permits, and effluent data as defined in 40 CFR §2.302(a)(2).
- c. Information required by NPDES application forms provided by the Regional Administrator under 40 CFR §122.21 may not be claimed confidential. This includes information submitted on the forms themselves and any attachments used to supply information required by the forms.

NPDES PART II STANDARD CONDITIONS
(January, 2007)

8. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after its expiration date, the permittee must apply for and obtain a new permit. The permittee shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Regional Administrator. (The Regional Administrator shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)

9. State Authorities

Nothing in Part 122, 123, or 124 precludes more stringent State regulation of any activity covered by these regulations, whether or not under an approved State program.

10. Other Laws

The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights, nor does it relieve the permittee of its obligation to comply with any other applicable Federal, State, or local laws and regulations.

PART II. B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

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 this permit and with the requirements of storm water pollution prevention plans. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when the operation is necessary to achieve compliance with the conditions of the permit.

2. Need to Halt or Reduce Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

4. Bypass

a. Definitions

- (1) *Bypass* means the intentional diversion of waste streams from any portion of a treatment facility.

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- (2) *Severe property damage* means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can be reasonably expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. Bypass not exceeding limitations

The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provision of Paragraphs B.4.c. and 4.d. of this section.

c. Notice

- (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
- (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph D.1.e. of this part (Twenty-four hour reporting).

d. Prohibition of bypass

Bypass is prohibited, and the Regional Administrator may take enforcement action against a permittee for bypass, unless:

- (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and
- (3) i) The permittee submitted notices as required under Paragraph 4.c. of this section.
ii) The Regional Administrator may approve an anticipated bypass, after considering its adverse effects, if the Regional Administrator determines that it will meet the three conditions listed above in paragraph 4.d. of this section.

5. Upset

- a. Definition. *Upset* means an exceptional incident in which there is an unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph B.5.c. of this section are met. No determination made during

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administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

- c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
 - (2) The permitted facility was at the time being properly operated;
 - (3) The permittee submitted notice of the upset as required in paragraphs D.1.a. and 1.e. (Twenty-four hour notice); and
 - (4) The permittee complied with any remedial measures required under B.3. above.
- d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

PART II. C. MONITORING REQUIREMENTS

1. Monitoring and Records

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- b. Except for records for monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application except for the information concerning storm water discharges which must be retained for a total of 6 years. This retention period may be extended by request of the Regional Administrator at any time.
- c. Records of monitoring information shall include:
 - (1) The date, exact place, and time of sampling or measurements;
 - (2) The individual(s) who performed the sampling or measurements;
 - (3) The date(s) analyses were performed;
 - (4) The individual(s) who performed the analyses;
 - (5) The analytical techniques or methods used; and
 - (6) The results of such analyses.
- d. Monitoring results must be conducted according to test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, unless other test procedures have been specified in the permit.
- e. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by

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imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

2. Inspection and Entry

The permittee shall allow the Regional Administrator or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and other documents as may be required by law, to:

- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location.

PART II. D. REPORTING REQUIREMENTS

1. Reporting Requirements

- a. **Planned Changes.** The permittee shall give notice to the Regional Administrator as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is only required when:
 - (1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR§122.29(b); or
 - (2) The alteration or addition could significantly change the nature or increase the quantities of the pollutants discharged. This notification applies to pollutants which are subject neither to the effluent limitations in the permit, nor to the notification requirements at 40 CFR§122.42(a)(1).
 - (3) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition or change may justify the application of permit conditions different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- b. **Anticipated noncompliance.** The permittee shall give advance notice to the Regional Administrator of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- c. **Transfers.** This permit is not transferable to any person except after notice to the Regional Administrator. The Regional Administrator may require modification or revocation and reissuance of the permit to change the name of the permittee and

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incorporate such other requirements as may be necessary under the CWA. (See 40 CFR Part 122.61; in some cases, modification or revocation and reissuance is mandatory.)

- d. Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.
 - (1) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director for reporting results of monitoring of sludge use or disposal practices.
 - (2) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of the monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Director.
 - (3) Calculations for all limitations which require averaging or measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.
- e. Twenty-four hour reporting.
 - (1) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances.

A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
 - (2) The following shall be included as information which must be reported within 24 hours under this paragraph.
 - (a) Any unanticipated bypass which exceeds any effluent limitation in the permit. (See 40 CFR §122.41(g).)
 - (b) Any upset which exceeds any effluent limitation in the permit.
 - (c) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Regional Administrator in the permit to be reported within 24 hours. (See 40 CFR §122.44(g).)
 - (3) The Regional Administrator may waive the written report on a case-by-case basis for reports under Paragraph D.1.e. if the oral report has been received within 24 hours.

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- f. Compliance Schedules. Reports of compliance or noncompliance with, any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
 - g. Other noncompliance. The permittee shall report all instances of noncompliance not reported under Paragraphs D.1.d., D.1.e., and D.1.f. of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in Paragraph D.1.e. of this section.
 - h. Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Administrator, it shall promptly submit such facts or information.
2. Signatory Requirement
- a. All applications, reports, or information submitted to the Regional Administrator shall be signed and certified. (See 40 CFR §122.22)
 - b. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 2 years per violation, or by both.
3. Availability of Reports.

Except for data determined to be confidential under Paragraph A.8. above, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the State water pollution control agency and the Regional Administrator. As required by the CWA, effluent data shall not be considered confidential. Knowingly making any false statements on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the CWA.

PART II. E. DEFINITIONS AND ABBREVIATIONS

1. Definitions for Individual NPDES Permits including Storm Water Requirements

Administrator means the Administrator of the United States Environmental Protection Agency, or an authorized representative.

Applicable standards and limitations means all, State, interstate, and Federal standards and limitations to which a “discharge”, a “sewage sludge use or disposal practice”, or a related activity is subject to, including “effluent limitations”, water quality standards, standards of performance, toxic effluent standards or prohibitions, “best management practices”, pretreatment standards, and “standards for sewage sludge use and disposal” under Sections 301, 302, 303, 304, 306, 307, 308, 403, and 405 of the CWA.

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Application means the EPA standard national forms for applying for a permit, including any additions, revisions, or modifications to the forms; or forms approved by EPA for use in “approved States”, including any approved modifications or revisions.

Average means the arithmetic mean of values taken at the frequency required for each parameter over the specified period. For total and/or fecal coliforms and Escherichia coli, the average shall be the geometric mean.

Average monthly discharge limitation means the highest allowable average of “daily discharges” over a calendar month calculated as the sum of all “daily discharges” measured during a calendar month divided by the number of “daily discharges” measured during that month.

Average weekly discharge limitation means the highest allowable average of “daily discharges” measured during the calendar week divided by the number of “daily discharges” measured during the week.

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of “waters of the United States.” BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Best Professional Judgment (BPJ) means a case-by-case determination of Best Practicable Treatment (BPT), Best Available Treatment (BAT), or other appropriate technology-based standard based on an evaluation of the available technology to achieve a particular pollutant reduction and other factors set forth in 40 CFR §125.3 (d).

Coal Pile Runoff means the rainfall runoff from or through any coal storage pile.

Composite Sample means a sample consisting of a minimum of eight grab samples of equal volume collected at equal intervals during a 24-hour period (or lesser period as specified in the section on Monitoring and Reporting) and combined proportional to flow, or a sample consisting of the same number of grab samples, or greater, collected proportionally to flow over that same time period.

Construction Activities - The following definitions apply to construction activities:

- (a) Commencement of Construction is the initial disturbance of soils associated with clearing, grading, or excavating activities or other construction activities.
- (b) Dedicated portable asphalt plant is a portable asphalt plant located on or contiguous to a construction site and that provides asphalt only to the construction site that the plant is located on or adjacent to. The term dedicated portable asphalt plant does not include facilities that are subject to the asphalt emulsion effluent limitation guideline at 40 CFR Part 443.
- (c) Dedicated portable concrete plant is a portable concrete plant located on or contiguous to a construction site and that provides concrete only to the construction site that the plant is located on or adjacent to.

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- (d) Final Stabilization means that all soil disturbing activities at the site have been complete, and that a uniform perennial vegetative cover with a density of 70% of the cover for unpaved areas and areas not covered by permanent structures has been established or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.
- (e) Runoff coefficient means the fraction of total rainfall that will appear at the conveyance as runoff.

Contiguous zone means the entire zone established by the United States under Article 24 of the Convention on the Territorial Sea and the Contiguous Zone.

Continuous discharge means a “discharge” which occurs without interruption throughout the operating hours of the facility except for infrequent shutdowns for maintenance, process changes, or similar activities.

CWA means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub. L. 92-500, as amended by Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483, and Pub. L. 97-117; 33 USC §§1251 et seq.

Daily Discharge means the discharge of a pollutant measured during the calendar day or any other 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the “daily discharge” is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurements, the “daily discharge” is calculated as the average measurement of the pollutant over the day.

Director normally means the person authorized to sign NPDES permits by EPA or the State or an authorized representative. Conversely, it also could mean the Regional Administrator or the State Director as the context requires.

Discharge Monitoring Report Form (DMR) means the EPA standard national form, including any subsequent additions, revisions, or modifications for the reporting of self-monitoring results by permittees. DMRs must be used by “approved States” as well as by EPA. EPA will supply DMRs to any approved State upon request. The EPA national forms may be modified to substitute the State Agency name, address, logo, and other similar information, as appropriate, in place of EPA’s.

Discharge of a pollutant means:

- (a) Any addition of any “pollutant” or combination of pollutants to “waters of the United States” from any “point source”, or
- (b) Any addition of any pollutant or combination of pollutants to the waters of the “contiguous zone” or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation (See “Point Source” definition).

This definition includes additions of pollutants into waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by a State, municipality, or other person which do not lead

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to a treatment works; and discharges through pipes, sewers, or other conveyances leading into privately owned treatment works.

This term does not include an addition of pollutants by any “indirect discharger.”

Effluent limitation means any restriction imposed by the Regional Administrator on quantities, discharge rates, and concentrations of “pollutants” which are “discharged” from “point sources” into “waters of the United States”, the waters of the “contiguous zone”, or the ocean.

Effluent limitation guidelines means a regulation published by the Administrator under Section 304(b) of CWA to adopt or revise “effluent limitations”.

EPA means the United States “Environmental Protection Agency”.

Flow-weighted composite sample means a composite sample consisting of a mixture of aliquots where the volume of each aliquot is proportional to the flow rate of the discharge.

Grab Sample – An individual sample collected in a period of less than 15 minutes.

Hazardous Substance means any substance designated under 40 CFR Part 116 pursuant to Section 311 of the CWA.

Indirect Discharger means a non-domestic discharger introducing pollutants to a publicly owned treatment works.

Interference means a discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

- (a) Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and
- (b) Therefore is a cause of a violation of any requirement of the POTW’s NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act (CWA), the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resources Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the SDWA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection Research and Sanctuaries Act.

Landfill means an area of land or an excavation in which wastes are placed for permanent disposal, and which is not a land application unit, surface impoundment, injection well, or waste pile.

Land application unit means an area where wastes are applied onto or incorporated into the soil surface (excluding manure spreading operations) for treatment or disposal.

Large and Medium municipal separate storm sewer system means all municipal separate storm sewers that are either: (i) located in an incorporated place (city) with a population of 100,000 or more as determined by the latest Decennial Census by the Bureau of Census (these cities are listed in Appendices F and 40 CFR Part 122); or (ii) located in the counties with unincorporated urbanized

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populations of 100,000 or more, except municipal separate storm sewers that are located in the incorporated places, townships, or towns within such counties (these counties are listed in Appendices H and I of 40 CFR 122); or (iii) owned or operated by a municipality other than those described in Paragraph (i) or (ii) and that are designated by the Regional Administrator as part of the large or medium municipal separate storm sewer system.

Maximum daily discharge limitation means the highest allowable “daily discharge” concentration that occurs only during a normal day (24-hour duration).

Maximum daily discharge limitation (as defined for the Steam Electric Power Plants only) when applied to Total Residual Chlorine (TRC) or Total Residual Oxidant (TRO) is defined as “maximum concentration” or “Instantaneous Maximum Concentration” during the two hours of a chlorination cycle (or fraction thereof) prescribed in the Steam Electric Guidelines, 40 CFR Part 423. These three synonymous terms all mean “a value that shall not be exceeded” during the two-hour chlorination cycle. This interpretation differs from the specified NPDES Permit requirement, 40 CFR § 122.2, where the two terms of “Maximum Daily Discharge” and “Average Daily Discharge” concentrations are specifically limited to the daily (24-hour duration) values.

Municipality means a city, town, borough, county, parish, district, association, or other public body created by or under State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or an Indian tribe or an authorized Indian tribe organization, or a designated and approved management agency under Section 208 of the CWA.

National Pollutant Discharge Elimination System means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318, and 405 of the CWA. The term includes an “approved program”.

New Discharger means any building, structure, facility, or installation:

- (a) From which there is or may be a “discharge of pollutants”;
- (b) That did not commence the “discharge of pollutants” at a particular “site” prior to August 13, 1979;
- (c) Which is not a “new source”; and
- (d) Which has never received a finally effective NPDES permit for discharges at that “site”.

This definition includes an “indirect discharger” which commences discharging into “waters of the United States” after August 13, 1979. It also includes any existing mobile point source (other than an offshore or coastal oil and gas exploratory drilling rig or a coastal oil and gas exploratory drilling rig or a coastal oil and gas developmental drilling rig) such as a seafood processing rig, seafood processing vessel, or aggregate plant, that begins discharging at a “site” for which it does not have a permit; and any offshore rig or coastal mobile oil and gas exploratory drilling rig or coastal mobile oil and gas developmental drilling rig that commences the discharge of pollutants after August 13, 1979, at a “site” under EPA’s permitting jurisdiction for which it is not covered by an individual or general permit and which is located in an area determined by the Regional Administrator in the issuance of a final permit to be in an area of biological concern. In determining whether an area is an area of biological concern, the Regional Administrator shall consider the factors specified in 40 CFR §§125.122 (a) (1) through (10).

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An offshore or coastal mobile exploratory drilling rig or coastal mobile developmental drilling rig will be considered a “new discharger” only for the duration of its discharge in an area of biological concern.

New source means any building, structure, facility, or installation from which there is or may be a “discharge of pollutants”, the construction of which commenced:

- (a) After promulgation of standards of performance under Section 306 of CWA which are applicable to such source, or
- (b) After proposal of standards of performance in accordance with Section 306 of CWA which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal.

NPDES means “National Pollutant Discharge Elimination System”.

Owner or operator means the owner or operator of any “facility or activity” subject to regulation under the NPDES programs.

Pass through means a Discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW’s NPDES permit (including an increase in the magnitude or duration of a violation).

Permit means an authorization, license, or equivalent control document issued by EPA or an “approved” State.

Person means an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof.

Point Source means any discernible, confined, and discrete conveyance, including but not limited to any pipe ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff (see 40 CFR §122.2).

Pollutant means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. §§2011 et seq.)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. It does not mean:

- (a) Sewage from vessels; or
- (b) Water, gas, or other material which is injected into a well to facilitate production of oil or gas, or water derived in association with oil and gas production and disposed of in a well, if the well is used either to facilitate production or for disposal purposes is approved by the authority of the State in which the well is located, and if the State determines that the injection or disposal will not result in the degradation of ground or surface water resources.

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Primary industry category means any industry category listed in the NRDC settlement agreement (Natural Resources Defense Council et al. v. Train, 8 E.R.C. 2120 (D.D.C. 1976), modified 12 E.R.C. 1833 (D. D.C. 1979)); also listed in Appendix A of 40 CFR Part 122.

Privately owned treatment works means any device or system which is (a) used to treat wastes from any facility whose operation is not the operator of the treatment works or (b) not a “POTW”.

Process wastewater means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

Publicly Owned Treatment Works (POTW) means any facility or system used in the treatment (including recycling and reclamation) of municipal sewage or industrial wastes of a liquid nature which is owned by a “State” or “municipality”.

This definition includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment.

Regional Administrator means the Regional Administrator, EPA, Region I, Boston, Massachusetts.

Secondary Industry Category means any industry which is not a “primary industry category”.

Section 313 water priority chemical means a chemical or chemical category which:

- (1) is listed at 40 CFR §372.65 pursuant to Section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) (also known as Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986);
- (2) is present at or above threshold levels at a facility subject to EPCRA Section 313 reporting requirements; and
- (3) satisfies at least one of the following criteria:
 - (i) are listed in Appendix D of 40 CFR Part 122 on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols), or Table V (certain toxic pollutants and hazardous substances);
 - (ii) are listed as a hazardous substance pursuant to Section 311(b)(2)(A) of the CWA at 40 CFR §116.4; or
 - (iii) are pollutants for which EPA has published acute or chronic water quality criteria.

Septage means the liquid and solid material pumped from a septic tank, cesspool, or similar domestic sewage treatment system, or a holding tank when the system is cleaned or maintained.

Sewage Sludge means any solid, semisolid, or liquid residue removed during the treatment of municipal wastewater or domestic sewage. Sewage sludge includes, but is not limited to, solids removed during primary, secondary, or advanced wastewater treatment, scum, septage, portable toilet pumpings, Type III Marine Sanitation Device pumpings (33 CFR Part 159), and sewage sludge products. Sewage sludge does not include grit or screenings, or ash generated during the incineration of sewage sludge.

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Sewage sludge use or disposal practice means the collection, storage, treatment, transportation, processing, monitoring, use, or disposal of sewage sludge.

Significant materials includes, but is not limited to: raw materials, fuels, materials such as solvents, detergents, and plastic pellets, raw materials used in food processing or production, hazardous substance designated under section 101(14) of CERCLA, any chemical the facility is required to report pursuant to EPCRA Section 313, fertilizers, pesticides, and waste products such as ashes, slag, and sludge that have the potential to be released with storm water discharges.

Significant spills includes, but is not limited to, releases of oil or hazardous substances in excess of reportable quantities under Section 311 of the CWA (see 40 CFR §110.10 and §117.21) or Section 102 of CERCLA (see 40 CFR § 302.4).

Sludge-only facility means any “treatment works treating domestic sewage” whose methods of sewage sludge use or disposal are subject to regulations promulgated pursuant to Section 405(d) of the CWA, and is required to obtain a permit under 40 CFR §122.1(b)(3).

State means any of the 50 States, the District of Columbia, Guam, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, the Trust Territory of the Pacific Islands.

Storm Water means storm water runoff, snow melt runoff, and surface runoff and drainage.

Storm water discharge associated with industrial activity means the discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant. (See 40 CFR §122.26 (b)(14) for specifics of this definition.

Time-weighted composite means a composite sample consisting of a mixture of equal volume aliquots collected at a constant time interval.

Toxic pollutants means any pollutant listed as toxic under Section 307 (a)(1) or, in the case of “sludge use or disposal practices” any pollutant identified in regulations implementing Section 405(d) of the CWA.

Treatment works treating domestic sewage means a POTW or any other sewage sludge or wastewater treatment devices or systems, regardless of ownership (including federal facilities), used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated for the disposal of sewage sludge. This definition does not include septic tanks or similar devices.

For purposes of this definition, “domestic sewage” includes waste and wastewater from humans or household operations that are discharged to or otherwise enter a treatment works. In States where there is no approved State sludge management program under Section 405(f) of the CWA, the Regional Administrator may designate any person subject to the standards for sewage sludge use and disposal in 40 CFR Part 503 as a “treatment works treating domestic sewage”, where he or she finds that there is a potential for adverse effects on public health and the environment from poor sludge quality or poor sludge handling, use or disposal practices, or where he or she finds that such designation is necessary to ensure that such person is in compliance with 40 CFR Part 503.

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Waste Pile means any non-containerized accumulation of solid, non-flowing waste that is used for treatment or storage.

Waters of the United States means:

- (a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of tide;
- (b) All interstate waters, including interstate “wetlands”;
- (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, “wetlands”, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
 - (1) Which are or could be used by interstate or foreign travelers for recreational or other purpose;
 - (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - (3) Which are used or could be used for industrial purposes by industries in interstate commerce;
- (d) All impoundments of waters otherwise defined as waters of the United States under this definition;
- (e) Tributaries of waters identified in Paragraphs (a) through (d) of this definition;
- (f) The territorial sea; and
- (g) “Wetlands” adjacent to waters (other than waters that are themselves wetlands) identified in Paragraphs (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA (other than cooling ponds as defined in 40 CFR §423.11(m) which also meet the criteria of this definition) are not waters of the United States.

Wetlands means those areas that are inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Whole Effluent Toxicity (WET) means the aggregate toxic effect of an effluent measured directly by a toxicity test. (See Abbreviations Section, following, for additional information.)

2. Definitions for NPDES Permit Sludge Use and Disposal Requirements.

Active sewage sludge unit is a sewage sludge unit that has not closed.

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Aerobic Digestion is the biochemical decomposition of organic matter in sewage sludge into carbon dioxide and water by microorganisms in the presence of air.

Agricultural Land is land on which a food crop, a feed crop, or a fiber crop is grown. This includes range land and land used as pasture.

Agronomic rate is the whole sludge application rate (dry weight basis) designed:

- (1) To provide the amount of nitrogen needed by the food crop, feed crop, fiber crop, cover crop, or vegetation grown on the land; and
- (2) To minimize the amount of nitrogen in the sewage sludge that passes below the root zone of the crop or vegetation grown on the land to the ground water.

Air pollution control device is one or more processes used to treat the exit gas from a sewage sludge incinerator stack.

Anaerobic digestion is the biochemical decomposition of organic matter in sewage sludge into methane gas and carbon dioxide by microorganisms in the absence of air.

Annual pollutant loading rate is the maximum amount of a pollutant that can be applied to a unit area of land during a 365 day period.

Annual whole sludge application rate is the maximum amount of sewage sludge (dry weight basis) that can be applied to a unit area of land during a 365 day period.

Apply sewage sludge or sewage sludge applied to the land means land application of sewage sludge.

Aquifer is a geologic formation, group of geologic formations, or a portion of a geologic formation capable of yielding ground water to wells or springs.

Auxiliary fuel is fuel used to augment the fuel value of sewage sludge. This includes, but is not limited to, natural gas, fuel oil, coal, gas generated during anaerobic digestion of sewage sludge, and municipal solid waste (not to exceed 30 percent of the dry weight of the sewage sludge and auxiliary fuel together). Hazardous wastes are not auxiliary fuel.

Base flood is a flood that has a one percent chance of occurring in any given year (i.e. a flood with a magnitude equaled once in 100 years).

Bulk sewage sludge is sewage sludge that is not sold or given away in a bag or other container for application to the land.

Contaminate an aquifer means to introduce a substance that causes the maximum contaminant level for nitrate in 40 CFR §141.11 to be exceeded in ground water or that causes the existing concentration of nitrate in the ground water to increase when the existing concentration of nitrate in the ground water exceeds the maximum contaminant level for nitrate in 40 CFR §141.11.

Class I sludge management facility is any publicly owned treatment works (POTW), as defined in 40 CFR §501.2, required to have an approved pretreatment program under 40 CFR §403.8 (a) (including any POTW located in a state that has elected to assume local program responsibilities pursuant to 40 CFR §403.10 (e) and any treatment works treating domestic sewage, as defined in 40 CFR § 122.2,

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classified as a Class I sludge management facility by the EPA Regional Administrator, or, in the case of approved state programs, the Regional Administrator in conjunction with the State Director, because of the potential for sewage sludge use or disposal practice to affect public health and the environment adversely.

Control efficiency is the mass of a pollutant in the sewage sludge fed to an incinerator minus the mass of that pollutant in the exit gas from the incinerator stack divided by the mass of the pollutant in the sewage sludge fed to the incinerator.

Cover is soil or other material used to cover sewage sludge placed on an active sewage sludge unit.

Cover crop is a small grain crop, such as oats, wheat, or barley, not grown for harvest.

Cumulative pollutant loading rate is the maximum amount of inorganic pollutant that can be applied to an area of land.

Density of microorganisms is the number of microorganisms per unit mass of total solids (dry weight) in the sewage sludge.

Dispersion factor is the ratio of the increase in the ground level ambient air concentration for a pollutant at or beyond the property line of the site where the sewage sludge incinerator is located to the mass emission rate for the pollutant from the incinerator stack.

Displacement is the relative movement of any two sides of a fault measured in any direction.

Domestic septage is either liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives either commercial wastewater or industrial wastewater and does not include grease removed from a grease trap at a restaurant.

Domestic sewage is waste and wastewater from humans or household operations that is discharged to or otherwise enters a treatment works.

Dry weight basis means calculated on the basis of having been dried at 105 degrees Celsius (°C) until reaching a constant mass (i.e. essentially 100 percent solids content).

Fault is a fracture or zone of fractures in any materials along which strata on one side are displaced with respect to the strata on the other side.

Feed crops are crops produced primarily for consumption by animals.

Fiber crops are crops such as flax and cotton.

Final cover is the last layer of soil or other material placed on a sewage sludge unit at closure.

Fluidized bed incinerator is an enclosed device in which organic matter and inorganic matter in sewage sludge are combusted in a bed of particles suspended in the combustion chamber gas.

Food crops are crops consumed by humans. These include, but are not limited to, fruits, vegetables, and tobacco.

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Forest is a tract of land thick with trees and underbrush.

Ground water is water below the land surface in the saturated zone.

Holocene time is the most recent epoch of the Quaternary period, extending from the end of the Pleistocene epoch to the present.

Hourly average is the arithmetic mean of all the measurements taken during an hour. At least two measurements must be taken during the hour.

Incineration is the combustion of organic matter and inorganic matter in sewage sludge by high temperatures in an enclosed device.

Industrial wastewater is wastewater generated in a commercial or industrial process.

Land application is the spraying or spreading of sewage sludge onto the land surface; the injection of sewage sludge below the land surface; or the incorporation of sewage sludge into the soil so that the sewage sludge can either condition the soil or fertilize crops or vegetation grown in the soil.

Land with a high potential for public exposure is land that the public uses frequently. This includes, but is not limited to, a public contact site and reclamation site located in a populated area (e.g., a construction site located in a city).

Land with low potential for public exposure is land that the public uses infrequently. This includes, but is not limited to, agricultural land, forest and a reclamation site located in an unpopulated area (e.g., a strip mine located in a rural area).

Leachate collection system is a system or device installed immediately above a liner that is designed, constructed, maintained, and operated to collect and remove leachate from a sewage sludge unit.

Liner is soil or synthetic material that has a hydraulic conductivity of 1×10^{-7} centimeters per second or less.

Lower explosive limit for methane gas is the lowest percentage of methane gas in air, by volume, that propagates a flame at 25 degrees Celsius and atmospheric pressure.

Monthly average (Incineration) is the arithmetic mean of the hourly averages for the hours a sewage sludge incinerator operates during the month.

Monthly average (Land Application) is the arithmetic mean of all measurements taken during the month.

Municipality means a city, town, borough, county, parish, district, association, or other public body (including an intermunicipal agency of two or more of the foregoing entities) created by or under State law; an Indian tribe or an authorized Indian tribal organization having jurisdiction over sewage sludge management; or a designated and approved management agency under section 208 of the CWA, as amended. The definition includes a special district created under state law, such as a water district, sewer district, sanitary district, utility district, drainage district, or similar entity, or an integrated waste management facility as defined in section 201 (e) of the CWA, as amended, that has as one of its principal responsibilities the treatment, transport, use or disposal of sewage sludge.

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Other container is either an open or closed receptacle. This includes, but is not limited to, a bucket, a box, a carton, and a vehicle or trailer with a load capacity of one metric ton or less.

Pasture is land on which animals feed directly on feed crops such as legumes, grasses, grain stubble, or stover.

Pathogenic organisms are disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova.

Permitting authority is either EPA or a State with an EPA-approved sludge management program.

Person is an individual, association, partnership, corporation, municipality, State or Federal Agency, or an agent or employee thereof.

Person who prepares sewage sludge is either the person who generates sewage sludge during the treatment of domestic sewage in a treatment works or the person who derives a material from sewage sludge.

pH means the logarithm of the reciprocal of the hydrogen ion concentration; a measure of the acidity or alkalinity of a liquid or solid material.

Place sewage sludge or sewage sludge placed means disposal of sewage sludge on a surface disposal site.

Pollutant (as defined in sludge disposal requirements) is an organic substance, an inorganic substance, a combination of organic and inorganic substances, or pathogenic organism that, after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism either directly from the environment or indirectly by ingestion through the food chain, could on the basis of information available to the Administrator of EPA, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunction in reproduction) or physical deformations in either organisms or offspring of the organisms.

Pollutant limit (for sludge disposal requirements) is a numerical value that describes the amount of a pollutant allowed per unit amount of sewage sludge (e.g., milligrams per kilogram of total solids); the amount of pollutant that can be applied to a unit of land (e.g., kilograms per hectare); or the volume of the material that can be applied to the land (e.g., gallons per acre).

Public contact site is a land with a high potential for contact by the public. This includes, but is not limited to, public parks, ball fields, cemeteries, plant nurseries, turf farms, and golf courses.

Qualified ground water scientist is an individual with a baccalaureate or post-graduate degree in the natural sciences or engineering who has sufficient training and experience in ground water hydrology and related fields, as may be demonstrated by State registration, professional certification, or completion of accredited university programs, to make sound professional judgments regarding ground water monitoring, pollutant fate and transport, and corrective action.

Range land is open land with indigenous vegetation.

Reclamation site is drastically disturbed land that is reclaimed using sewage sludge. This includes, but is not limited to, strip mines and construction sites.

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Risk specific concentration is the allowable increase in the average daily ground level ambient air concentration for a pollutant from the incineration of sewage sludge at or beyond the property line of a site where the sewage sludge incinerator is located.

Runoff is rainwater, leachate, or other liquid that drains overland on any part of a land surface and runs off the land surface.

Seismic impact zone is an area that has 10 percent or greater probability that the horizontal ground level acceleration to the rock in the area exceeds 0.10 gravity once in 250 years.

Sewage sludge is a solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to: domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in treatment works.

Sewage sludge feed rate is either the average daily amount of sewage sludge fired in all sewage sludge incinerators within the property line of the site where the sewage sludge incinerators are located for the number of days in a 365 day period that each sewage sludge incinerator operates, or the average daily design capacity for all sewage sludge incinerators within the property line of the site where the sewage sludge incinerators are located.

Sewage sludge incinerator is an enclosed device in which only sewage sludge and auxiliary fuel are fired.

Sewage sludge unit is land on which only sewage sludge is placed for final disposal. This does not include land on which sewage sludge is either stored or treated. Land does not include waters of the United States, as defined in 40 CFR §122.2.

Sewage sludge unit boundary is the outermost perimeter of an active sewage sludge unit.

Specific oxygen uptake rate (SOUR) is the mass of oxygen consumed per unit time per unit mass of total solids (dry weight basis) in sewage sludge.

Stack height is the difference between the elevation of the top of a sewage sludge incinerator stack and the elevation of the ground at the base of the stack when the difference is equal to or less than 65 meters. When the difference is greater than 65 meters, stack height is the creditable stack height determined in accordance with 40 CFR §51.100 (ii).

State is one of the United States of America, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Trust Territory of the Pacific Islands, the Commonwealth of the Northern Mariana Islands, and an Indian tribe eligible for treatment as a State pursuant to regulations promulgated under the authority of section 518(e) of the CWA.

Store or storage of sewage sludge is the placement of sewage sludge on land on which the sewage sludge remains for two years or less. This does not include the placement of sewage sludge on land for treatment.

Surface disposal site is an area of land that contains one or more active sewage sludge units.

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Total hydrocarbons means the organic compounds in the exit gas from a sewage sludge incinerator stack measured using a flame ionization detection instrument referenced to propane.

Total solids are the materials in sewage sludge that remain as residue when the sewage sludge is dried at 103 to 105 degrees Celsius.

Treat or treatment of sewage sludge is the preparation of sewage sludge for final use or disposal. This includes, but is not limited to, thickening, stabilization, and dewatering of sewage sludge. This does not include storage of sewage sludge.

Treatment works is either a federally owned, publicly owned, or privately owned device or system used to treat (including recycle and reclaim) either domestic sewage or a combination of domestic sewage and industrial waste of a liquid nature.

Unstable area is land subject to natural or human-induced forces that may damage the structural components of an active sewage sludge unit. This includes, but is not limited to, land on which the soils are subject to mass movement.

Unstabilized solids are organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Vector attraction is the characteristic of sewage sludge that attracts rodents, flies, mosquitoes, or other organisms capable of transporting infectious agents.

Volatile solids is the amount of the total solids in sewage sludge lost when the sewage sludge is combusted at 550 degrees Celsius in the presence of excess air.

Wet electrostatic precipitator is an air pollution control device that uses both electrical forces and water to remove pollutants in the exit gas from a sewage sludge incinerator stack.

Wet scrubber is an air pollution control device that uses water to remove pollutants in the exit gas from a sewage sludge incinerator stack.

3. Commonly Used Abbreviations

BOD	Five-day biochemical oxygen demand unless otherwise specified
CBOD	Carbonaceous BOD
CFS	Cubic feet per second
COD	Chemical oxygen demand
Chlorine	
Cl ₂	Total residual chlorine
TRC	Total residual chlorine which is a combination of free available chlorine (FAC, see below) and combined chlorine (chloramines, etc.)

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TRO	Total residual chlorine in marine waters where halogen compounds are present
FAC	Free available chlorine (aqueous molecular chlorine, hypochlorous acid, and hypochlorite ion)
Coliform	
Coliform, Fecal	Total fecal coliform bacteria
Coliform, Total	Total coliform bacteria
Cont. (Continuous)	Continuous recording of the parameter being monitored, i.e. flow, temperature, pH, etc.
Cu. M/day or M ³ /day	Cubic meters per day
DO	Dissolved oxygen
kg/day	Kilograms per day
lbs/day	Pounds per day
mg/l	Milligram(s) per liter
ml/l	Milliliters per liter
MGD	Million gallons per day
Nitrogen	
Total N	Total nitrogen
NH ₃ -N	Ammonia nitrogen as nitrogen
NO ₃ -N	Nitrate as nitrogen
NO ₂ -N	Nitrite as nitrogen
NO ₃ -NO ₂	Combined nitrate and nitrite nitrogen as nitrogen
TKN	Total Kjeldahl nitrogen as nitrogen
Oil & Grease	Freon extractable material
PCB	Polychlorinated biphenyl
pH	A measure of the hydrogen ion concentration. A measure of the acidity or alkalinity of a liquid or material
Surfactant	Surface-active agent

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Temp. °C	Temperature in degrees Centigrade
Temp. °F	Temperature in degrees Fahrenheit
TOC	Total organic carbon
Total P	Total phosphorus
TSS or NFR	Total suspended solids or total nonfilterable residue
Turb. or Turbidity	Turbidity measured by the Nephelometric Method (NTU)
ug/l	Microgram(s) per liter
WET	“Whole effluent toxicity” is the total effect of an effluent measured directly with a toxicity test.
C-NOEC	“Chronic (Long-term Exposure Test) – No Observed Effect Concentration”. The highest tested concentration of an effluent or a toxicant at which no adverse effects are observed on the aquatic test organisms at a specified time of observation.
A-NOEC	“Acute (Short-term Exposure Test) – No Observed Effect Concentration” (see C-NOEC definition).
LC ₅₀	LC ₅₀ is the concentration of a sample that causes mortality of 50% of the test population at a specific time of observation. The LC ₅₀ = 100% is defined as a sample of undiluted effluent.
ZID	Zone of Initial Dilution means the region of initial mixing surrounding or adjacent to the end of the outfall pipe or diffuser ports.

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1 – NEW ENGLAND
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: **MA0030244**

PUBLIC NOTICE START AND END DATES:

NAME AND MAILING ADDRESS OF APPLICANT: December 1, 2017 - December 30, 2017

**Simon Property Group/ Mayflower Emerald Square LLC
999 South Washington Street
North Attleboro, MA 02760**

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

**Emerald Square Mall
Route 1 and Route I-295
999 South Washington Street
North Attleboro, MA 02760**

RECEIVING WATER & CLASSIFICATION:

Unnamed pond within wetlands system (Outfall 001) & wetlands system (Outfall 002), both of which are adjacent to Sevenmile River (MA52-07)

Class A (public water supply)

SIC CODES: 6512 (Operators of Nonresidential Buildings), 5311 (Department Stores), 5399 (Miscellaneous General Merchandise Stores), 5651 (Family Clothing Stores), and 5812 (Eating Places)

CURRENT PERMIT:

**Issuance Date: July 1, 2010
Expired Date: June 30, 2015**

Application Date: January 20, 2015

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1.0 Proposed Action, Type of Facility, and Discharge Location

Simon Property Group/ Mayflower Emerald Square LLC (the Permittee) owns and operates the Emerald Square Mall (ESM, the Mall, or the Facility) and has applied to the U.S. Environmental Protection Agency (EPA, Region 1 or the Region) and the Massachusetts Department of Environmental Protection (MassDEP) for the re-issuance of a National Pollutant Discharge Elimination System (NPDES) permit to discharge stormwater from Outfalls 001 and 002 into the designated receiving waters.

The existing permit (2010 Permit) was issued on July 1, 2010, became effective on July 1, 2010 and expired on June 30, 2015. EPA received a permit renewal application from ESM dated January 20, 2015. Since the permit renewal application was deemed complete by EPA, the 2010 Permit has been administratively continued pursuant to 40 C.F.R. § 122.6 and § 122.21(d).

Emerald Square Mall is a regional shopping mall comprised of department stores, general merchandise stores, clothing stores, and eating establishments, and consists of one large building surrounded by parking lots and access roads. The parking lots are both multi-level and ground level. According to the original fact sheet, “the site is comprised of 58 acres and is zoned for commercial use. The mall contains 4,350 parking spaces and approximately 960,000 square feet of retail space.” The Mall is bound on the north side by Route 295, also known as Route 1A; on the east-southeast side by South Washington Street, also known as Route 1; and on the west-southwest side by Allen Avenue.

The Emerald Square Mall has been discharging stormwater via renewed NPDES permits since 1989. Site development in the late 1980s required completion of an Environmental Impact Report (EIR) in accordance with the Massachusetts Environmental Policy Act (MEPA). As a result, the original and subsequent NPDES permits contain, in addition to effluent limits, a requirement for a detailed Stormwater Pollution Prevention Plan (SWPPP) containing site-specific best management practices (BMP).

The stormwater system collects stormwater from the parking lots (ground level and multi-level), nearby access roads and the roof of the mall building. The stormwater system includes several oil/water separators, each influenced by small areas of the site. Stormwater, defined in 40 C.F.R. § 122.26(b)(13), to be “stormwater runoff, snow melt runoff and surface runoff and drainage” discharges via two permitted outfalls.

Stormwater discharges from Outfalls 001 and 002 into existing wetlands that are hydraulically connected to the Sevenmile River. *See* the Site Plan with Discharge Locations provided as Attachments A and B and the Facility Location Map provided as Attachment C of this Fact Sheet.

A quantitative description of the discharge based on recent discharge monitoring reports (DMRs) from September 2012 through June 2017 is included as Attachment D of this Fact Sheet.

A pre-permitting site visit was conducted at the facility on November 17, 2016 with MassDEP (acting as representative for the jointly issued EPA and MassDEP permit). During the visit it was determined that several permit parameters were not clear to the applicant. Through discussion

and a second site visit on May 18, 2017, the facility has responded to the permitting issues, namely, the sensitivity of the downstream receptors, sufficiently sensitive test methods, and the requirement for a Stormwater Pollution Prevention Plan (SWPPP).

2.0 Receiving Water Description

The Emerald Square Mall discharges stormwater to wetlands that are adjacent to and hydraulically connected to the Sevenmile River. The headwaters of the Sevenmile River are Hoppin Hill Reservoir in North Attleborough. From there the river flows approximately 3.2 miles into Orr's Pond in Attleboro through Luther Reservoir. This segment of the river, identified as MA52-07, is the receiving water for the Emerald Square Mall discharge. From Orrs Pond the Sevenmile River flows approximately 3.4 miles into the confluence with the Ten Mile River in Pawtucket, Rhode Island. This downstream segment of the river is identified as MA52-08. The Ten Mile River ultimately discharges into Narragansett Bay.

The Attleboro Water Division supplies drinking water to Attleboro, North Attleboro and Mansfield. There are three active surface water sources in the system: Manchester Reservoir, Orr's Pond and the Wading River. Water from Luther Reservoir can be pumped to Manchester Reservoir or to Orr's Pond. Manchester Reservoir and Orr's Pond are located in Attleboro.

The Sevenmile River is listed as a Class A waterbody and Public Water Supply. Massachusetts Surface Water Quality Standards (SWQSs) at 314 CMR 4.05(3)(a) state that Class A waters "include waters designated as a source of public water supply and their tributaries" and shall have the following designated uses:

...excellent habitat for fish, other aquatic life and wildlife, including for their reproduction, migration, growth and other critical functions, and for primary and secondary contact recreation, even if not allowed.

Furthermore, "[t]hese waters shall have excellent aesthetic value" and "are protected as Outstanding Resource Waters."

This segment of the Sevenmile River is also considered a warm water fishery. The Massachusetts SWQSs at 314 CMR 4.02 defines warm water fishery as:

[w]aters in which the maximum mean monthly temperature generally exceeds 68° F (20° C) during the summer months and are not capable of sustaining a year-round population of cold water stenothermal aquatic life.

Sections 305(b) and 303(d) of the Clean Water Act (CWA) require states to complete a water quality inventory for designated uses 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, requires the development of a Total Maximum Daily Load (TMDL) for each pollutant that prevents the waterbody from attaining a designated use (or uses). A TMDL is essentially a pollution budget designed to restore the health of a water body. A TMDL typically identifies the source(s) of the pollutant from direct and indirect discharges, determines 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, and outlines a plan to meet the goal. The final *Massachusetts Year 2014 Integrated List of Waters* (December 2015) (303(d) List) lists the Sevenmile River (Segment MA MA52-07) as a Category 2 water (“Attaining some uses; other uses not assessed”). The draft *Massachusetts Year 2016 Integrated List of Waters* lists the Sevenmile River (Segment MA MA52-07) as a Category 5 water (“Waters requiring a TMDL”) for *Escherichia coli*. Since the Emerald Square Mall is unlikely to cause or contribute to the impairment of the Sevenmile River, this permit does not include bacteria testing.

3.0 Permit Basis: Statutory and Regulatory Authority

3.1 General Requirements

The CWA prohibits the discharge of pollutants to waters of the United States without a NPDES permit, unless such a discharge is otherwise authorized by the CWA. The NPDES permit is the mechanism used to implement technology-based effluent limitations (TBELs,) water quality-based effluent limitations (WQBELs) 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 applicable State regulations. The regulations governing the EPA NPDES permit program are generally found at 40 C.F.R. Parts 122, 124, 125, and 136. The general conditions of the Draft Permit are based on 40 C.F.R. § 122.41 and consist primarily of management requirements common to all permits. The effluent monitoring requirements have been established to yield data representative of the discharge under authority of Section 308(a) of the CWA in accordance with 40 C.F.R. § 122.41(j), § 122.44(i) and § 122.48.

During development of this permit, EPA and MassDEP considered (a) technology-based requirements, (b) water quality-based requirements (c) all limitations and requirements in the current/existing permit, and (d) water supply protection.

3.1.1 Technology-Based Requirements

Subpart A of 40 C.F.R. § 125 establishes criteria and standards for the imposition of technology-based treatment requirements (technology-based effluent limits, TBELs) in permits under Section 301(b) of the CWA, including the application of EPA promulgated Effluent Limitations Guidelines (ELGs) and case-by-case determinations of effluent limitations under Section 402(a)(1) of the CWA.

Technology-based treatment requirements represent the minimum level of control that must be imposed under CWA §§ 301(b) and 402 (see 40 C.F.R. § 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. In general, technology-based effluent guidelines for non-POTW facilities 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 C.F.R. §125.3(a)(2)].

EPA has not promulgated technology-based ELGs for Commercial Establishments such as malls

(SIC codes 6512, 5311, 5399, 5651, and 5812) in 40 C.F.R. Subchapter N Parts 425 through 471. 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 Judgement (BPJ). To the extent applicable to the Facility, EPA has incorporated limitations and conditions from EPA Region 1's general stormwater permits, namely, the Municipal Separate Storm Sewer Systems (MS4) and Multi-Sector General Permit (MSGP).

3.1.2 Water Quality-Based Requirements

Section 301(b)(1)(C) of the CWA requires that effluent limitations based on water quality considerations be established for point source discharges when such limitations are necessary to meet state or federal water quality standards that are applicable to the designated receiving water. This is necessary when less stringent TBELs would interfere with the attainment or maintenance of water quality in the receiving water.

Under CWA § 301(b)(1)(C) and EPA regulations, NPDES permits must contain effluent limits more stringent than TBELs where more stringent limits are necessary to maintain or achieve state or federal water quality standards. Generally, water quality standards consist of three parts: (1) beneficial designated uses for a water-body or a segment of a water-body; (2) numeric and/or narrative water quality criteria (WQC) sufficient to protect the assigned designated use(s); and (3) anti-degradation requirements to ensure that once a use is attained it will not be degraded. The Massachusetts SWQSSs, 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 CWA § 304(a), shall be used unless site specific criteria is established.

3.1.3 Reasonable Potential

Pursuant to 40 C.F.R. § 122.44(d)(1), NPDES permits must contain any requirements in addition to TBELs necessary to achieve water quality standards established under Section 303 of the CWA. In addition, limitations "must control any pollutant or pollutant parameter (conventional, non-conventional, or toxic) which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any water quality standard, including State narrative criteria for water quality". 40 C.F.R. § 122.44(d)(1)(i). There is reasonable potential to cause or contribute to an excursion if the projected or actual in-stream concentration exceeds the applicable criterion. If the permitting authority determines that a discharge causes, has the reasonable potential to cause, or contributes to such an excursion, the permit must contain WQBELs for the pollutant. *See* 40 C.F.R. § 122.44(d)(1)(iii).

In determining "reasonable potential," EPA considers: (1) existing controls on point and non-point sources of pollution; (2) pollutant concentration and variability in the effluent and receiving water based on available information including, but not limited to, a permittee's NPDES application, monthly discharge monitoring reports (DMRs), and State and Federal Water

Quality Reports; (3) sensitivity of the indicator species used in toxicity testing; (4) known water quality impacts of processes on waste waters; and (5) where appropriate, dilution of the effluent in the receiving water. EPA typically follows a quantitative approach based on the guidance in Technical Support Document for Water Quality-based Toxics Control (TSD) to determine if any pollutant or pollutant parameter (conventional, non-conventional, and toxic) is or may be discharged causes or has the reasonable potential to cause or contribute to an excursion above any WQS (40 C.F.R. § 122.44(d)).¹ EPA's quantitative approach statistically projects effluent concentrations based on available effluent data, which are then compared to the applicable WQC.

3.1.4 Dilution Factor

EPA considers the available dilution when determining water quality based limitations in a NPDES permit. Massachusetts SWQSs at 314 CMR 4.03(3) define the most severe hydrologic conditions at which water quality standards must be applied. For rivers and streams, this flow condition is the lowest mean flow for seven consecutive days to be expected once in 10 years (7Q10). Use of the 7Q10 flow allows for the calculation of the available dilution under critical flow (worst-case) conditions, which in turn results in the derivation of conservative water quality-based effluent limitations. For lakes and ponds, Massachusetts SWQSs at 314 CMR 4.03(3)(c) states that, "the Department will establish extreme hydrologic conditions at which aquatic life criteria must be applied on a case-by-case basis. In all cases existing uses shall be protected and the selection shall not interfere with the attainment of designated uses."

In this case, the stormwater from Emerald Square Mall flows to both an unnamed pond at Outfall 001 and a wetland area at Outfall 002. The relatively small size of the unnamed pond and low flow to the wetland would afford very little, if any dilution to this discharge. In the wetland there is no natural hydraulic flow within this channelized section of wetlands during the dry months. Therefore, EPA is assuming that a dilution factor of one is appropriate to use in calculating reasonable potential and water quality-based limits.

3.2 Anti-Degradation

Federal regulations found at 40 C.F.R. §131.12 require states to develop and adopt a statewide anti-degradation policy which maintains and protects existing in-stream water uses and the level of water quality necessary to protect these 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 waterbody.

The Commonwealth of Massachusetts anti-degradation provision found in 314 CMR 4.04 applies to any new or increased discharge that would lower water quality or affect existing or designated uses, including increased loadings to a water body from an existing activity. The anti-degradation provisions focus on protecting high quality waters and maintaining water quality necessary to protect existing uses.

All existing in-stream uses and the level of water quality necessary to protect the existing uses of

¹ EPA's Technical Support Document for Water Quality-based Toxics Control: EPA/505/2-90-001, 1991.

the wetlands adjacent to the channel of the Sevenmile River shall be maintained and protected. As previously described, a Class A waterbody in Massachusetts is a public water supply, habitat for fish, other aquatic life and wildlife, and for primary and secondary contact recreation. This permit is being reissued with effluent limitations sufficiently stringent to protect the existing uses of the receiving waters. Further, there are no new or increased discharges being proposed with this permit reissuance to trigger an anti-degradation review by the state.

3.3 Anti-Backsliding

A permit may not be renewed, reissued or modified with less stringent limitations or conditions than those contained in a previous permit unless in compliance with the anti-backsliding requirements of the CWA. *See* §402(o) and §303(d)(4) of the CWA and 40 C.F.R. §122.44(l)(1 and 2). EPA's anti-backsliding provisions prohibit the relaxation of permit limits, standards, and conditions except under certain circumstances. *See* 40 C.F.R. § 122.44(l)(i). Anti-backsliding provisions apply to effluent limits based on technology, water quality, BPJ and state certification requirements.

This Draft Permit complies with the anti-backsliding requirements of the CWA. All proposed limitations in the Draft Permit are at least as stringent as those included in the 2010 Permit.

3.4 Test Methods and Minimum Levels

NPDES permits require that the approved analytical procedures found in 40 C.F.R. Part 136 be used for sampling and analysis unless other procedures are explicitly specified. Permits also include requirements necessary to comply with *the National Pollutant Discharge Elimination System (NPDES): Use of Sufficiently Sensitive Test Methods for Permit Applications and Reporting Rule* (Sufficiently Sensitive Test Method Rule).² This Rule requires that where EPA-approved methods exist, NPDES permittees must use sufficiently sensitive EPA-approved analytical methods when quantifying the presence of pollutants in a discharge. Further, the Director must prescribe that only sufficiently sensitive EPA-approved methods be used for analyses of pollutants or pollutant parameters under the permit. The NPDES regulations at 40 C.F.R. § 122.21(e)(3) (completeness), 40 C.F.R. § 122.44(i)(1)(iv) (monitoring requirements) and/or as cross referenced at 40 C.F.R. § 136.1(c) (applicability) indicate that an EPA-approved method is sufficiently sensitive where:

- The method minimum level (ML) is at or below the level of the applicable water quality criterion or permit limitation for the measured pollutant or pollutant parameter; or
- In the case of permit applications, the ML is above the applicable water quality criterion, but the amount of the pollutant or pollutant parameter in a facility's discharge is high enough that the method detects and quantifies the level of the pollutant or parameter in the discharge; or
- The method has the lowest ML of the EPA-approved analytical methods.

4.0 Description of Outfalls and Discharges

² See Federal Register, Vol. 79, No. 160, Tuesday, August 19, 2014; FR Doc. 2014-19557.

4.1 Outfall 001

Stormwater from a portion of the west side of the Emerald Square Mall site flows into a constructed stormwater treatment system located across Allen Avenue, behind North Attleborough Fire Department Station No.3 (also known as the “Upper Detention Basin and Wetland Cells”). The constructed stormwater treatment system is comprised of a detention basin which overflows into a series of three constructed wetlands. Overflow from the final wetland flows through a headwall into a 24-inch pipe directed east across Allen Avenue and the Mall parking lot. In the parking lot another pipe joins the 24-inch pipe at a manhole. The pipe collects stormwater from another portion of the west side of the Emerald Square Mall site.

The 24-inch pipe crosses South Washington Street through a 24-inch x 30-inch stone culvert and discharges into a small unnamed pond through a headwall. The pond is located between a retail business located at 1190 South Washington Street and residential property owned by Whispering Pines Mobile Home Park, Inc. at 1174 South Washington Street. The discharge location of the 24-inch pipe into the unnamed pond is designated Outfall 001. Overflow from the unnamed pond flows into existing wetlands that are hydraulically connected to the Sevenmile River. The Site Plan (Attachments A and B of this Fact Sheet) shows the location of Outfall 001 relative to the pond. Data from DMRs pertaining to Outfall 001 from September 2012 through June 2017 is included in Attachment D of this Fact Sheet.

4.2 Outfall 002

Stormwater from across the Emerald Square Mall site, excluding areas that discharge through Outfall 001, flows into detention basin(s) located on the east side of the site. A portion of this flow is treated through three oil/water separators, specifically targeted to treat stormwater from the parking garages. Stormwater is either directed to the first detention basin in a series of two or directly to the second basin. Overflow from the second detention basin flows through a pair of 30-inch concrete culverts located under South Washington Street, also known as Route 1, and through a diversion channel about 400 feet in length. Flow continues through three constructed wetland cells in series (also known as the “Lower Wetland Cells”). Between each wetland cell is a concrete control structure, each including a weir to control flow, thereby encouraging settling in each cell. Overflow from the final wetland cell flows into existing unnamed wetlands that are hydraulically connected to the Sevenmile River.

The discharge location of Outfall 002 is located after wetland cell 6. Flow is estimated and a sample is collected at this location. The Site Plan (Attachments A and B of this Fact Sheet) shows the location of Outfall 002. Data from DMRs pertaining to Outfall 002 from September 2012 through June 2017 is included in Attachment D of the Fact Sheet.

5.0 Proposed Permit Effluent Limitations and Conditions (for both Outfalls 001 and 002)

The bases for the effluent limitations and monitoring requirements, special conditions and standard conditions derived under the Federal Clean Water Act and Massachusetts’ Surface Water Quality Standards are as described below. These proposed effluent limitations and conditions, the basis of which is discussed throughout this Fact Sheet, may be found in Part I of the Draft Permit.

5.1 Monitoring Frequency

Consistent with the 2010 Permit, the required monitoring frequency for each outfall in the Draft Permit is at least one storm event per quarter. Given the intermittent occurrence of these stormwater discharges, all stormwater effluent limits are specified as daily maximum limits.

5.2 Flow

The stormwater flow through Outfalls 001 and 002 consist of drainage from the property roof, multi-level parking lots, and access roads. The Draft Permit requires the Permittee to report the estimated volume of stormwater discharged at each outfall during the day that is monitored. Consistent with the 2010 Permit and the Region's Multi-Sector General Permit (MSGP), the Draft Permit also requires that samples be collected from a storm event (rainfall or snow melt) greater than 0.1 inches in magnitude that results in an actual discharge from the site and that occurs at least 72 hours from the previously measurable (i.e., greater than 0.1-inch) storm event. All samples are to be taken within thirty (30) minutes of the discharge from the storm event described above. This is intended to capture the "first flush" of pollutants from the Facility's stormwater treatment system. In addition, the Permittee is required to record and report with each quarter's DMR and each updated SWPPP the following: 1) the date and duration of the storm event, 2) the antecedent dry period (time elapsed in hours since the last measurable storm greater than 0.1 inches), and 3) the total precipitation accumulated, in inches, during the wet weather event.

5.3 pH

The hydrogen-ion (H-) concentration in an aqueous solution is represented by the pH using a logarithmic scale of 0 to 14 standard units (SU). Solutions with pH 7.0 SU are neutral, while those with pH less than 7.0 standard units (S.U.) are acidic and those with pH greater than 7.0 S.U. are basic. "Note that although basic solutions are alkaline, "basicity" and "alkalinity" are not exactly the same thing. Basicity refers to the ratio of hydrogen and hydroxyl (OH-) ions in solution, and is directly related to pH. Alkalinity is related to the acid-neutralizing capacity (ANC) of a solution. In aquatic ecosystems, processes that increase dissolved carbon dioxide or dissolved organic carbon (DOC) decrease pH but have no effect on ANC." U.S. EPA, Entry: Causal Analysis/Diagnosis Decision Information System, Volume 2: Sources, Stressors & Responses, pH, at <https://www.epa.gov/caddis-vol2/caddis-volume-2-sources-stressors-responses-ph>. Effluent with pH values markedly different from the receiving water pH can have a detrimental effect on the environment. Sudden pH changes can kill aquatic life.

Massachusetts SWQSs require the pH of Class A inland waterbodies to be in the range of 6.5 to 8.3 S.U. but not more than 0.5 units outside of the natural background range. *See* 314 CMR 4.05(3)(a)3. Consistent with this regulation, this limit range is retained in the Draft Permit.

According to DMR data from September 2012 through June 2017, included in Attachment D of this Fact Sheet, there were three reported violations of the lower pH limit during 2014 and 2017 at Outfall 001 and four reported violations during 2014, 2015, and 2017 for Outfall 002. The lowest pH reported for Outfall 001 was 5.91 S.U. and the lowest for Outfall 002 was 6.33 S.U. during this time period.

5.4 Total Suspended Solids (TSS)

Solids are the most common pollutant in stormwater runoff and could include inorganic and organic matter. Suspended solids may settle to form bottom deposits in the receiving water, potentially causing benthic smothering. Suspended solids also increase turbidity in receiving waters and reduce light penetration through the water column, thereby limiting the growth of rooted aquatic vegetation that serves as a critical habitat for fish and other aquatic organisms and can clog fish gills, resulting in an increase in susceptibility to infection or asphyxiation. Suspended solids also provide a medium for the transport of other sorbed pollutants, including nutrients, pathogens, and metals, which may accumulate in settled deposits that may have a long-term impact on the water column through cycles of re-suspension.

In the absence of published technology-based effluent guidelines, the permit writer is authorized under CWA §402(a)(1)(B) to establish effluent limitations on a case-by-case basis using best professional judgment (BPJ). During the development of the first permit for ESM, in the late 1980's, EPA conducted a site-specific BPJ analysis and determined that the appropriate TBEL for TSS is a daily maximum limit of 30 mg/L. This limit was originally based on the water quality impact analysis of the Draft Environmental Impact Report (DEIR).

According to DMR data from September 2012 through June 2017, included in Attachment D of this Fact Sheet, there was one reported TSS violation for Outfall 001 in 2013 and two violations for Outfall 002, in 2013 and 2015. The highest TSS reported for Outfall 001 during this time period was 55 mg/L and the highest for Outfall 002 was 66 mg/L. The average values for Outfalls 001 and 002 were 8.4 mg/L and 12.1 mg/L, respectively. In compliance with antibacksliding requirements found in 40 C.F.R. § 122.44(l), EPA is not proposing to change this limitation in the Draft Permit.

5.5 Oil and Grease

Oil and grease are a known component of uncontrolled urban stormwater runoff. Petroleum and non-petroleum oils (e.g. vegetable oils, grease) share common physical properties and produce similar environmental effects. Oil and grease (O&G) constituents can be highly toxic to aquatic life both directly and indirectly. Direct exposure through surface coating or direct ingestion of material with food items can affect respiration, impair reproduction and growth and cause blood, liver and kidney disorders, to name a few. See Howarth, R. W, *Determining the Ecological Effects of Oil Pollution in Marine Ecosystems*, 1989, pages 69-97 in S. Levin, et. al., editors, *Ecotoxicology: Problems and Approaches*, Springer New York. Indirectly, surface waters coated with even a thin film of oil can inhibit re-aeration, reducing the amount of available oxygen in the water. Furthermore, oils and greases can form products that linger in the environment for many years.

Massachusetts SWQSs at 314 CMR 4.05(3)(a)(7) state that Class A waterbodies, such as the wetlands adjacent to the channel of the Sevenmile River “shall be free from oil and grease, petrochemicals and other volatile or synthetic organic pollutants.” EPA interprets this narrative to represent the absence of oil and grease in the respective receiving waters. In this situation, EPA establishes the oil and grease effluent limit at zero to comply with the States’s water quality

standards. Because the zero limit is below the analytical detection limit for this pollutant, EPA follows guidance set forth in Technical Support Document for Water Quality-based Toxics Control, March 1991, EPA/505/2-90-001, pages 111-112 which recommends "... that the compliance level be defined in the permit as the minimum level (ML)." The minimum level of detection for oil and grease referenced in test method 1664 is 5.0 mg/L. Therefore, the limit at which compliance/noncompliance determinations will be based is the ML. Oil and grease was limited to 5 mg/L in the existing 2010 Permit for ESM and carried forward to the Draft Permit. The Draft Permit also requires monthly monitoring for oil and grease to ensure that the receiving water meets water quality standards.

According to DMR data from September 2012 through June 2017, included in Attachment D of this Fact Sheet, there were no reported violations of the oil and grease limit of 5 mg/L for Outfall 001. For Outfall 002 the minimum detection limit exceeded the oil and grease limit twice during 2015 and 2016. Reporting non-detect values above permitted levels are considered violations in accordance with the Sufficiently Sensitive Test Method Rule discussed in Section 3.4 of this Fact Sheet. The highest oil and grease reported for Outfall 001 during the period reviewed was 5 mg/L and for Outfall 002 it was 6 mg/L. Averages for Outfalls 001 and 002 were 2.5 mg/L and 2.9 mg/L respectively. In compliance with antibacksliding requirements found in 40 C.F.R. § 122.44(i), EPA is not proposing to change this limitation in the Draft Permit.

5.6 Lead, Copper and Zinc

Dissolved fractions of certain metals in water can be toxic to aquatic life. Therefore, there is a need to limit toxic metal concentrations in the effluent where aquatic life may be impacted. The current permit includes water quality based effluent limits for lead (daily maximum of 20 µg/L), copper (daily maximum of 7.5 µg/L), and zinc (daily maximum of 65 µg/L).

Metals may be present in both dissolved and particulate forms in the water column with extensive studies suggesting that it is the dissolved fraction that is biologically available and therefore presents the greatest risk of toxicity to aquatic life inhabiting the water column. This conclusion is widely accepted by the scientific community both within and outside of EPA and as a result, water quality criteria are established in terms of dissolved metals. *See* Water Quality Standards Handbook: Second Edition, Chapter 3.6 and Appendix J, EPA 1994 (EPA 823-B-94-005a) updated March 2012 (EPA 823-B-12-0020) at <http://www.epa.gov/wqs-tech/water-quality-standards-handbook>. However, many inorganic components of wastewater, including metals, are in the particulate form, and differences in the chemical composition between the effluent and the receiving water affects the partitioning of metals between the particulate and dissolved fractions as the effluent mixes with the receiving water, often resulting in a transition from the particulate to dissolved form. *See* The Metals Translator: Guidance for Calculating a Total Recoverable Permit Limit from a Dissolved Criterion (Metals Translator), EPA 1996, EPA 823-B96-007 at https://www3.epa.gov/npdes/pubs/metals_translator.pdf. Consequently, quantifying only the dissolved fraction of metals in the effluent prior to discharge may not accurately reflect the biologically-available portion of metals in the receiving water. Regulations at 40 C.F.R. § 122.45(c) require, with limited exceptions, that metals limits in NPDES permits be expressed as total recoverable metals.

The freshwater criteria for copper, lead, and zinc in EPA's National Recommended Water Quality Criteria: 2002 (2002 National Criteria), EPA 822-R-02-047, November 2002 (adopted by MassDEP) and are hardness dependent and expressed as the dissolved fraction in the water column. The acute criteria values based on hardness are calculated using the following formula found in the 2002 National Criteria and the Metals Translator:

$$\text{CMC (dissolved)} = \exp\{m_A [\ln(\text{hardness})] + b_A\} * CF$$

"CF" is the conversion factor used for converting a metal criterion expressed as the total recoverable fraction in the water column to a criterion expressed as the dissolved fraction in the water column.

For the existing 2010 Emerald Square Mall NPDES Permit, metals limits were calculated using a hardness of 50 mg/L as CaCO₃. Since lead, copper, and zinc are more toxic at lower hardness, an ambient water hardness of 50 mg/L as CaCO₃ is used to calculate the water quality criteria of these metals for the Draft Permit.³ Although no hardness data has been collected for the Sevenmile River, EPA has determined that this approach is conservative and consistent with antibacksliding requirements found in 40 C.F.R. § 122.44(l).⁴ However, the Draft Permit requires effluent and ambient hardness data to be collected and submitted with the next permit application in order to more accurately evaluate appropriate criteria.

As previously mentioned, 40 C.F.R. § 122.45(c) requires that permit limits are based on total recoverable metals and not dissolved metals. Consequently, it is necessary to apply a translator in order to develop a total recoverable permit limit from the dissolved criteria. The translator reflects how a discharge partitions between the particulate and dissolved phases after mixing with the receiving water. In the absence of site specific data on how a particular discharge partitions in the receiving water, a default assumption that the translator is equivalent to the criteria conversion factor is used in accordance with the Metals Translator. Therefore, the following equation is used to determine the total recoverable-based acute permit limitations:

$$\text{CMC effluent limit} = \text{CMC (dissolved)} * \text{dilution factor}(1) / \text{translator}(CF)$$

Table 1 below presents the factors used to determine the acute total recoverable permit limits for lead, copper, and zinc.

³ EPA considered average ambient hardness data from the nearby Ten Mile River taken by the Attleboro Water Pollution Control Facility between 2010-2015. The median hardness of the 22 samples collected is 60 mg/L CaCO₃, which is less conservative than the current permitting approach.

⁴ If higher hardness values are believed to be more representative of ambient conditions in the receiving waters, the Permittee may submit receiving water hardness data during the public comment period.

Table 1: Calculating Acute Hardness-dependent Freshwater Metals Criteria

Metal	Metal-specific Constants		Conversion Factors	Total Dissolved Criteria	Total Recoverable Criteria
	m _A	b _A	CF (acute)	Acute Criteria (CMC) (µg/L)	Acute Permit Limitations (µg/L)
Lead	1.273	-1.46	0.892*	30.14	33.8
Copper	0.9422	-1.7000	0.960	6.99	7.3
Zinc	0.8473	0.884	0.978	65.13	66.6

* $1.46203 - [(\ln \text{hardness})(0.145712)]$

5.6.1 Total Recoverable Lead

According to DMR data from September 2012 through June 2017, included in Attachment D of this Fact Sheet, there were no reported violations of the existing permit's total lead limit for either Outfall 001 or Outfall 002. The highest reported level during this time period was 15 µg/L for both outfalls. Average lead values for Outfalls 001 and 002 were 7.4 µg/L and 7.3 µg/L, respectively.

The existing 2010 Permit included a daily maximum limit of 20 µg/L, based on treatment system removal efficiencies during worst case conditions. This limit is sufficient to meet water quality standards and therefore a technology-based limit of 20 µg/L for lead has been retained in this Draft Permit in accordance with antibacksliding requirements found in 40 C.F.R. § 122.44(l).

5.6.2 Total Recoverable Copper

According to DMR data from September 2012 through June 2017, included in Attachment D of this Fact Sheet, the minimum detection limit reported exceeded the copper limit four times for Outfall 001 and five times for Outfall 002 during 2013 and 2014. To prevent reporting non-detect values above permitted levels and in accordance with the Sufficiently Sensitive Test Method Rule discussed in Section 3.4 of this Fact Sheet, the Draft Permit requires that the Permittee use an EPA-approved test method that is sufficiently sensitive to detect copper at a level that is at or below the permit limitation. In addition, two copper violations were reported for Outfall 002 during 2013 and 2015. The highest copper values reported during the review period were <10 µg/L for Outfall 001 and 12 µg/L for Outfall 002. Averages were 5.4 µg/L for Outfall 001 and 6.1 µg/L for Outfall 002.

Consistent with the calculations presented above, the water quality-based daily maximum (acute) limit of 7.3 µg/L is being added to the Draft Permit. This water quality-based effluent limit is slightly more stringent than the existing permit's limit of 7.5 µg/L for copper.

5.6.3 Total Recoverable Zinc

According to DMR data from September 2012 through June 2017, included in Attachment D of

this Fact Sheet, the minimum detection limit reported exceeded the zinc limit once in 2013 for each outfall location (Outfall 001 and Outfall 002). As discussed for oil and grease and copper, reporting non-detect values above permitted levels are considered violations in accordance with the Sufficiently Sensitive Test Method Rule discussed in Section 3.5 of this Fact Sheet. In addition, for this same time period, one zinc violation was reported for Outfall 001 in 2013 and three violations were reported for Outfall 002 in 2013, 2015, and 2016. Averages were 35.3 µg/L for Outfall 001 and 48.8 µg/L for Outfall 002.

In contrast to the calculated water quality-based limit of 67 µg/L for zinc presented above, the existing 2010 Permit includes a technology-based daily maximum limit of 65 µg/L. The existing 2010 Permit limit is based on the review of the effluent monitoring data from 2002 through 2003, which indicated a higher level of treatment attainable by the existing on-site treatment system compared to a calculated water quality-based limit. This more stringent technology-based limit has been retained in this Draft Permit and is consistent with antibacksliding requirements found in 40 CFR §122.44(l).

5.7 Special Conditions

5.7.1 Stormwater Pollution Prevention Plan

The discharge of pollutants from the Emerald Square Mall, as permitted in the Draft Permit, is mainly a result of stormwater runoff from parking lots and paved surfaces. However, other potential sources exist at the facility that could result in the discharge of pollutants to the receiving waters either directly or indirectly through stormwater runoff.

The mall utilizes nine electrical transformers that contain mineral oil as dielectric fluid, which is contained in a sealed tank within each transformer. The mall also utilizes a 1,000-gallon diesel storage tank for the emergency generator, which is enclosed in a room surrounded by concrete walls. Also located at the facility are two, 500-gallon underground storage tanks containing used car oil, owned by Sears.

As described in this Fact Sheet, the discharge of stormwater from the facility results in the discharge of pollutants to waters of the United States. To control pollutants to the receiving waters, potentially violating the State's Water Quality Standards, the current and Draft Permit require the facility to implement and maintain a Stormwater Pollution Prevention Plan (SWPPP) containing best management practices (BMPs) appropriate for this specific facility. *See* Sections 304(e) and 402(a)(1) of the CWA and 40 C.F.R. § 125.103(b). The requirements of the SWPPP are consistent with EPA's 2015 Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP).

The goal of the SWPPP is to reduce, or prevent, the discharge of pollutants through the stormwater system. The SWPPP requirements in the 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 stormwater discharges associated with industrial activity from the facility. Upon implementation, the SWPPP becomes a

supporting element to any numerical effluent limitations in the permit. Consequently, the SWPPP is as equally enforceable as the numerical limits in this permit.

The SWPPP development process involves the following five main steps:

1. Forming a team of qualified facility personnel who will be responsible for developing and updating the SWPPP and assisting the operations director in its implementation;
2. Assessing all potential stormwater pollution sources;
3. Selecting and implementing appropriate management practices and controls for these potential pollution sources;
4. Reevaluating, periodically, the effectiveness of the SWPPP in preventing stormwater contamination; and
5. Developing and implementing site-specific BMPs including:
 - a. Ensuring proper inspection and cleaning of all oil/water separators and catch basins (inspection of oil/water separators at least quarterly and cleaning at least annually; catch basins cleaned at least semiannually);
 - b. Performing cleaning at a minimum seasonally;
 - c. Requiring storage of materials and equipment such that contact with stormwater is limited, and avoided whenever possible; and
 - d. Reducing the amount of turbidity in the effluent.

The Draft Permit requires the Permittee to certify that it has updated its SWPPP including the site map within ninety (90) days of the issuance of the permit, provide a copy of the certification and updated SWPPP to EPA and MassDEP, and maintain all SWPPP records on-site for at least five years.

6.0 Other Legal Requirements

6.1 Essential Fish Habitat

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 National Marine Fisheries Service (“NMFS”) if EPA’s action or proposed actions that it funds, permits, or undertakes, “may adversely impact any essential fish habitat.” *See* 16 U.S.C. §1855(b). The Amendments broadly define “essential fish habitat” (EFH) as: “waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.” *See* 16 U.S.C. §1802(10). “Adversely impact” means any impact which reduces the quality and/or quantity of essential fish habitat (EFH). *See* 50 C.F.R. § 600.910(a). Adverse impacts 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.

EFH is only designated for fish species for which federal Fisheries Management Plans exist. *See* 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. In some cases, a narrative identifies rivers and other waterways that should be considered EFH due to present or historic use by federally managed species.

A review of the relevant essential fish habitat information provided by NMFS indicates that EFH has been designated for 33 managed species within the NMFS boundaries encompassing Narragansett Bay, which the Sevenmile River discharges to, via the Seekonk River and the Providence River. *See* NOAA, Summary of Essential Fish Habitat, Narragansett Bay, RI (<http://www.nero.noaa.gov/hcd/ri1.html>). It is possible that a number of these species utilize the downstream Rhode Island waters for spawning, while others are present seasonally.

Based on the relevant information examined, EPA finds that the reissuance of this permit will adequately protect EFH for the following reasons:

- The Emerald Square Mall discharge is located more than 10 miles upstream of designated EFH habitat; This permit action does not constitute a new source of pollutants. It is the reissuance of an existing NPDES permit;
- The Draft Permit contains water quality-based limits for pH, oil and grease, zinc, and copper;
- The Draft Permit contains a technology based limit for lead that is more stringent than the water quality-based limit; and
- The Draft Permit prohibits the discharge of pollutants or combinations of pollutants in toxic amounts.

EPA believes that the conditions and limitations contained within the Draft Permit adequately protect all aquatic life, and that further mitigation is not warranted. Therefore, EPA has determined that no EFH consultation with NMFS is required at this time. If adverse effects to EFH are detected as a result of this permit action, or if new information is received that changes the basis for our conclusion, NOAA Fisheries will be notified and an EFH consultation will be initiated.

6.2 Endangered Species Act

Section 7(a) of the Endangered Species Act (ESA) of 1973, as amended (the “Act”), grants authority to and imposes requirements upon federal agencies regarding endangered or threatened species of fish, wildlife, or plants (“listed species”) and the habitats of such species that have been designated as critical (“critical habitat”). The NMFS administers Section 7 consultations for marine species and anadromous fish. The United States Fish and Wildlife Service (USFWS) administers Section 7 consultations for freshwater species. In consultation with and with the assistance of the Secretary of the Interior, Section 7(a)(2) of the Act requires every federal agency ensure that any action it authorizes, funds, or carries out, in the United States or upon the high seas, will not jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat.

EPA has reviewed the federal endangered or threatened species of fish, wildlife, or plants to see if any such listed species might potentially be impacted by the issuance of this NPDES permit. The review has not found any such listed species in the vicinity of the discharge. Therefore, consultation under Section 7 of the ESA is not required at this time. If adverse effects do occur

as a result of this permit action, or if new information becomes available that changes the basis for this conclusion, then EPA will notify and initiate consultation with the USFWS and/or NMFS.

7.0 Monitoring and Reporting

The effluent monitoring requirements have been established to yield data representative of the discharge under authority of Section 308 (a) of the CWA in accordance with 40 C.F.R. §§ 122.41 (j), 122.44 (l), and 122.48. The Draft Permit requires the permittee to report required monitoring results in the Discharge Monitoring Reports (DMRs) no later than the 15th day of the month following the completed reporting period.

NetDMR is a national web-based tool for regulated Clean Water Act permittees to submit DMRs electronically via a secure Internet application to U.S. EPA through the Environmental Information Exchange Network. NetDMR allows participants to discontinue mailing in hard copy forms under 40 C.F.R. § 122.41 and § 403.12. NetDMR is accessed from the following url: <http://www.epa.gov/netdmr>. Further information about NetDMR can be found on the EPA Region 1 NetDMR website located at <http://www.epa.gov/region1/npdes/netdmr/index.html>.

EPA currently conducts free training on the use of NetDMR, and anticipates that the availability of this training will continue to assist permittees with the transition to use of NetDMR. To learn more about upcoming trainings, please visit the NetDMR website <https://netdmr.zendesk.com/hc/en-us/articles/209616386>.

In most cases, reports required under the permit shall be submitted to EPA as an electronic attachment through NetDMR, subject to the same six-month time frame and opt-out provisions as identified for NetDMR. Certain exceptions are provided in the permit such as for the submittal of SWPPP certifications and for providing written notifications required under the Part II Standard Permit Conditions. Once a permittee begins submitting reports to EPA using NetDMR, it will no longer be required to submit hard copies of DMRs or certain other reports to EPA and will no longer be required to submit hard copies of DMRs to MassDEP. Reporting requirements are further explained in the draft permit.

8.0 State Certification Requirements

Under CWA § 401, EPA may not issue a permit unless the MassDEP 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 Massachusetts SWQs or it is deemed that the state has waived its right to such certification. Regulations governing state certification are set forth in 40 C.F.R. § 124.53 and § 124.55. The staff of the 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 C.F.R. § 124.53 and expects that the Final Permit will be certified.

9.0 General Conditions

The general conditions of the permit are based on 40 C.F.R. § 122, Subparts A and D and 40 C.F.R. § 124, Subparts A, D, E, and F and are consistent with management requirements common to NPDES permits. *See* Part II: Standard Conditions.

10.0 Comment Period, Hearing Requests, and Procedures for Final Decisions

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 Sharon DeMeo, U.S. EPA, Office of Ecosystem Protection, 5 Post Office Square, Suite 100, OEP 06-1, Boston, Massachusetts 02109-3912 or via email to demeo.sharon@epa.gov and to MassDEP, Bureau of Water Resources, Attn: Jennifer Wood, 1 Winter Street, Boston Massachusetts 02108 or via email to jennifer.wood@massmail.state.ma.us. 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 and/or submit a request for an adjudicatory hearing to MassDEP's Office of Appeals and Dispute Resolution consistent with 310 CMR 1.00.

11.0 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:

Sharon DeMeo

U.S. Environmental Protection Agency
5 Post Office Square, Suite 100
Mailcode: OEP 06-4
Boston, MA 02109-3912
Tel: (617) 918-1995
FAX: (617) 918-0995
Email: demeo.sharon@epa.gov

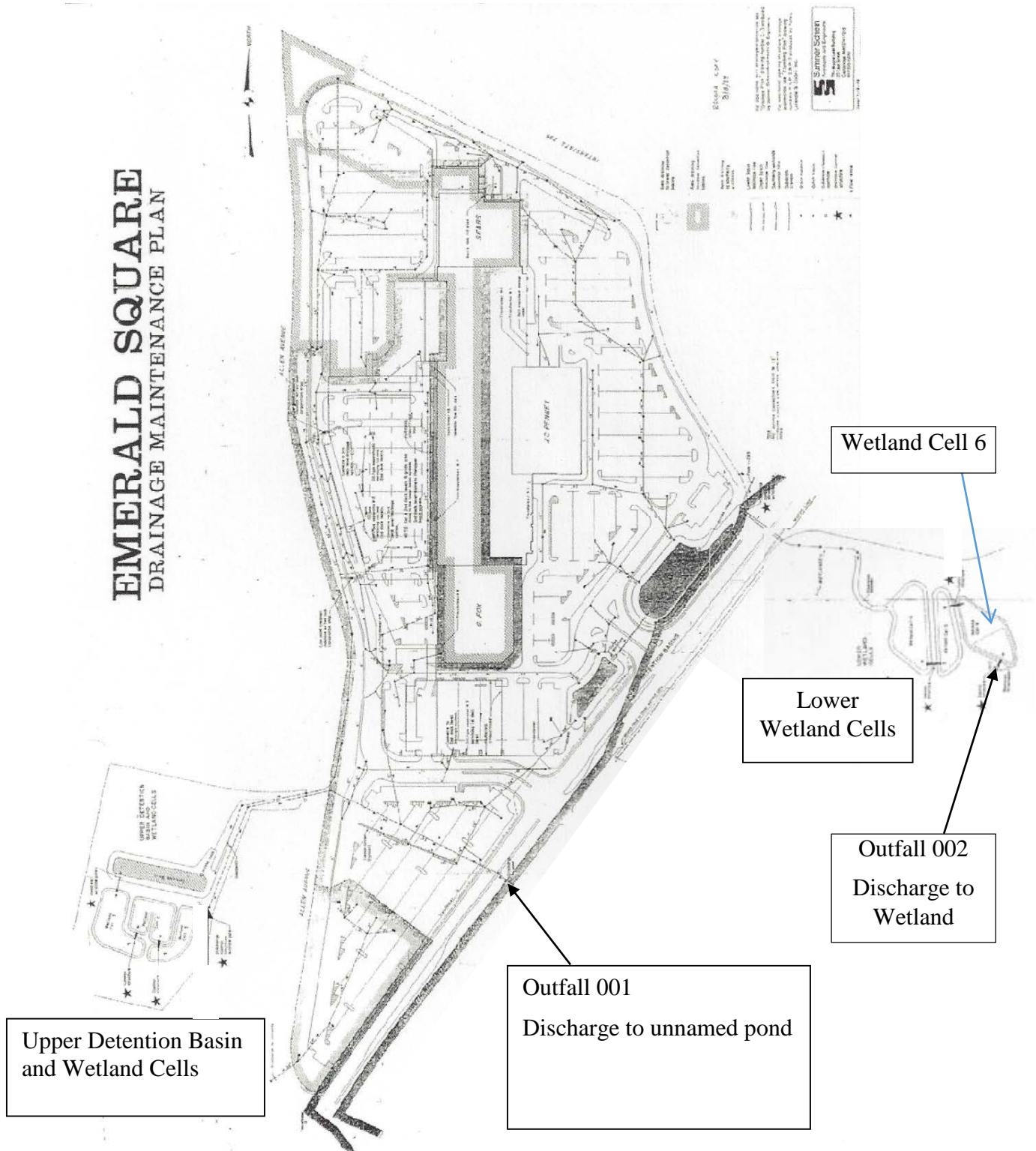
Jennifer Wood

Massachusetts Department of Environmental Protection
Surface Water Discharge Permit Program
1 Winter Street
Boston, MA 02108
Tel: (617) 654-6536
E-mail: jennifer.wood@state.ma.us

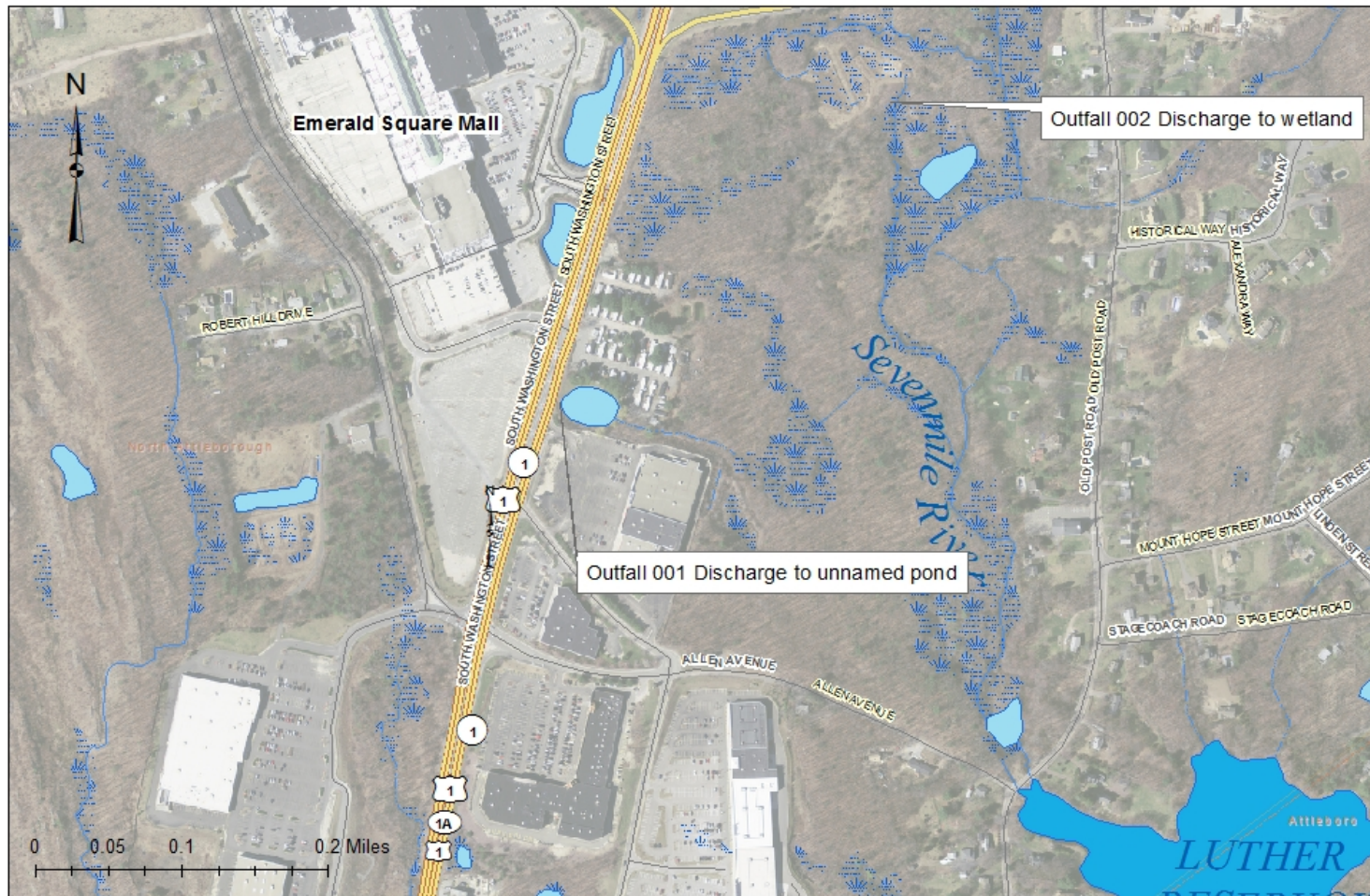
November 2017
Date

**Lynne Hamjian, Acting Director
Office of Ecosystem Protection
U.S. Environmental Protection Agency
Boston, MA**

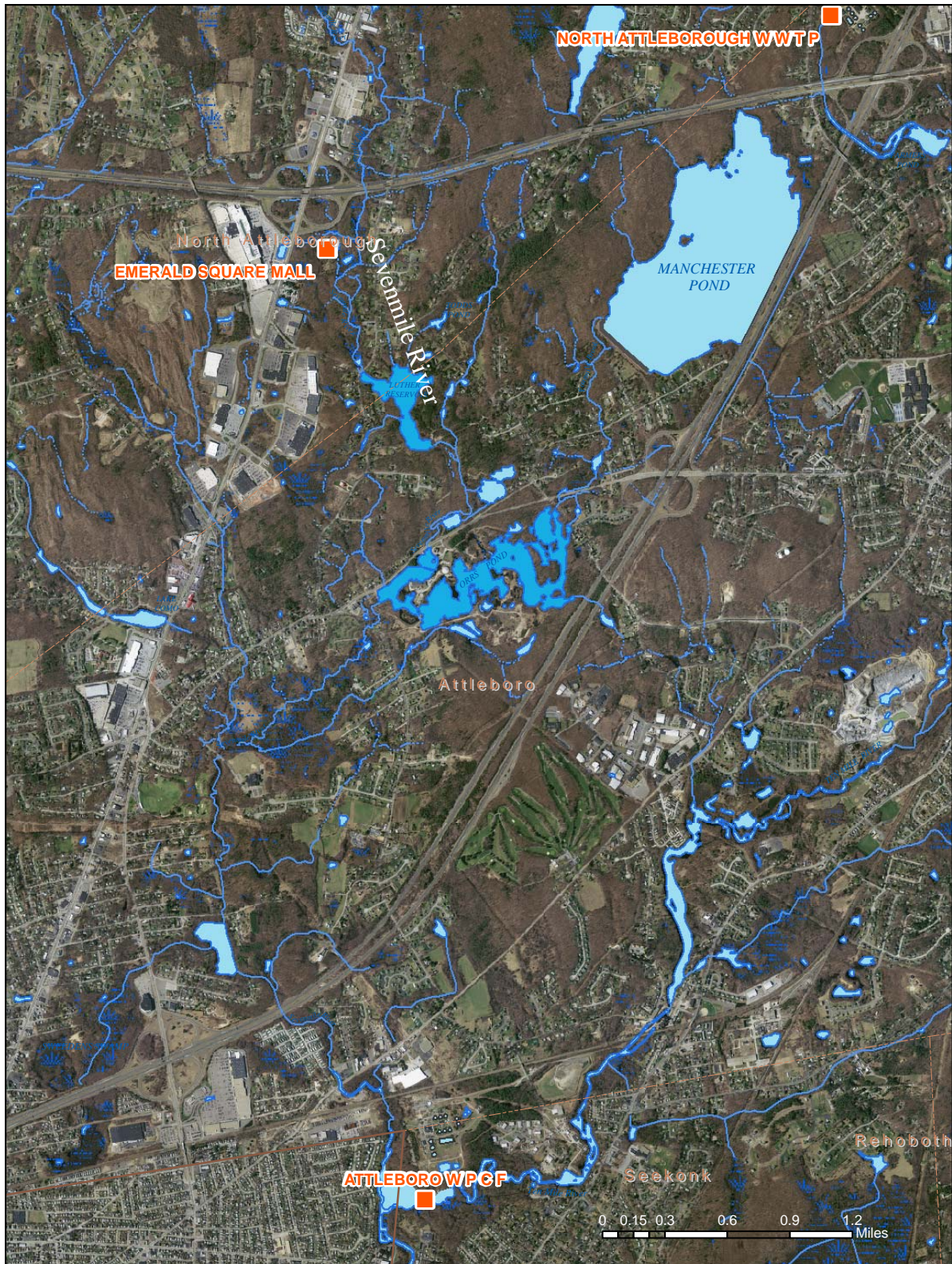
Attachment A- Discharge Locations (Map 1 of 2)



Attachment B- Discharge Locations (Map 2 of 2)



Attachment C- Facility Location



Attachment D- Facility Monitoring Data

Outfall 001

	Flow	pH		Total Suspended Solids	Oil and Grease	Lead	Copper	Zinc
Monitoring Period End Date	Max Daily	Daily Minimum	Daily Maximum	Max Daily	Max Daily	Max Daily	Max Daily	Max Daily
	MGD	S.U.	S.U.	mg/L	mg/L	µg/L	µg/L	µg/L
09/30/2012	0.13	7.6	7.6	<5	<1	<7.5	<5	18.7
12/31/2012	0.39	6.8	6.8	<5	<1	<7.5	<5	7.8
03/31/2013	0.14	6.85	6.85	55	<1	9.1	<5	55.6
06/30/2013	0.21	6.89	6.89	<5	<1	<7.5	<5	41.6
09/30/2013	0.81	6.8	6.8	<5	<1	<15	<10	73.7
12/31/2013	0.42	6.9	6.9	0	1.85	<15	<10	<165
03/31/2014	0.01	6.5	6.5	<5	<.99	<15	<10	34.6
06/30/2014	0.01	6.85	6.85	5	<1.02	<15	<10	46
09/30/2014	0.00	NODI	NODI	NODI	NODI	NODI	NODI	NODI
12/31/2014	2.60	6.2	6.2	<5	<.99	<7.5	<5	<6.5
03/31/2015	0.00	NODI	NODI	NODI	NODI	NODI	NODI	NODI
06/30/2015	0.00	NODI	NODI	NODI	NODI	NODI	NODI	NODI
09/30/2015	3.80	7.64	7.64	5	<5	<1	2	7
12/31/2015	0.00	8.17	8.17	<5	<5	<1	2	<5
03/31/2016	0.00	7.3	7.3	<5	<5	<1	<1	7
06/30/2016	0.00	NODI	NODI	NODI	NODI	NODI	NODI	NODI
09/30/2016	0.00	NODI	NODI	NODI	NODI	NODI	NODI	NODI
12/31/2016	0.00	NODI	NODI	NODI	NODI	NODI	NODI	NODI
3/31/2017	0.05	5.94	5.94	8	5	1	3	21
6/30/2017	0.2	5.91	5.91	<5	<5	<1	2	<5
Current Permit limit	report	6.5	8.3	30	5	20	7.5	65
Minimum	0.00	5.9	5.9	0	1	1	1	5
Maximum	3.80	8.2	8.2	55	5.0	15	10	165
Average	0.44	6.9	6.9	8.4	2.5	7.4	5.4	35.3
Standard Deviation	0.99	0.64	0.64	14	2.0	5.8	3.3	43.3
No. Measurements	20	14	14	14	14	14	14	14
No. Exceedances	-	3	0	1	0	0	4	2

Notes: NODI = No discharge

Outfall 002

	Flow	pH		Total Suspended Solids	Oil and Grease	Lead	Copper	Zinc
Monitoring Period End Date	Max Daily	Daily Minimum	Daily Maximum	Max Daily	Max Daily	Max Daily	Max Daily	Max Daily
	MGD	S.U.	S.U.	mg/L	mg/L	µg/L	µg/L	µg/L
09/30/2012	0.19	7.4	7.4	<5	<1	<7.5	<5	8.8
12/31/2012	2.7	6.8	6.8	<5	<1	<7.5	<5	8.1
03/31/2013	0.86	6.87	6.87	49	<1	10.1	12.1	145
06/30/2013	0.97	6.7	6.7	22	<1	<7.5	6.6	42.2
09/30/2013	1.19	6.8	6.8	9	<1	<15	<10	28.3
12/31/2013	0.84	6.8	6.8		2.14	<15	<10	<165
03/31/2014	0.032	6.7	6.7	<5	<1	<15	<10	34.5
06/30/2014	0.021	7.1	7.1	16	<1.56	<15	<10	26.1
09/30/2014	0.00	6.42	6.42	<5	1.6	<15	<10	0.133
12/31/2014	0.12	6.5	6.5	<5	<.98	<7.5	<5	R
03/31/2015	0.03	6.72	6.72	<5	<1.06	<7.5	<5	41.4
06/30/2015	0.03	6.48	6.48	66	<5	8	11	110
09/30/2015	3.5	7.97	7.97	7	<6	1	2	18
12/31/2015	0.128	6.86	6.86	<5	<5	<1	2	22
03/31/2016	0.00	6.73	6.73	<5	<5	<1	<1	21
06/30/2016	0.00	-	-	NODI	NODI	NODI	NODI	NODI
09/30/2016	0.00	7.75	7.75	<5	<6	2	6	190
12/31/2016	0.2	7.98	7.98	5	5	1	<1	21
3/31/2017	0.05	6.48	6.48	5	5	1	2	19
6/30/2017	0.2	6.33	6.33	5	5	1	2	16
Current Permit limit	report	6.5	8.3	30	5	20	7.5	65
Minimum	0.00	6.33	6.33	0	1	1	1	0.133
Maximum	3.50	8.0	8.0	66	6	15	12	190
Average	0.55	6.9	6.9	12.1	2.6	7.3	6.1	48.8
Standard Deviation	0.96	0.50	0.50	16.9	2.1	5.6	3.8	57.7
No. Measurements	20	19	19	19	19	19	19	19
No. Exceedances	-	4	0	2	2	0	7	4

Notes: NODI = No discharge

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

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF ECOSYSTEM PROTECTION
5 POST OFFICE SQUARE – SUITE 100
BOSTON, MASSACHUSETTS 021109-3912

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

DATE OF PUBLIC COMMENT PERIOD: December 1, 2017 - December 30, 2017

PUBLIC NOTICE NUMBER: MA-006-18

PERMIT NUMBER: **MA0030244**

NAME AND MAILING ADDRESS OF APPLICANT:

**Simon Property Group/ Mayflower Emerald Square LLC
999 South Washington Street
North Attleboro, MA 02760**

NAME AND LOCATION OF FACILITY WHERE DISCHARGE OCCURS:

**Emerald Square Mall
999 South Washington Street
North Attleboro, MA 02760**

RECEIVING WATER: Unnamed pond and wetland system adjacent to Sevenmile River (MA52-07),
Class A

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 draft permit for the Emerald Square Mall, which discharges stormwater. The effluent limits and permit conditions imposed have been drafted to assure compliance with the CWA, 33 U.S.C. sections 1251 et seq., the Massachusetts Clean Waters Act, G.L. c. 21, §§ 26-53, 314 CMR 3.00 and State Surface Water Quality Standards at 314 CMR 4.00. EPA has formally requested that the State certify the draft permit pursuant to Section 401 of the CWA and expects that the draft permit will be certified.

INFORMATION ABOUT THE DRAFT PERMIT:

A fact sheet (describing the type of facility; type and quantities of wastes; a 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: <https://www.epa.gov/npdes-permits/massachusetts-draft-individual-npdes-permits> or by writing or calling EPA's contact person named below:

Ms. Sharon DeMeo
U.S. Environmental Protection Agency – Region 1
5 Post Office Square, Suite 100 (OEP06-1)
Boston, MA 02109-3912
Telephone: (617) 918-1995

The administrative record containing all documents relating to this draft permit including all data submitted by the applicant 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 the draft permit, is inappropriate, must raise all issues and submit all available arguments and all supporting material for their arguments in full by December 30, 2017 to the address listed above. Any person, prior to such date, may submit a request in writing to EPA and 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 thirty days' public notice whenever the Regional Administrator finds that response to this notice indicates significant public interest. In reaching a final decision on the draft permit, the Regional Administrator will respond to all significant comments and make these responses available to the public at EPA's Boston office.

FINAL PERMIT DECISION:

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.

LEALDON LANGLEY, DIRECTOR
MASSACHUSETTS WETLANDS AND
PROGRAMS
MASSACHUSETTS DEPARTMENT OF
ENVIRONMENTAL PROTECTION

LYNNE A. HAMJIAN, ACTING DIRECTOR
OFFICE OF ECOSYSTEM WASTEWATER
U.S. ENVIRONMENTAL PROTECTION
AGENCY - REGION I