STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
ACTING COMMISSIONER

August 1, 2011

Mr. John Foster, P.E.
Director of Public Works
Town of Brunswick
jfoster@brunswickme.org

Sent via electronic mail
Delivery confirmation requested

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0102113
Maine Waste Discharge License (WDL) Application #W004308-5L-D-R
FINALIZED MEPDES Permit/WDL

Dear Mr. Foster:

Enclosed, please find a copy of your **final** MEPDES permit and Maine WDL, which was approved by the Department of Environmental Protection. Please read the permit/license and its attached conditions carefully. You must follow the conditions in the order to satisfy the requirements of law. Any discharge not receiving adequate treatment is in violation of State law and is subject to enforcement action.

Any interested person aggrieved by a Department determination made pursuant to applicable regulations, may appeal the decision following the procedures described in the attached DEP FACT SHEET entitled "*Appealing a Commissioner's Licensing Decision.*"

Sincerely,

Bill Hinkel

Bill Hinkel
Division of Water Quality Management
Bureau of Land and Water Quality

Enc.

ec: Matt Hight, MeDEP Sandy Mojica, USEPA Jim Fitch, Woodard & Curran
File #W4308

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826
RAY BLDG., HOSPITAL ST.

BANGOR
106 HOGAN ROAD, SUITE 6
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04679-2094
(207) 764-0477 FAX: (207) 760-3143

web site: www.maine.gov/dep

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

DEPARTMENT ORDER

IN THE MATTER OF

TOWN OF BRUNSWICK		)	MAINE POLLUTANT DISCHARGE
BRUNSWICK, CUMBERLAND COUNTY, MAINE		)	ELIMINATION SYSTEM PERMIT
NON-HAZARDOUS WASTE LANDFILL		)	AND
#ME0102113		)	WASTE DISCHARGE LICENSE
#W004308-5L-D-R	**APPROVAL**	)	**RENEWAL**

Pursuant to the provisions of the *Federal Water Pollution Control Act*, Title 33 USC, §1251, *Conditions of licenses*, 38 M.R.S.A. § 414-A, and applicable regulations, the Maine Department of Environmental Protection (Department) has considered the application of the Town of Brunswick (Town), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

The Town has applied to the Department for renewal of Waste Discharge License (WDL) #W004308-5L-C-R/ Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0102113, which was issued on November 16, 2004, and expired on November 16, 2009. The November 16, 2004 permit authorized the monthly average discharge of up to 0.20 million gallons per day (MGD) of treated landfill leachate and storm water from a non-hazardous landfill, to the Androscoggin River, Class C, in Brunswick, Maine.

The November 16, 2004 permit established a schedule of compliance for imposition of new, technology-based effluent limitations, as required by 40 Code of Federal Regulation (CFR) Part 445, Subpart B, with a compliance date of January 1, 2008. On December 20, 2007, the Department issued a minor permit revision to extend the final compliance date for the ammonia limits to November 15, 2009.

PERMIT SUMMARY

This permitting action is similar to the November 16, 2004 permitting action and December 20, 2007 minor revision in that it is:

1. Carrying forward the monthly average and daily maximum mass limitations for biochemical oxygen demand (BOD_5) and total suspended solids (TSS) to ensure there is no additional loading to the receiving waters as a result of changes in BOD_5 and TSS concentration limitations;
2. Carrying forward the monthly average technology-based concentration limitation for biochemical oxygen demand (BOD_5);
3. Carrying forward the monthly average and daily maximum, technology-based concentration and mass limitations for ammonia (as N), ά-(alpha) terpineol, benzoic acid, ρ-cresol, total phenol, and total zinc;

PERMIT SUMMARY (cont'd)

4. Carrying forward the monthly average and daily maximum technology-based concentration limitations for settleable solids;
5. Carrying forward the geometric mean (monthly average) and instantaneous (daily maximum) effluent limitations for *Escherichia coli*; and
6. Carrying forward the technology-based effluent pH range limitation.

This permitting action is significantly different from the November 16, 2004 permitting action and December 20, 2007 minor revision in that it is:

1. Revising the monthly average discharge flow limitation from 0.20 MGD to 0.30 MGD based on a request by the permittee and to reflect current effluent flows from the facility;
2. Revising the daily maximum concentration limit for biochemical oxygen demand (BOD_5) for consistency with the effluent guideline limitations;
3. Revising the monthly average and daily maximum concentration limitations for total suspended solids (TSS) for consistency with the effluent guideline limitations;
4. Establishing a daily maximum, technology-based limitation for total residual chlorine (TRC);
5. Eliminating the monthly average and daily maximum, water quality-based concentration and mass limits for total copper based on the results of effluent monitoring;
6. Revising the minimum monitoring frequency requirements for all monitored parameters that were included in the previous permitting action; and
7. Establishing a requirement to monitor and report landfill leachate flow between Lagoon # 2 and Lagoon #3.

CONCLUSIONS

BASED on the findings summarized in the attached Fact Sheet dated June 20, 2011, and subject to the Conditions listed below, the Department makes the following conclusions:

1. The discharges, either individually or in combination with other discharges, will not lower the quality of any classified body of water below such classification.
2. The discharges, either individually or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.
3. The provisions of the State's antidegradation policy, *Classification of Maine waters*, 38 M.R.S.A. § 464(4)(F), will be met, in that:

   (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
   (b) Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;
   (c) Where the standards of classification of the receiving water bodies are not met, the discharges will not cause or contribute to the failure of the water bodies to meet the standards of classification;

CONCLUSIONS (cont'd)

(d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification that higher water quality will be maintained and protected; and
(e) Where a discharge will result in lowering the existing water quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.

4. The discharges will be subject to effluent limitations that require application of best practicable treatment as defined in 38 M.R.S.A. § 414-A(1)(D).

ACTION

THEREFORE, the Department APPROVES the above noted application of the TOWN OF BRUNSWICK to discharge up to a monthly average of up to 0.30 million gallons per day (MGD) of treated landfill leachate and storm water to the Androscoggin River, Class C, in Brunswick, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

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

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

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

DONE AND DATED AT AUGUSTA, MAINE, THIS 12th DAY OF AUGUST, 2011.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
PATRICIA W. AHO, Acting Commissioner

Filed
AUG 15 2011
State of Maine
Board of Environmental Protection

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: December 4, 2009
Date of application acceptance: December 10, 2009
This Order prepared by Bill Hinkel, BUREAU OF LAND & WATER QUALITY

SPECIAL CONDITION

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge **treated landfill leachate and storm water from a non-hazardous waste landfill via Outfall #001A** to the Androscoggin River. Such discharges shall be limited and monitored by the permittee as specified below[1]:

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average as specified	Daily Maximum as specified	Monthly Average as specified	Daily Maximum as specified	Measurement Frequency as specified	Sample Type as specified
Flow *[50050]*	0.30 MGD *[03]*	--	--	--	5/Week [2a, 2b] *[05/07]*	Measured *[MS]*
BOD_5 *[00310]*	62 lbs./day *[26]*	167 lbs./day *[26]*	37 mg/L *[19]*	140 mg/L *[19]*	Monthly When Discharging[2b] *[MM/DD]*	Grab *[GR]*
TSS *[00530]*	42 lbs./day *[26]*	83 lbs./day *[26]*	27 mg/L *[19]*	88 mg/L *[19]*	Monthly When Discharging[2b] *[MM/DD]*	Grab *[GR]*
Settleable Solids *[00545]*	--	--	0.1 ml/L *[25]*	0.5 ml/L *[25]*	Monthly When Discharging[2b] *[MM/DD]*	Grab *[GR]*
Ammonia (as N) *[61574]*	8.2 lbs./day *[26]*	16.7 lbs./day *[26]*	4,900 µg/L *[28]*	10,000 µg/L *[28]*	Monthly When Discharging[2b] *[MM/DD]*	Grab *[GR]*
Alpha Terpineol *[51045]*	0.03 lbs./day *[26]*	0.05 lbs./day *[26]*	16 µg/L *[28]*	33 µg/L *[28]*	1/Quarter *[01/90]*	Grab *[GR]*
Benzoic Acid *[77247]*	0.12 lbs./day *[26]*	0.20 lbs./day *[26]*	71 µg/L *[28]*	120 µg/L *[28]*	1/Quarter *[01/90]*	Grab *[GR]*
ρ-Cresol *[77146]*	0.02 lbs./day *[26]*	0.04 lbs./day *[26]*	14 µg/L *[28]*	25 µg/L *[28]*	1/Quarter *[01/90]*	Grab *[GR]*
Phenol, Total *[03604]*	0.02 lbs./day *[26]*	0.04 lbs./day *[26]*	15 µg/L *[28]*	26 µg/L *[28]*	1/Quarter *[01/90]*	Grab *[GR]*
Zinc, Total *[01092]*	0.2 lbs./day *[26]*	0.3 lbs./day *[26]*	110 µg/L *[28]*	220 µg/L *[28]*	1/Quarter *[01/90]*	Grab *[GR]*
***E. coli* Bacteria**[3a] *[31633] May 15 – Sept 30*	--	--	142/100 ml[3b] *[13]*	949/100 ml *[13]*	Weekly When Discharging[2b] *[07/WD]*	Grab *[GR]*
Total Residual Chlorine [4] *[00665]*	--	--	--	1.0 mg/L *[19]*	Weekly When Discharging[2b] *[07/WD]*	Grab *[GR]*
pH *[00400]*	--	--	--	6.0 – 8.5 SU *[12]*	Weekly When Discharging[2b] *[07/WD]*	Grab *[GR]*

FOOTNOTES: See Pages 5-6 of this permit for applicable footnotes.

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

SPECIAL CONDITIONS

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

2. The permittee shall monitor effluent flow from Lagoon Cell #2 (landfill leachate prior to comingling with storm water in Lagoon Cell #3) as specified below. This monitoring point is assigned **Outfall #100** (internal waste stream) for data management purposes.

	Monthly Total as specified	Daily Maximum as specified	Monthly Average as specified	Daily Maximum as specified	Measurement Frequency as specified	Sample Type as specified
Flow - Total *[82220]*	Report Million Gallons per Month *[80]*	--	--	--	Week Days[2a, 2b] *[05/07]*	Measured *[MS]*

FOOTNOTES:

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

   All analytical test results shall be reported to the Department including results which are detected below the respective reporting limits (RLs) specified by the Department or as specified by other approved test methods. See **Attachment A** of this permit for a list of the Department's RLs. If a non-detect analytical test result is below the respective RL, the concentration result shall be reported as <Y where Y is the RL achieved by the laboratory for each respective parameter. Reporting a value of <Y that is greater than an established RL or reporting an estimated value ("J" flagged) is not acceptable and will be rejected by the Department. Reporting analytical data and its use in calculations must follow established Department guidelines specified in this permit or in available Department guidance documents.

2. a. **Discharge flow** monitoring is required five days per week excluding official holidays observed by the Town of Brunswick. For instances when a town holiday occurs during the normal 5-day work week, the Town shall provide a comment on the monthly discharge monitoring report to indicate the number of actual sampling events for that week (frequency of analysis cell).

SPECIAL CONDITIONS

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

FOOTNOTES:

b. Monitoring is required at the frequency established in Special Condition A, Table 1. In the event that monitoring cannot be conducted because the facility did not discharge wastewater on a normal monitoring day (Tuesday through Saturday) for an entire month, the permittee shall enter "NODI-F" ("insufficient flow for sampling") for the entire Discharge Monitoring Report. If there is measurable flow on a normal monitoring day, in a given week or month, monitoring must be conducted according to the minimum required frequency for that parameter. In no case shall the permittee take any action that would cause a discharge, with the intent of avoiding the monitoring requirements. It is expected that weather events may cause such discharges that will not be monitored.

3. a. **Bacteria Sampling Location** – Samples collected for permit compliance with the bacteria limitations established herein shall be obtained from a point after Lagoon #2 and before Lagoon #3. The sampling location for bacteria may be modified at any time during the term of this permit subject to Department review and written approval.

b. **Bacteria Reporting** – The monthly average *E. coli* bacteria limitation is a geometric mean limitation and sample results shall be reported as such.

4. **Total Residual Chlorine** – Limitations and monitoring requirements are in effect anytime elemental chlorine or chlorine-based compounds are utilized to disinfect the discharge(s). The permittee shall utilize a USEPA-approved test method capable of bracketing the TRC limitations specified in this permit.

B. NARRATIVE EFFLUENT LIMITATIONS

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

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

3. The effluent shall not cause visible discoloration or turbidity in the receiving water which would impair the usages designated by the classification of the receiving waters.

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

SPECIAL CONDITIONS

C. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only: 1) in accordance with the permittee's General Application for Waste Discharge License, accepted for processing on December 10, 2009; 2) in accordance with the terms and conditions of this permit; 3) via Outfall #001A. Discharges of wastewater from any other point source are not authorized under this permit, and shall be reported in accordance with Standard Condition B(5), *Bypasses*, of this permit.

D. NOTIFICATION REQUIREMENT

In accordance with Standard Condition D, the permittee shall notify the Department of the following:

1. Any substantial change (realized or anticipated) in the volume or character of pollutants being introduced into the wastewater collection and treatment system.

2. For the purposes of this section, adequate notice shall include information on:
   a. The quality and quantity of waste water introduced to the wastewater collection and treatment system; and
   b. Any anticipated change in the quality and quantity of the wastewater to be discharged from the treatment system.

E. MONITORING AND REPORTING

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate Discharge Monitoring Report (DMR) forms provided by the Department. If you are receiving hard-copy DMR forms by mail, the completed, returned forms must be **postmarked on or before the thirteenth (13th) day of the month or hand-delivered to the Department's Regional Office such that the DMRs are received by the Department on or before the fifteenth (15th) day of the month** following the completed reporting period. A signed copy of the DMR and all other reports required herein shall be submitted to the Department assigned inspector (unless otherwise specified by the Department) at the following address:

Department of Environmental Protection
Southern Maine Regional Office
Bureau of Land and Water Quality
Division of Water Quality Management
312 Canco Road
Brunswick, Maine 04103

Alternatively, if you are submitting an electronic Discharge Monitoring Report (eDMR), the completed eDMR must be electronically submitted to the Department by a facility authorized DMR Signatory **not later than close of business on the 15th day of the month** following the completed reporting period. **Hard copy documentation** submitted in support of the eDMR must be **postmarked on or before the thirteenth (13th) day of the month or hand-delivered to the**

SPECIAL CONDITIONS

E. MONITORING AND REPORTING (cont'd)

Department's Regional Office such that it is received by the Department on or before the fifteenth (15th) day of the month following the completed reporting period. **Electronic documentation** in support of the eDMR must be submitted **not later than close of business on the 15th day of the month** following the completed reporting period.

F. 06-096 CMR 530(2)(D)(4) STATEMENT FOR REDUCED/WAIVED TOXICS TESTING

By December 31 of each calendar year *[PCS Code 95799]*, the permittee shall provide the Department with a certification describing any of the following that have occurred since the effective date of this permit:

1. Changes in the number or types of non-domestic wastes contributed directly or indirectly to the wastewater treatment works that may increase the toxicity of the discharge;
2. Changes in the operation of the treatment works that may increase the toxicity of the discharge; and
3. Changes in industrial manufacturing processes contributing wastewater to the treatment works that may increase the toxicity of the discharge.

Further, the Department may require that annual testing be re-instituted if it determines that there have been changes in the character of the discharge or if annual certifications described above are not submitted.

G. MERCURY

All mercury sampling required by this permit or required to determine compliance with interim limitations established pursuant to *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (effective February 5, 2000), shall be conducted in accordance with the USEPA's "clean sampling techniques" found in USEPA Method 1669, Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels. All mercury analysis shall be conducted in accordance with USEPA Method 1631, Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry. See **Attachment B,** *Effluent Mercury Test Report*, of this permit for the Department's form for reporting mercury test results.

H. OPERATIONS AND MAINTENANCE (O&M) PLAN

This facility shall have a current written comprehensive Operation & Maintenance (O&M) Plan. The plan shall 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 this permit.

By December 31 of each year, or within 90 days of any process changes or minor equipment upgrades, the permittee shall evaluate and modify the O&M Plan including site plan(s) and

SPECIAL CONDITIONS

H. OPERATIONS AND MAINTENANCE (O&M) PLAN (cont'd)

schematic(s) for the waste water treatment facility to ensure that it is up-to-date. The O&M Plan shall be kept on-site at all times and made available to Department and USEPA personnel upon request.

Within 90 days of completion of new and or substantial upgrades of the waste water treatment facility, the permittee shall submit the updated O&M Plan to their Department inspector for review and comment.

I. REOPENING OF PERMIT FOR MODIFICATION

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

J. SEVERABILITY

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

ATTACHMENT A

Printed 7/27/2009

Maine Department of Environmental Protection
WET and Chemical Specific Data Report Form
This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

Facility Name _____ MEPDES # _____ Pipe # _____ Facility Representative Signature _____
To the best of my knowledge this information is true, accurate and complete.

Licensed Flow (MGD)		Flow for Day (MGD)[1]	Flow Avg. for Month (MGD)[2]
Acute dilution factor			
Chronic dilution factor		Date Sample Collected	Date Sample Analyzed
Human health dilution factor			
Criteria type: M(arine) or F(resh)			

Laboratory _____ Telephone _____
Address _____
Lab Contact _____ Lab ID # _____

ERROR WARNING ! Essential facility information is missing. Please check required entries in bold above.

FRESH WATER VERSION

Please see the footnotes on the last page.

			Effluent Limits, %			Receiving Water or Ambient	**Effluent Concentration (ug/L or as noted)**		**Possible Exceedence [7]**		
			Acute	Chronic			WET Result, % Do not enter % sign	Reporting Limit Check	Acute	Chronic	
	WHOLE EFFLUENT TOXICITY										
	Trout - Acute										
	Trout - Chronic										
	Water Flea - Acute										
	Water Flea - Chronic										
	WET CHEMISTRY										
	pH (S.U.) (9)					(8)					
	Total Organic Carbon (mg/L)					(8)					
	Total Solids (mg/L)										
	Total Suspended Solids (mg/L)										
	Alkalinity (mg/L)					(8)					
	Specific Conductance (umhos)										
	Total Hardness (mg/L)					(8)					
	Total Magnesium (mg/L)					(8)					
	Total Calcium (mg/L)					(8)					
	ANALYTICAL CHEMISTRY [3]										
	Also do these tests on the effluent with WET. Testing on the receiving water is optional	Reporting Limit	Effluent Limits, ug/L Acute[6]	Chronic[6]	Health[6]			Reporting Limit Check	**Possible Exceedence [7]** Acute	Chronic	Health
	TOTAL RESIDUAL CHLORINE (mg/L) (9)	0.05				NA					
	AMMONIA	NA				(8)					
M	ALUMINUM	NA				(8)					
M	ARSENIC	5				(8)					
M	CADMIUM	1				(8)					
M	CHROMIUM	10				(8)					
M	COPPER	3				(8)					
M	CYANIDE	5				(8)					
M	LEAD	3				(8)					
M	NICKEL	5				(8)					
M	SILVER	1				(8)					
M	ZINC	5				(8)					

Maine Department of Environmental Protection
WET and Chemical Specific Data Report Form
This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

	PRIORITY POLLUTANTS [4]		Effluent Limits					Reporting Limit Check	Possible Exceedence [7]		
		Reporting Limit	Acute[6]	Chronic[6]	Health[6]				Acute	Chronic	Health
M	ANTIMONY	5									
M	BERYLLIUM	2									
M	MERCURY (5)	0.2									
M	SELENIUM	5									
M	THALLIUM	4									
A	2,4,6-TRICHLOROPHENOL	3									
A	2,4-DICHLOROPHENOL	5									
A	2,4-DIMETHYLPHENOL	5									
A	2,4-DINITROPHENOL	45									
A	2-CHLOROPHENOL	5									
A	2-NITROPHENOL	5									
A	4,6 DINITRO-O-CRESOL (2-Methyl-4,6-dinitrophenol)	25									
A	4-NITROPHENOL	20									
A	P-CHLORO-M-CRESOL (3-methyl-4-chlorophenol)+B80	5									
A	PENTACHLOROPHENOL	20									
A	PHENOL	5									
BN	1,2,4-TRICHLOROBENZENE	5									
BN	1,2-(O)DICHLOROBENZENE	5									
BN	1,2-DIPHENYLHYDRAZINE	10									
BN	1,3-(M)DICHLOROBENZENE	5									
BN	1,4-(P)DICHLOROBENZENE	5									
BN	2,4-DINITROTOLUENE	6									
BN	2,6-DINITROTOLUENE	5									
BN	2-CHLORONAPHTHALENE	5									
BN	3,3'-DICHLOROBENZIDINE	16.5									
BN	3,4-BENZO(B)FLUORANTHENE	5									
BN	4-BROMOPHENYLPHENYL ETHER	2									
BN	4-CHLOROPHENYL PHENYL ETHER	5									
BN	ACENAPHTHENE	5									
BN	ACENAPHTHYLENE	5									
BN	ANTHRACENE	5									
BN	BENZIDINE	45									
BN	BENZO(A)ANTHRACENE	8									
BN	BENZO(A)PYRENE	3									
BN	BENZO(G,H,I)PERYLENE	5									
BN	BENZO(K)FLUORANTHENE	3									
BN	BIS(2-CHLOROETHOXY)METHANE	5									
BN	BIS(2-CHLOROETHYL)ETHER	6									
BN	BIS(2-CHLOROISOPROPYL)ETHER	6									
BN	BIS(2-ETHYLHEXYL)PHTHALATE	3									
BN	BUTYLBENZYL PHTHALATE	5									
BN	CHRYSENE	3									
BN	DI-N-BUTYL PHTHALATE	5									
BN	DI-N-OCTYL PHTHALATE	5									
BN	DIBENZO(A,H)ANTHRACENE	5									
BN	DIETHYL PHTHALATE	5									
BN	DIMETHYL PHTHALATE	5									

Maine Department of Environmental Protection
WET and Chemical Specific Data Report Form
This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

BN	FLUORANTHENE	5									
BN	FLUORENE	5									
BN	HEXACHLOROBENZENE	2									
BN	HEXACHLOROBUTADIENE	1									
BN	HEXACHLOROCYCLOPENTADIENE	10									
BN	HEXACHLOROETHANE	2									
BN	INDENO(1,2,3-CD)PYRENE	5									
BN	ISOPHORONE	5									
BN	N-NITROSODI-N-PROPYLAMINE	10									
BN	N-NITROSODIMETHYLAMINE	1									
BN	N-NITROSODIPHENYLAMINE	5									
BN	NAPHTHALENE	5									
BN	NITROBENZENE	5									
BN	PHENANTHRENE	5									
BN	PYRENE	5									
P	4,4'-DDD	0.05									
P	4,4'-DDE	0.05									
P	4,4'-DDT	0.05									
P	A-BHC	0.2									
P	A-ENDOSULFAN	0.05									
P	ALDRIN	0.15									
P	B-BHC	0.05									
P	B-ENDOSULFAN	0.05									
P	CHLORDANE	0.1									
P	D-BHC	0.05									
P	DIELDRIN	0.05									
P	ENDOSULFAN SULFATE	0.1									
P	ENDRIN	0.05									
P	ENDRIN ALDEHYDE	0.05									
P	G-BHC	0.15									
P	HEPTACHLOR	0.15									
P	HEPTACHLOR EPOXIDE	0.1									
P	PCB-1016	0.3									
P	PCB-1221	0.3									
P	PCB-1232	0.3									
P	PCB-1242	0.3									
P	PCB-1248	0.3									
P	PCB-1254	0.3									
P	PCB-1260	0.2									
P	TOXAPHENE	1									
V	1,1,1-TRICHLOROETHANE	5									
V	1,1,2,2-TETRACHLOROETHANE	7									
V	1,1,2-TRICHLOROETHANE	5									
V	1,1-DICHLOROETHANE	5									
V	1,1-DICHLOROETHYLENE (1,1-dichloroethene)	3									
V	1,2-DICHLOROETHANE	3									
V	1,2-DICHLOROPROPANE	6									
V	1,2-TRANS-DICHLOROETHYLENE (1,2-trans-dichloroethene)	5									
V	1,3-DICHLOROPROPYLENE (1,3-dichloropropene)	5									
V	2-CHLOROETHYLVINYL ETHER	20									

Maine Department of Environmental Protection
WET and Chemical Specific Data Report Form
This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

V	ACROLEIN	NA									
V	ACRYLONITRILE	NA									
V	BENZENE	5									
V	BROMOFORM	5									
V	CARBON TETRACHLORIDE	5									
V	CHLOROBENZENE	6									
V	CHLORODIBROMOMETHANE	3									
V	CHLOROETHANE	5									
V	CHLOROFORM	5									
V	DICHLOROBROMOMETHANE	3									
V	ETHYLBENZENE	10									
V	METHYL BROMIDE (Bromomethane)	5									
V	METHYL CHLORIDE (Chloromethane)	5									
V	METHYLENE CHLORIDE	5									
V	TETRACHLOROETHYLENE (Perchloroethylene or Tetrachloroethene)	5									
V	TOLUENE	5									
V	TRICHLOROETHYLENE (Trichloroethene)	3									
V	VINYL CHLORIDE	5									

Notes:

(1) Flow average for day pertains to WET/PP composite sample day.

(2) Flow average for month is for month in which WET/PP sample was taken.

(3) Analytical chemistry parameters must be done as part of the WET test chemistry.

(4) Priority Pollutants should be reported in micrograms per liter (ug/L).

(5) Mercury is often reported in nanograms per liter (ng/L) by the contract laboratory, so be sure to convert to micrograms per liter on this spreadsheet.

(6) Effluent Limits are calculated based on dilution factor, background allocation (10%) and water quality reserves (15% - to allow for new or changed discharges or non-point sources).

(7) Possible Exceedence determinations are done for a single sample only on a mass basis using the actual pounds discharged. This analysis does not consider watershed wide allocations for fresh water discharges.

(8) These tests are optional for the receiving water. However, where possible samples of the receiving water should be preserved and saved for the duration of the WET test. In the event of questions about the receiving water's possible effect on the WET results, chemistry tests should then be conducted.

(9) pH and Total Residual Chlorine must be conducted at the time of sample collection. Tests for Total Residual Chlorine need be conducted only when an effluent has been chlorinated or residual chlorine is believed to be present for any other reason.

Comments:

ATTACHMENT B

Name of Facility: _____ Federal Permit # ME _____

Pipe # _____

Purpose of this test:

- ☐ Initial limit determination
- ☐ Compliance monitoring for: _____ calendar year _____ quarter
- ☐ Supplemental or extra test

SAMPLE COLLECTION INFORMATION

Sampling Date: ____ ____ ____ (mm dd yy) Sampling time: _____ AM/PM

Sampling Location:

Weather Conditions: _____

Please describe any unusual conditions with the influent or at the facility during or preceding the time of sample collection:

Optional test - not required but recommended where possible to allow for the most meaningful evaluation of mercury results:

Suspended Solids _____ mg/L Sample type: _____ Grab (recommended) or _____ Composite

ANALYTICAL RESULT FOR EFFLUENT MERCURY

Name of Laboratory: _____

Date of analysis: _____ **Result:** _____ **ng/L (PPT)**

Please Enter Effluent Limits for your facility

Effluent Limits: **Average =** _____ ng/L **Maximum =** _____ ng/L

Please attach any remarks or comments from the laboratory that may have a bearing on the results or their interpretation. If duplicate samples were taken at the same time please report the average.

CERTIFICATION

I certify that to the best of my knowledge the foregoing information is correct and representative of conditions at the time of sample collection. The sample for mercury was collected and analyzed using EPA Methods 1669 (clean sampling) and 1631 (trace level analysis) in accordance with instructions from the DEP.

By: _____ Date: _____

Title: _____

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

AND

MAINE WASTE DISCHARGE LICENSE

FACT SHEET

DATE: **JUNE 20, 2011**
REVISED: **AUGUST 1, 2011**

PERMIT NUMBER: **#ME0102113**
LICENSE NUMBER: **#W004308-5L-D-R**

NAME AND ADDRESS OF APPLICANT

TOWN OF BRUNSWICK
28 FEDERAL STREET
BRUNSWICK, MAINE 04011

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

TOWN OF BRUSNWICK
GRAHAM ROAD LANDFILL
BRUNSWICK, MAINE 04011

COUNTY: **CUMBERLAND COUNTY**

RECEIVING WATERS/CLASSIFICATIONS: **ANDROSCOGGIN RIVER / CLASS C**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **MR. JOHN A. FOSTER, P.E.**
DIRECTOR OF PUBLIC WORKS
JFOSTER@BRUSNWICKME.ORG
(207) 725-6654

1. APPLICATION SUMMARY

Town of Brunswick (Town) has applied to the Department of Environmental Protection (Department) for renewal of Waste Discharge License (WDL) #W004308-5L-C-R/ Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0102113, which was issued on November 16, 2004, and expired on November 16, 2009. The November 16, 2004 permit authorized the monthly average discharge of up to 0.20 million gallons per day (MGD) of treated wastewater (combined leachate and storm water) from a non-hazardous landfill, to the Androscoggin River, Class C, in Brunswick, Maine.

The November 16, 2004 permit established a schedule of compliance for imposition of new, technology-based effluent limitations, as required by 40 Code of Federal Regulation (CFR) Part 445, Subpart B, with a compliance date of January 1, 2008. On December 20, 2007, the Department issued a minor permit revision to extend the final compliance date for the ammonia limits to November 15, 2009.

2. PERMIT SUMMARY

a. Terms and Conditions: **This permitting action is similar to the November 16, 2004 permitting action and December 20, 2007 minor revision in that it is:**

1. Carrying forward the monthly average and daily maximum mass limitations for biochemical oxygen demand (BOD_5) and total suspended solids (TSS) to ensure there is no additional loading to the receiving waters as a result of changes in BOD_5 and TSS concentration limitations;
2. Carrying forward the monthly average technology-based concentration limitation for biochemical oxygen demand (BOD_5);
3. Carrying forward the monthly average and daily maximum, technology-based concentration and mass limitations for ammonia (as N), á-(alpha) terpineol, benzoic acid, ρ-cresol, total phenol, and total zinc;
4. Carrying forward the monthly average and daily maximum technology-based concentration limitations for settleable solids;
5. Carrying forward the geometric mean (monthly average) and instantaneous (daily maximum) effluent limitations for *Escherichia coli*; and
6. Carrying forward the technology-based effluent pH range limitation.

This permitting action is significantly different from the November 16, 2004 permitting action and December 20, 2007 minor revision in that it is:

1. Revising the monthly average discharge flow limitation from 0.20 MGD to 0.30 MGD based on a request by the permittee and to reflect current effluent flows from the facility;
2. Revising the daily maximum concentration limit for biochemical oxygen demand (BOD_5) for consistency with the effluent guideline limitations;
3. Revising the monthly average and daily maximum concentration limitations for total suspended solids (TSS) for consistency with the effluent guideline limitations;
4. Establishing a daily maximum, technology-based limitation for total residual chlorine (TRC);
5. Eliminating the monthly average and daily maximum, water quality-based concentration and mass limits for total copper based on the results of effluent monitoring;
6. Revising the minimum monitoring frequency requirements for all monitored parameters that were included in the previous permitting action; and
7. Establishing a requirement to monitor and report landfill leachate flow between Lagoon # 2 and Lagoon #3.

b. History: This section provides a chronological summary of recent, relevant licensing/permitting actions that have been completed for the Graham Road Landfill.

March 23, 1983 – The Board of Environmental Protection issued conditional approval to the Town to site Phases 1, 2 and 3 of a municipal landfill off the Graham Road in Brunswick and to construct and use only Phase 1 of the landfill.

January 9, 1984 – Phase 1 of the Graham Road Landfill became operational.

2. PERMIT SUMMARY (cont'd)

October 11, 1991 – The Department issued Solid Waste Order #S-08458-7A-F-N to the Town authorizing the construction and operation of Phases 2 and 3 of the Graham Road Landfill.

May 9, 1994 – The Department issued a water quality certification to the Town certifying that the discharge proposed from the Graham Road Landfill in a pending National Pollutant Discharge Elimination System (NPDES) permit was in compliance with applicable sections of the Federal Water Pollution Control Act and State law.

May 26, 1994 – The U.S. Environmental Protection Agency (USEPA) issued NPDES permit #ME0102113 to the Town for the monthly average discharge of up to 0.1 MGD of treated wastewater (combined leachate and storm water) from the Graham Road Landfill to the Androscoggin River in Brunswick. The 5/26/94 NPDES permit superseded the previous and initial NPDES permit issued on February 12, 1988, and expired on May 26, 1999.

December 1, 1998 – The Town submitted an application to the USEPA for renewal of NPDES permit #ME0102113. The USEPA did not act on the application prior to the State of Maine receiving authority to administer the NPDES program.

March 16, 2000 – The USEPA promulgated national effluent guidelines for the discharge of wastewater from non-hazardous subcategory of waste landfills at 40 CFR Part 445.21. The USEPA did not modify the Town's NPDES permit to reflect the new effluent limitation guidelines.

August 9, 2000 – The Department administratively modified WDL #W004308-59-B-R by establishing interim monthly average and daily maximum concentration limits and monitoring requirements for mercury. It is noted the limitations are not found in this specific permitting document as the limitations and monitoring requirements have been subject to numerous modifications in recent years. However, the interim limitations remain in effect and enforceable and any modifications to the limits and/or monitoring requirements will be formalized outside of this permitting document.

January 12, 2001 – The Department received authorization from the USEPA to administer the NPDES permit program in Maine, excluding areas of special interest to Maine Indian Tribes. From that point forward, the program has been referred to as the MEPDES program, and MEPDES permit #ME0102113 has been utilized as the primary reference number for Town's landfill facility.

November 16, 2004 – The Department issued WDL #W004308-5L-C-R to the Town for a five-year term. The 11/16/04 permit superseded WDL #W004308-59-B-R, which was issued on February 16, 1995 for a five-year term, and WDL #W4308-59-A-N issued on April 27, 1988. It is noted that the 2004 permit contained a schedule of compliance for imposition of new technology-based effluent limitations with an option to submit a request for a variance from the national effluent guidelines

2. PERMIT SUMMARY (cont'd)

promulgated at 40 CFR Part 445.21. The deadline for this compliance schedule item was June 1, 2007. The Town submitted a variance request based on fundamentally different factors on November 6, 2009, which was ultimately denied.

May 29, 2007 – The Town submitted a request for consideration of a fundamentally different factors variance, and provided information regarding the progress of research.

September 14, 2007 – The Town submitted a fundamentally different factors variance request addressing the factors contained in 06-096 CMR 524(4)(II)(d).

December 4, 2009 – The Town submitted a complete General Application to the Department for renewal of the 11/16/04 MEPDES permit. The application was accepted for processing on December 10, 2009, and was assigned WDL #W004308-5L-D-R / MEPDES #ME0102113.

c. Source Description: The Town owns and operates a municipal landfill commonly referred to as Graham Road Landfill in Brunswick, Maine. Phase 1 of the landfill was constructed in 1984 and the facility has expanded and has remained operational since that time. The facility receives residential and commercial solid wastes and a limited quantity of "special waste" (asbestos-containing materials), as defined by Department rule Chapter 400(1)(Nnn) on a case-by-case basis following Department approvals, that is generated within the Town of Brunswick. The facility does not receive hazardous wastes.

The landfill was constructed with a total of three phases (referred to as phases 1, 2 and 3), and the third phase is subdivided into phases 3A and 3B. Only one cell is active at any given time and phase 3A is currently the active landfill cell.

Phase 1 consists of 7.55 acres of secure landfill area, has been filled to capacity and was closed in July, 1995 through the installation of an intermediate cover system, which consists of high density polyethylene (HDPE) geomembranes. An interface lining system was installed on the west slope face of phase 1 to collect and remove leachate generated by this cell. Phase 2 consists of 3.42 acres of secure landfill area, has been filled to capacity and was closed in October, 2000 through the installation of a geomembrane. An interface lining system was installed on the west slope face of phase 2 to collect and convey leachate generated by this cell to the leachate collection and removal (LCR) system of phase 3A. Phases 3A (3.45 acres) and 3B (2.07 acres) were constructed in 1998. The total combined waste capacity of phases 3A and 3B is approximately 541,500 cubic yards and is projected to have a life of 11 years, assuming a disposal rate of 50,000 cubic yards per year. A map showing the location of the Graham Road Landfill is included as **Attachment A** of this Fact Sheet.

d. Wastewater Treatment: Wastewater is generated by storm water runoff from the active and inactive landfill phases and by the generation of leachate, which is produced by precipitation falling on the waste, decomposition reactions that occur to the waste within the landfill cell, and from the initial moisture content of the waste at the time of

2. PERMIT SUMMARY (cont'd)

placement. Most of the leachate produced can be attributed to precipitation that comes in contact with the waste. The wastewater collection system consists of primary and secondary leachate collection and removal systems (LCRs). The primary LCR is designed to collect all leachate generated within a landfill cell and consists of perforated HDPE piping on top of the primary HDPE liner which is surrounded by crushed stone and geotextile and a 12-inch layer of sand in phases 1 and 2 and a 12-inch layer of crushed stone in phase 3. The primary LCR conveys wastewater to treatment pond #1 described below. The secondary LCR serves as a leak detection and collection system, and a separate leak detection system exists for each landfill phase. The secondary LCR for phases 1 and 2 is located between the primary and secondary HDPE liners and is independent of the primary LCR. The secondary LCR consists of perforated HDPE pipe surrounded by crushed stone and geotextile and a 12-inch layer of sand on top of an 80 mil HDPE secondary liner. The 6-inch diameter leak detection pipes associated with the secondary LCR collect and transport wastewater to treatment pond #1 described below.

Wastewater generated by precipitation that falls on inactive portions of the landfill (clean storm water runoff) drains through crushed stone to a collection pipe system and is transported to treatment pond #3 described below prior to discharge.

The Graham Road Landfill utilizes three onsite facultative wastewater treatment lagoons operated in series to provide treatment of landfill leachate and storm water runoff wastewater. The treatment lagoons were constructed as part of the phase 1 construction in 1983. All three lagoons have a liner system consisting of a 60 mil HDPE liner over 6 inches of sand and 6 inches of clay. The treatment capacities of the three lagoons are as follows: Lagoon #1: 245,000 cubic feet (1,830,000 gallons); Lagoon #2: 91,700 cubic feet (686,000 gallons); and Lagoon #3: 57,400 cubic feet (429,000 gallons). Lagoons #1 and #2 were designed strictly for treatment of leachate. Lagoon #3 is designed as a sedimentation basin for storm water and as a mixing/additional treatment basin for the leachate from Lagoons #1 and #2.

The Town has installed a new chlorine disinfection system between Lagoon # 2 and #3 to ensure compliance with the numeric bacteria standards established in this permitting action.

Final treated effluent is conveyed to the Androscoggin River for discharge via a 24-inch diameter PVC outfall pipe designated as Outfall #001A. The pipe is submerged in the river at a location approximately 50 feet from the western shore of the river.

Sediment accumulates in each of the three treatment ponds and must be periodically removed. The Town's consulting engineer informed the Department that the lagoons accumulate sludge at a relatively slow rate with cleaning necessary approximately every ten years. The first cleaning activity was performed by the Town in 1993 (approximately 10 years after start-up of the treatment system) and all three lagoon cells were cleaned at that time. In 2000, Lagoon #3 was drained and cleaned. In 2004, all three lagoon cells were measured for sludge depth and none of the depths measured more than twelve inches.

3. CONDITIONS OF PERMITS

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

4. RECEIVING WATER QUALITY STANDARDS

Classifications of major river basins, 38 M.R.S.A. § 467(1)(A)(2) classifies the Androscoggin River "*from its confluence with the Ellis River to a line formed by the extension of the Bath-Brunswick boundary across Merrymeeting Bay in a northwesterly direction*", as Class C waters. *Standards for classification of fresh surface waters*, 38 M.R.S.A. § 465(4) describes the standards for Class C waters.

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2008 Integrated Water Quality Monitoring and Assessment Report, (Report) prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists the Androscoggin River at Brunswick as *"Category 4-B: Rivers and Streams Impaired by Pollutants - Pollution Control Requirements Reasonably Expected to Result in Attainment."* Impairment in this context refers to a fish consumption advisory due to the presence of dioxin (including 2,3,7,8-TCDD). The 2008 Report states that new dioxin sources have been removed and the river is expected to attain its ascribed standards. The Department has no information that the Graham Road Landfill causes or contributes to this non-attainment status.

The 2008 Report also lists Maine's fresh waters as *"Category 4-A: Rivers and Streams with Impaired Use, TMDL Completed."* All freshwaters formerly listed in Category 5-C are moved to Category 4-A (TMDL Completed) due to USEPA approval of a Regional Mercury TMDL. Impairment in this context refers to a statewide fish consumption advisory due to elevated levels of mercury in some fish tissues. The Report states, *"Impairment caused by atmospheric deposition of mercury; a regional scale TMDL has been approved. Maine has a fish consumption advisory for fish taken from all freshwaters due to mercury. Many waters, and many fish from any given water, do not exceed the action level for mercury. However, because it is impossible for someone consuming a fish to know whether the mercury level exceeds the action level, the Maine Department of Human Services decided to establish a statewide advisory for all freshwater fish that recommends limits on consumption. Maine has already instituted statewide programs for removal and reduction of mercury sources."*

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

Pursuant to 38 M.R.S.A. § 420(1-B)(B), *"a facility is not in violation of the ambient criteria for mercury if the facility is in compliance with an interim discharge limit established by the Department pursuant to section 413 subsection 11."* The Department has established interim monthly average and daily maximum mercury concentration limits and reporting requirements for this facility pursuant to *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (effective February 5, 2000).

The 2008 Report also lists this segment of the Androscoggin River as *"Category 5-D: Rivers and Streams Impaired by Legacy Pollutants."* Impairment in this context refers to the presence of polychlorinated biphenyls in some fish tissues. The Department has no information that the Graham Road Landfill causes or contributes to this non-attainment status.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

Regulatory Basis: The discharge from the Graham Road Landfill is subject to the technology-based effluent guidelines attainable by the application of best practicable control technology currently available treatment (BPT) promulgated at 40 Code of Federal Regulations (CFR) Part 445, *Landfills Point Source Category, Subpart B - RCRA Subtitle D Non-hazardous Waste Landfills*. As was done in the previous permitting action, these effluent guidelines will be utilized to calculate technology-based thresholds applicable to the discharge, which will then be compared against any water quality-based thresholds when establishing numeric effluent limitations.

In developing the technology-based effluent guidelines for the non-hazardous subcategory of waste landfills, the USEPA considered two options: 1) biological treatment consisting of aerated equalization followed by biological treatment; and 2) biological treatment and multimedia filtration consisting of aerated equalization and biological treatment followed by multimedia filtration. The USEPA promulgated guidelines for the non-hazardous subcategory based on the second of these options because of the demonstrated ability of biological treatment systems in controlling organic pollutants and the effectiveness of multimedia filtration in removing total suspended solids. The USEPA also evaluated reverse osmosis technology as a potential option for establishing best available technology (BAT) effluent limits more stringent than BPT for the control of toxic pollutants. In the end, the USEPA concluded that it should not establish BAT limits based on more stringent treatment technology than the BPT technology. The USEPA concluded that a biological system followed by multimedia filtration would remove the majority of toxic pollutants leaving the single-stage reverse osmosis to treat the very low levels of pollutants that remained. The USEPA ultimately identified seven (7) facilities that met all of the BPT/BAT criteria. These seven facilities employed various types of biological treatment systems including activated sludge, a sequencing batch reactor, aerobic and anaerobic biological towers or fixed film, and aerated ponds or lagoons. The USEPA used data from facilities they believed were representative as having good biological treatment systems to develop the effluent guidelines for biochemical oxygen demand, total suspended solids, á- (alpha) terpineol, ammonia, benzoic acid, ρ-cresol, phenol, and zinc.

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

The Graham Road Landfill employs a biological treatment system consisting of three non-aerated lagoons operated in series.

The previous permitting action established two tiers of effluent limitations and a schedule of compliance for imposition of more stringent technology-based effluent limitations based on the national effluent guidelines promulgated at 40 CFR Part 445.21. The following paragraphs in this section identify the Tier II limitations that became effective on January 1, 2008 (except for ammonia, which was extended until November 15, 2009). See the 11/16/04 permit for more details on previous permit limits.

a. Flow: The previous permitting action established a monthly average discharge flow limitation of 0.20 MGD based on the average wastewater flows from the facility at that time. The permittee has requested that this permitting action revise the monthly average limitation to 0.30 MGD to reflect current wastewater flow from the facility. This permitting action is establishing a monthly average discharge flow limitation of 0.30 MGD based on this request and review of effluent compliance data. This permitting action is revising the minimum monitoring frequency requirement to five days per week with a specific exception that monitoring is not required five times per week if the facility is not staffed due to holiday.

The Department has summarized the discharge flow data as reported on the monthly Discharge Monitoring Reports (DMRs) submitted to the Department for Outfall #001A for the period January 2008 through March 2011 as follows:

Discharge Flow	Minimum	Maximum	Arithmetic Mean	# DMRs
Monthly Average	0.0043 MGD	0.292 MGD	0.056 MGD	38

b. Dilution Factors: Dilution factors associated with the average design flow of 0.30 MGD were derived in accordance with 06-096 CMR 530(4)(A) and were calculated as follows:

Mod. Acute: ¼ Q10 = 112.6 cfs $\Rightarrow \frac{(112.6 \text{ cfs})(0.6464) + 0.30 \text{ MGD}}{0.30 \text{ MGD}} =$ 244:1

Acute: 1Q10 = 450.5 cfs $\Rightarrow \frac{(450.5 \text{ cfs})(0.6464) + 0.30 \text{ MGD}}{0.30 \text{ MGD}} =$ 972:1

Chronic: 7Q10 = 1,715.6 cfs $\Rightarrow \frac{(1,715.6 \text{ cfs})(0.6464) + 0.30 \text{ MGD}}{0.30 \text{ MGD}} =$ 3,698:1

Harmonic Mean = 4,382 cfs $\Rightarrow \frac{(4,382 \text{ cfs})(0.6464) + 0.30 \text{ MGD}}{0.30 \text{ MGD}} =$ 9,443:1

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

06-096 CMR 530(4)(B)(1) states,

> *Analyses using numerical acute criteria for aquatic life must be based on 1/4 of the 1Q10 stream design flow to prevent substantial acute toxicity within any mixing zone and to ensure a zone of passage of at least 3/4 of the cross-sectional area of any stream as required by Chapter 581. Where it can be demonstrated that a discharge achieves rapid and complete mixing with the receiving water by way of an efficient diffuser or other effective method, analyses may use a greater proportion of the stream design flow, up to and including all of it, as long as the required zone of passage is maintained.*

Department records do not contain sufficient information regarding the mixing characteristics of the effluent with the receiving water to conclude that mixing is complete and rapid. Therefore, the Department is utilizing the default stream flow of ¼ of the 1Q10 in acute evaluations pursuant to 06-096 CMR 530. River flows are based on regulated flows from upstream dams and prorated drainage area contributions using an acceptable model.

b. Biochemical Oxygen Demand (BOD_5): The USEPA has promulgated technology-based, monthly average and daily maximum effluent guideline limitations (EGLs) of 37 mg/L and 140 mg/L, respectively, for BOD_5 at 40 CFR Part 445.21. The previous permitting action established a monthly average concentration limit of 37 mg/L based on the EGLs and a daily maximum concentration limit of 100 mg/L, which has been carried forward in all Department permitting actions since at least the 4/27/88 WDL and NPDES permits since 5/26/94. The permittee has requested that the Department revise the daily maximum concentration limit to be consistent with the EGLs given that the facility has not been able to achieve compliance with the 100 mg/L limit at all times.

Waste Discharge License Conditions, 06-096 CMR 523(5)(l)(2) (effective January 12, 2001) contains what is commonly referred to as the "anti-backsliding provisions." Generally, antibacksliding requires that "*a permit may not be renewed, reissued or modified on the basis of effluent guidelines promulgated under section 304(b) of the CWA subsequent to the original issuance of such permit, to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit.*" 06-096 CMR 523(5)(l)(2)(i)(E) provides an exception to this requirement and allowance for establishing a less stringent limit for a pollutant in a renewed permit if:

> *The permittee has installed the treatment facilities required to meet the effluent limitations in the previous permit and has properly operated and maintained the facilities but has nevertheless been unable to achieve the previous effluent limitations, in which case the limitations in the reviewed, reissued, or modified permit may*

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

reflect the level of pollutant control actually achieved (but shall not be less stringent than required by effluent guidelines in effect at the time of permit renewal, reissuance, or modification).

The Department has summarized the effluent BOD_5 data as reported on the monthly Discharge Monitoring Reports (DMRs) submitted to the Department for Outfall #001A for the period January 2008 through March 2011 as follows:

BOD_5	Minimum	Maximum	Arithmetic Mean	# DMRs
Monthly Average	0.3 lbs./day	80.2 lbs./day	10.7 lbs./day	39
	6.5 mg/L	156 mg/L	27.5 mg/L	39
Daily Maximum	0.4 lbs./day	216.1 lbs./day	20.9 lbs./day	39
	7 mg/L	174 mg/L	33.6 mg/L	39

This permitting action is revising the daily maximum concentration limitation for BOD_5 to 140 mg/L based on the level of pollutant control actually achieved at the Graham Road Landfill and permittee's request to revise the limit to be consistent with the EGL standard of 140 mg/L. The monthly average concentration limit of 37 mg/L is being carried forward in this permitting action. The previously established monthly average and daily maximum mass limits of 62 lbs./day and 167 lbs./day, respectively, which were based on the previous concentration limits of 37 mg/L and 100 mg/L, are being carried forward in this permitting action consistent with the intent of antibacksliding to not issued renewed permits with less stringent limits than previously established.

This permitting action is revising the minimum monitoring frequency requirement from twice per month to monthly when discharging for BOD_5 based on the compliance record and consideration that the facility experiences periods of no discharge.

c. Total Suspended Solids (TSS): The USEPA has promulgated technology-based, monthly average and daily maximum effluent guideline limitations (EGLs) of 27 mg/L and 88 mg/L, respectively, for TSS at 40 CFR Part 445.21. The previous permitting action established monthly average and daily maximum concentration limits of 25 mg/L and 50 mg/L, respectively, which have been carried forward in all Department permitting actions since at least the 4/27/88 WDL and in NPDES permits since 5/26/94 to satisfy anti-backsliding requirements. The permittee has requested that the Department revise the daily maximum concentration limits to be consistent with the EGLs given that the facility has not been able to achieve compliance with the more stringent limits at all times.

This permitting action is revising the monthly average and daily maximum concentration limitations for TSS to 27 mg/L and 88 mg/L, respectively, based on the level of pollutant control actually achieved at the Graham Road Landfill and permittee's request to revise the limits to be consistent with the EGL standards. The basis for this exception to antibacksliding is the same as discussed under the BOD_5 subsection above.

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

The monthly average and daily maximum mass limits of 42 lbs./day and 83 lbs./day, respectively, are being carried forward in this permitting action consistent with the intent of antibacksliding to not issued renewed permits with less stringent limits than previously established.

The Department has summarized the effluent TSS data as reported on the monthly DMRs submitted to the Department for Outfall #001A for the period January 2008 through March 2011 as follows:

TSS	Minimum	Maximum	Arithmetic Mean	# DMRs
Monthly Average	0.2 lbs./day	40 lbs./day	6.3 lbs./day	39
	4.3 mg/L	32 mg/L	13.5 mg/L	39
Daily Maximum	0.3 lbs./day	78 lbs./day	12.2 lbs./day	39
	5 mg/L	72 mg/L	19.4 mg/L	39

This permitting action is revising the minimum monitoring frequency requirement from twice per month to monthly when discharging for TSS based on the compliance record and consideration that the facility experiences periods of no discharge.

d. Settleable Solids: The previous permitting action established monthly average and daily maximum settleable solids concentration limits of 0.1 ml/L and 0.5 ml/L, respectively, which have been carried forward in all Department permitting actions since at least the 4/27/88 WDL and in NPDES permits since 5/26/94.

A summary of settleable solids data as reported on the monthly DMRs for the period of January 2008 through March 2011 (# DMRs = 39) indicates the effluent settleable solids concentration discharge has ranged from $\leq$ 0.1 ml/L to 0.3 ml/L. This permitting action is revising the minimum monitoring frequency requirement from twice per month to monthly when discharging for settleable solids based on the compliance record and consideration that the facility experiences periods of no discharge.

e. *Escherichia coli* bacteria: The previous permitting action established, and this permitting action is carrying forward, seasonal (May 15-September 30 of each year) monthly average and daily maximum *E. coli* bacteria concentration limits of 142 colonies/100 ml and 949 colonies/100 ml, respectively, based on the State's Water Classification Program criteria for Class C waters.

The Department has summarized the effluent *E. coli* bacteria data as reported on the monthly DMRs submitted to the Department for Outfall #001A for calendar years 2008 through 2010 (applicable disinfection period only) as follows:

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

E. coli bacteria	Minimum	Maximum	Arithmetic Mean	# DMRs
Monthly Average	4.8 col / 100 ml	9,388.7 col / 100 ml	1,717 col / 100 ml	14
Daily Maximum	17 col / 100 ml	141,360 col / 100 ml	15,326 col / 100 ml	14

It is noted that the Town completed construction of a new disinfection system in April 2010. Since installation of the new disinfection system, the Town has not exceeded the bacteria limitations. This permitting action is revising the minimum monitoring frequency requirement from twice per month to weekly when discharging for *E. coli* bacteria based on the compliance record and consideration that the facility experiences periods of no discharge.

f. Total Residual Chlorine (TRC): The previous permitting action did not establish effluent limitations or monitoring requirements for TRC as chlorine or chlorine-based compounds were not used at the facility for effluent disinfection. The Town has submitted plans to the Department, which have been reviewed and approved, for the construction of a new chlorine disinfection system to ensure compliance with the bacteria limits established herein. Limitations on TRC are specified to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. Department licensing/permitting actions impose the more stringent of either the water quality-based or technology-based based limits.

With modified acute (¼ 1Q10) and chronic dilution factors associated with the discharge as calculated above, water quality-based concentration thresholds for the discharge may be calculated as follows:

			Calculated	
Acute (A) Criterion	Chronic (C) Criterion	Mod. A & C Dilution Factors	Acute Threshold	Chronic Threshold
0.019 mg/L	0.011 mg/L	244:1 (Mod. A) 3,698:1 (C)	4.6 mg/L	40.7 mg/L

The Department has established a daily maximum BPT-based limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. The daily maximum BPT-based limit of 1.0 mg/L is more stringent than the water quality-based thresholds calculated above and is being established in this permitting action. This permitting action is establishing a minimum monitoring frequency requirement of weekly when discharging for TRC based (any time chlorine or chlorine-based compounds are in use for effluent disinfection) based on best professional judgment.

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

g. Ammonia (as N): The USEPA has promulgated technology-based, monthly average and daily maximum effluent guideline limitations (EGLs) of 4.9 mg/L and 10.0 mg/L, respectively, for ammonia (as N) at 40 CFR Part 445.21, which were established as effluent limitations in the previous permitting action, and are being carried forward in this permitting action as the more stringent of either the water quality-based or technology-based based limits. The freshwater acute and chronic ambient water quality criteria for ammonia are 24,103 µg/L and 3,007 µg/L, respectively. It is noted that the limits in this permit are expressed in terms of parts per billion for data management purposes (4,900 µg/L and 10,000 µg/L). This permitting action is carrying forward the corresponding monthly average and daily maximum mass limits of 8.2 lbs./day and 16.7 lbs./day, respectively, for ammonia. This previous permitting action established a minimum monitoring requirement of once per month for ammonia.

The Department has summarized the effluent ammonia data as reported on the monthly DMRs submitted to the Department for Outfall #001A for the period January 2008 through March 2011 as follows:

Ammonia	Minimum	Maximum	Arithmetic Mean	# DMRs
Monthly Average / Daily Maximum	0.05 lbs./day	15 lbs./day	4.8 lbs./day	39
	2 mg/L	33 mg/L	16.6 mg/L	39

It is noted that the monthly average and daily maximum DMR data are the same as a result of the once per month sampling frequency established in the previous permit.

This permitting action is revising the minimum monitoring frequency requirement from once per month to monthly when discharging for ammonia based on the compliance record and consideration that the facility experiences periods of no discharge.

j. ά - Terpineol: The USEPA has promulgated technology-based, monthly average and daily maximum EGLs of 0.016 mg/L and 0.033 mg/L, respectively, for ά–terpineol (alpha terpineol) at 40 CFR Part 445.21, which were established as effluent limitations in the previous permitting action, and are being carried forward in this permitting action. Neither the USEPA nor the Department has established ambient water quality criteria for ά–terpineol. It is noted that the limits in this permit are expressed in terms of parts per billion for data management purposes (16 µg/L and 33 µg/L). This permitting action is carrying forward the corresponding monthly average and daily maximum mass limits of 0.03 lbs./day and 0.05 lbs./day, respectively, for ά–terpineol. This previous permitting action established a minimum monitoring requirement of once per month for ά–terpineol.

The Department has summarized the effluent ά–terpineol data as reported on the monthly DMRs submitted to the Department for Outfall #001A for the period January 2008 through March 2011 as follows:

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

ά–Terpineol	Minimum	Maximum	Arithmetic Mean	# DMRs
Monthly Average /Daily Maximum	0.0 lbs./day	0.01 lbs./day	0.002 lbs./day	38
	0.005 mg/L	0.01 mg/L	0.01 mg/L	38

It is noted that the monthly average and daily maximum DMR data are the same as a result of the once per month sampling frequency established in the previous permit.

This permitting action is revising the minimum monitoring frequency requirement from once per month to once per calendar quarter based on compliance record for ά–terpineol.

k. Benzoic Acid: The USEPA has promulgated technology-based, monthly average and daily maximum EGLs of 0.071 mg/L and 0.12 mg/L, respectively, for benzoic acid at 40 CFR Part 445.21, which were established as effluent limitations in the previous permitting action, and are being carried forward in this permitting action. Neither the USEPA nor the Department has established ambient water quality criteria for benzoic acid. It is noted that the limits in this permit are expressed in terms of parts per billion for data management purposes (71 µg/L and 12,000 µg/L). This permitting action is carrying forward the corresponding monthly average and daily maximum mass limits of 0.12 lbs./day and 0.20 lbs./day, respectively, for benzoic acid. This previous permitting action established a minimum monitoring requirement of once per month for benzoic acid.

The Department has summarized the effluent benzoic acid data as reported on the monthly DMRs submitted to the Department for Outfall #001A for the period January 2008 through March 2011 as follows:

Benzoic Acid	Minimum	Maximum	Arithmetic Mean	# DMRs
Monthly Average /Daily Maximum	0.0 lbs./day	0.05 lbs./day	0.02 lbs./day	25
	0.005 mg/L	0.053 mg/L	0.04 mg/L	25

It is noted that the monthly average and daily maximum DMR data are the same as a result of the once per month sampling frequency established in the previous permit.

This permitting action is revising the minimum monitoring frequency requirement from once per month to once per calendar quarter based on compliance record for benzoic acid.

l. ρ-Cresol: The USEPA has promulgated technology-based, monthly average and daily maximum EGLs of 0.014 mg/L and 0.025 mg/L, respectively, for ρ-cresol at 40 CFR Part 445.21, which were established as effluent limitations in the previous permitting action, and are being carried forward in this permitting action. Neither the USEPA nor the Department has established ambient water quality criteria for ρ-cresol. It is noted that the limits in this permit are expressed in terms of parts per billion for data management

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

purposes (14 µg/L and 25 µg/L). This permitting action is carrying forward the corresponding monthly average and daily maximum mass limits of 0.02 lbs./day and 0.04 lbs./day, respectively, for ρ-cresol. This previous permitting action established a minimum monitoring requirement of once per month for ρ-cresol.

The Department has summarized the effluent ρ-cresol data as reported on the monthly DMRs submitted to the Department for Outfall #001A for the period January 2008 through March 2011 as follows:

ρ-Cresol	Minimum	Maximum	Arithmetic Mean	# DMRs
Monthly Average /Daily Maximum	0.0 lbs./day	0.01 lbs./day	0.004 lbs./day	25
	0.005 mg/L	0.01 mg/L	0.008 mg/L	25

It is noted that the monthly average and daily maximum DMR data are the same as a result of the once per month sampling frequency established in the previous permit.

This permitting action is revising the minimum monitoring frequency requirement from once per month to once per calendar quarter based on compliance record for ρ-cresol.

m. Total Phenols: The USEPA has promulgated technology-based, monthly average and daily maximum EGLs of 0.015 mg/L and 0.026 mg/L, respectively, for total phenols at 40 CFR Part 445.21, which were established as effluent limitations in the previous permitting action, and are being carried forward in this permitting action. Neither the USEPA nor the Department has established ambient water quality criteria for total phenols. It is noted that the limits in this permit are expressed in terms of parts per billion for data management purposes (15µg/L and 26 µg/L). This permitting action is carrying forward the corresponding monthly average and daily maximum mass limits of 0.02 lbs./day and 0.04 lbs./day, respectively, for total phenols. This previous permitting action established a minimum monitoring requirement of once per month for total phenols.

The Department has summarized the effluent total phenols data as reported on the monthly DMRs submitted to the Department for Outfall #001A for the period January 2008 through March 2011 as follows:

Total Phenols	Minimum	Maximum	Arithmetic Mean	# DMRs
Monthly Average /Daily Maximum	0.0 lbs./day	0.01 lbs./day	0.002 lbs./day	39
	0.0 mg/L	0.03 mg/L	0.007 mg/L	39

It is noted that the monthly average and daily maximum DMR data are the same as a result of the once per month sampling frequency established in the previous permit.

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

This permitting action is revising the minimum monitoring frequency requirement from once per month to once per calendar quarter based on compliance record for total phenols.

n. pH: The USEPA has promulgated a technology-based pH range limitation of 6.0 – 9.0 standard units (SU) at 40 CFR Part 445.21. The previous permitting action established, and this permitting action is carrying forward, a pH range limitation of 6.0 – 8.5 SU which had been carried forward in all Department permitting actions since at least the 4/27/88 WDL and in NPDES permits since 5/26/94 to satisfy anti-backsliding requirements.

A summary of pH data as reported on the monthly DMRs for the period of January 2008 through March 2011 (# DMRs = 39) indicates effluent pH has ranged from 6.58 SU to 8.8 SU with three excursions of the upper pH range limit of 8.5 SU during said monitoring period.

This permitting action is revising the minimum monitoring frequency requirement from once per week to weekly when discharging for pH based on the compliance record and consideration that the facility experiences periods of no discharge.

o. Whole Effluent Toxicity (WET) Testing: WET monitoring is required to assess and protect against impacts upon water quality and designated uses caused by the aggregate effect of the discharge on specific aquatic organisms. Acute and chronic WET tests are performed on invertebrate and vertebrate species. Priority pollutant and analytical chemistry testing is required to assess the levels of individual toxic pollutants in the discharge, comparing each pollutant to acute, chronic, and human health AWQC as established in 06-096 CMR 584.

06-096 CMR 530 establishes four categories of testing requirements based predominately on the chronic dilution factor. The categories are as follows (Q= permitted effluent flow limitation):

1) Level I – chronic dilution factor of <20:1.
2) Level II – chronic dilution factor of ≥20:1 but <100:1.
3) Level III – chronic dilution factor ≥100:1 but <500:1 or >500:1 and Q ≥1.0 MGD
4) Level IV – chronic dilution >500:1 and Q ≤1.0 MGD

06-096 CMR 530(1)(D) specifies the criteria to be used in determining the minimum monitoring frequency requirements for WET, priority pollutant and analytical chemistry testing. Based on the 06-096 CMR 530 criteria, the permittee's facility falls into the Level IV frequency category as the facility has a chronic dilution factor of >500:1 and Q ≤1.0 MGD. 06-096 CMR 530(1)(D)(1) specifies that default screening and surveillance level testing requirements are as follows:

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

Screening level testing – Beginning 12 months prior to permit expiration and lasting through permit expiration and every five years thereafter.

Level	WET Testing	Priority pollutant testing	Analytical chemistry
IV	1 per year	1 per year	4 per year

Surveillance level testing – Beginning upon issuance of the permit and lasting through 12 months prior to permit expiration.

Level	WET Testing	Priority pollutant testing	Analytical chemistry
IV	1 per year	None required	1 per year

06-096 CMR 530(2)(D) provides that routine testing requirements for Level IV are waived, except that the Department shall require an individual discharger to conduct testing for parameters where available information indicates that toxic compounds may be present in toxic amounts. With a critical chronic receiving water concentration of 0.03% (mathematical inverse of chronic dilution factor), the Department is making a best professional judgment determination that the effluent does not contain toxics in toxic amounts and is waiving WET testing for this facility.

p. Chemical specific testing: Chemical-specific monitoring is required to assess the levels of individual toxic pollutants in the discharge, comparing each pollutant to acute, chronic, and human health water quality criteria. Priority pollutant testing refers to the analysis for levels of priority pollutants listed in *Effluent Guidelines and Standards*, 06-096 CMR 525(4)(VI) (effective January 12, 2001). Analytical chemistry refers to a suite of thirteen (13) chemical tests consisting of: ammonia-nitrogen, total aluminum, total cadmium, total chromium, total copper, total hardness (fresh water only), total lead, total nickel, total silver, total zinc, total arsenic, total cyanide and total residual chlorine.

Total Copper

The previous permitting action established water quality-based monthly average and daily maximum concentration limit of 16.6 mg/L and 5.7 mg/L, respectively, for total copper based on a statistical evaluation performed by the Department on September 30, 2004, which indicated that the discharge from the Graham Road Landfill exhibited a reasonable potential to exceed the ambient water quality criteria for copper.

A summary of total copper data as reported on the monthly DMRs for the period of January 2008 through March 2011 (# DMRs = 39) indicates the effluent total copper concentration discharge has ranged from 0.0 mg/L to 0.24 mg/L with an arithmetic mean of 0.01 mg/L. Based on the information currently in the Department's database, the Department is making a best professional judgment determination that the discharge from the Graham Road Landfill does not exceed or demonstrate a reasonable potential to

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

exceed the acute or chronic ambient water quality criteria for copper. Therefore, this permitting action is eliminating the monthly average and daily maximum concentration and mass limitations for total copper.

Total Zinc

The USEPA has promulgated technology-based, monthly average and daily maximum EGLs of 0.11 mg/L and 0.20 mg/L, respectively, for total zinc at 40 CFR Part 445.21, which were established as effluent limitations in the previous permitting action, and are being carried forward in this permitting action. The Department has established acute and chronic ambient water quality criteria of 30.6 µg/L for total zinc. Based on available dilution, the Department has determined that the technology-based limitations for total zinc are significantly more stringent than the water quality-based thresholds. Therefore, the monthly average and daily maximum technology-based zinc limits are being carried forward in this permitting action. It is noted that the limits in this permit are expressed in terms of parts per billion for data management purposes (110 µg/L and 200 µg/L). This permitting action is carrying forward the corresponding monthly average and daily maximum mass limits of 0.2 lbs./day and 0.3 lbs./day, respectively, for total zinc. This previous permitting action established a minimum monitoring requirement of once per month for total zinc.

A summary of total zinc data as reported on the monthly DMRs for the period of January 2008 through March 2011 (# DMRs = 39) indicates the effluent total zinc concentration discharge has ranged from 0.008 mg/L to 0.16 mg/L with an arithmetic mean of 0.05 mg/L.

This permitting action is revising the minimum monitoring frequency requirement from once per month to once per calendar quarter based on compliance record for total zinc.

06-096 CMR 530(2)(D)(4) states, *"All dischargers having waived or reduced testing must file statements with the Department on or before December 31 of each year describing the following.*

(a) Changes in the number or types of non-domestic wastes contributed directly or indirectly to the wastewater treatment works that may increase the toxicity of the discharge;

(b) Changes in the operation of the treatment works that may increase the toxicity of the discharge; and

(c) Changes in industrial manufacturing processes contributing wastewater to the treatment works that may increase the toxicity of the discharge."

On April 10, 2006, the Department amended WDL#W004308-5L-C-R by issuing a Surface Waters Toxics Control Program fact sheet for this facility and

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

establishing or revising test frequencies to be consistent with 06-096 CMR 530 requirements and provisions for waived testing. The 4/10/06 fact sheet discussed above specified that the facility must comply with this annual notification statement to continue waived surveillance level testing. This permitting action is formally establishing the notification requirement in this permitting action as Special Condition F, 06-096 CMR 530(2)(D)(4), *Statement for Reduced/Waived Toxics Testing*, pursuant to 06-096 CMR 530(2)(D)(4). This permit provides for reconsideration of testing requirements, including the imposition of certain testing, in consideration of the nature of the wastewater discharged, existing wastewater treatment, receiving water characteristics, and results of testing.

q. Mercury: Pursuant to 38 M.R.S.A. § 420, 38 M.R.S.A. § 413 and 06-096 CMR 519, the Department issued a Notice of Interim Limits for the Discharge of Mercury to the permittee on August 9, 2000, thereby administratively modifying WDL # W004308-59-B-R by establishing interim monthly average and daily maximum effluent concentration limits of 4.5 parts per trillion (ppt) and 6.8 ppt, respectively, and a minimum monitoring frequency requirement of two (2) tests per year for mercury. Limitations and monitoring frequencies are regulated separately through 38 M.R.S.A. § 413 and 06-096 CMR 519 and Special Condition G of this permit. The interim limitations remain in effect and enforceable and any modifications to the limits and or monitoring requirements will be formalized outside of this permitting document.

Pursuant to 38 M.R.S.A. § 420(1-B)(B), *"a facility is not in violation of the ambient criteria for mercury if the facility is in compliance with an interim discharge limit established by the Department pursuant to section 413 subsection 11."* The Department has established interim monthly average and daily maximum mercury concentration limits and reporting requirements for this facility pursuant to 06-096 CMR 519. A review of the Department's database for the previous 60-month period indicates mercury test results reported have ranged from 2.2 ppt to 12.7 ppt with an arithmetic mean (n=15) of 6.2 ppt.

7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

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

8. PUBLIC COMMENTS

Public notice of this application was made in the *Times Record* newspaper on December 3, 2009. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses,* 06-096 CMR 522 (effective January 12, 2001).

9. DEPARTMENT CONTACTS

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

Bill Hinkel
Division of Water Quality Management
Bureau of Land & Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 485-2281 e-mail: bill.hinkel@maine.gov

10. RESPONSE TO COMMENTS

During the period of June 20, 2011 through the issuance date of this permit, the Department solicited comments on the proposed draft permit to be issued to the Town for the proposed discharge. The Department received comments from the Town's consulting engineer, Woodard & Curran (W&C) by way of letter dated July 19, 2011. The significant comments and Department responses are as follows.

Comment #1: W&C requested interim limits for certain pollutants based on the fact that a schedule of compliance is likely to be established in an Administrative Consent Agreement and Enforcement Order that is currently being developed by the Department for violations of the Town's 2004 MEPDES permit.

Response #1: The Department established a schedule of compliance in the 2004 permit. The new limits went into effect prior to expiration of the permit in November 2009. The Department can not establish a second schedule of compliance for technology-based limits that were effective prior to this permitting action.

Comment #2: W&C stated that there are "seasonal issues with certain parameters" and asked that the Department not consider seasonal based exceedences of permit limits to constitute violations of the permit. W&C also asked if the Lagoon Task Force report would allow less stringent limits than the national effluent guidelines prescribe.

Response #2: The Department evaluated effluent data for seasonal patterns and determined that there was not a consistent seasonality associated with these data. This information was communicated to W&C via e-mail dated October 26, 2009. The Department reviewed the Lagoon Task Force report in considerations of the Town's request to use this document to establish less stringent limitations for the Graham Road Landfill facility. The Department concluded, via e-mail from the Department to W&C, *et al.* dated May 5, 2011, for various reasons that the lagoon report was not a valid path forward in establishing alternate limits for the regulated pollutants.

Comment #3: W&C stated that the draft permit monitoring frequency for discharge flow needed to be changed to reflect that the facility is staffed Tuesday through Saturdays.

Response #3: The Department made the necessary changes in the final permit.

Comment #4: W&C asked if the intent of the language in the fact sheet regarding mercury was to continue monitoring at a frequency of twice per year and requested a reduction to once per year based on recent changes in Maine law.

Response #4: The intent is to carry forward mercury testing as established in the Notice of Interim Limits for the Discharge of Mercury, August 9, 2000. The revision to 38 M.R.S.A. § 420 does not go into effect until September 15, 2011. The Department does not have legal authority to reduce the testing frequency at this time. All dischargers affected by this change in the law will be notified of testing frequency reductions after September 15, 2011.

Comment #5: W&C highlighted a typographical error in the fact sheet regarding language on the testing frequency for benzoic acid.

Response #5: The Department reviewed the error and further determined that a reduction in monitoring frequency from once per month to once per calendar quarter was reasonable and acceptable for alpha terpineol, benzoic acid, ρ-Cresol, total phenol and total zinc based on the compliance history with these pollutants. The permit has been revised accordingly.

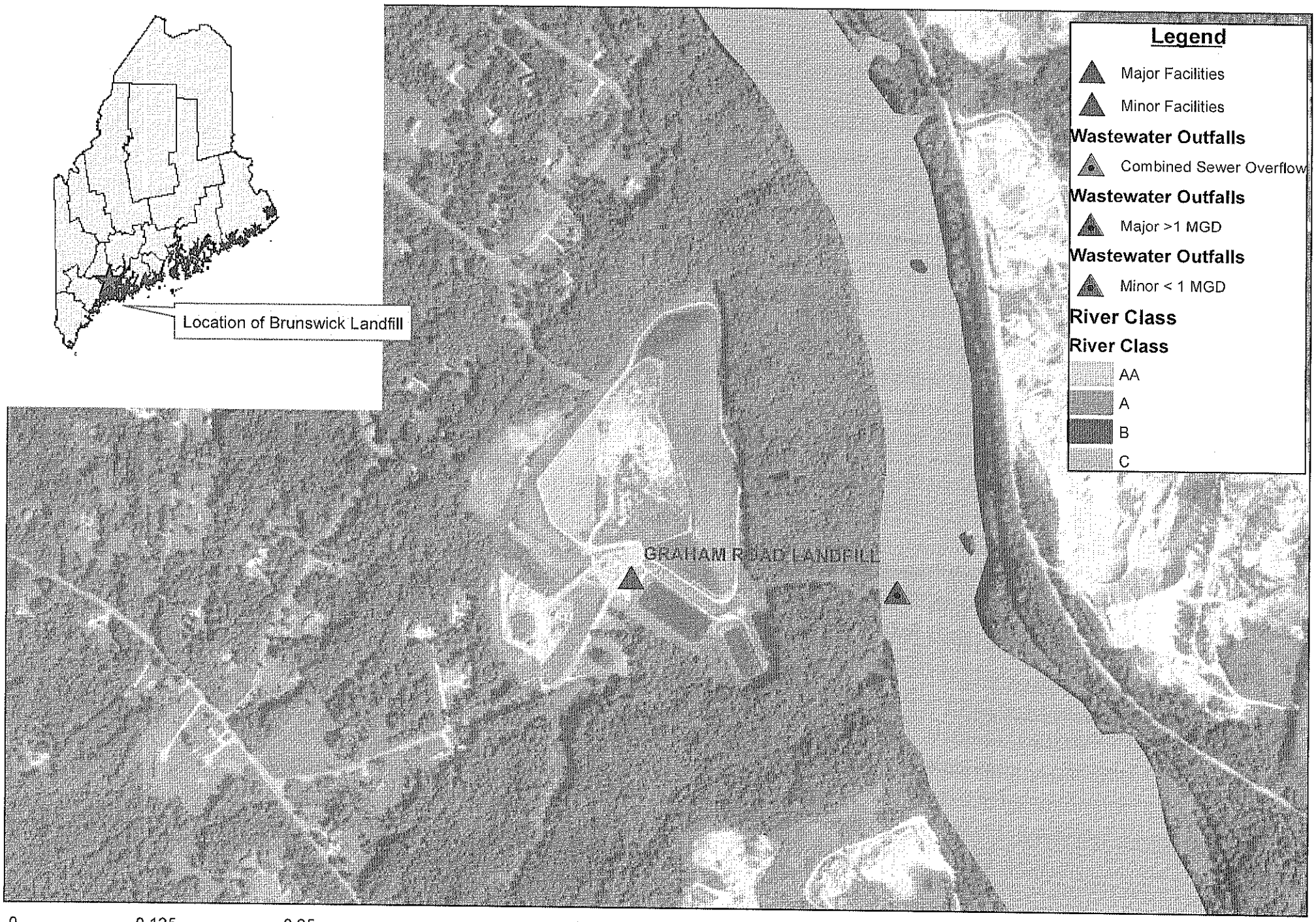
Comment #6: W&C asked if the pH range limitation of 6.0 – 8.5 standard units, which is established in the national effluent guidelines, could be increased to 6.0 – 9.0 SU.

Response #6: The Department denied the Town's variance request for fundamentally different factors. Thus, the national effluent guideline standards are being carried forward in this permitting action, including the pH range limitation.

Comment #7: W&C stated that monitoring data associated with some of the pollutants established in the national effluent guidelines and limited in this and the previous permitting action demonstrates that there is no history of non-compliance and asked why the Town still needs to demonstrate compliance with these limitations.

Response #7: The technology-based limits are established in the permit as required by federal and state regulations. Applicable NPDES regulations require monitoring for all parameters limited in permits regardless of compliance history. The Department took the compliance history of these pollutants into consideration and has reduced the frequency for certain pollutants from once per month to once per calendar quarter.

ATTACHMENT A



Brunswick (Graham Road) Landfill, Brunswick, Maine

Map created by Maine DEP
April, 2010

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

CONTENTS

A. GENERAL PROVISIONS

1. **General compliance**. All discharges shall be consistent with the terms and conditions of this permit; any changes in production capacity or process modifications which result in changes in the quantity or the characteristics of the discharge must be authorized by an additional license or by modifications of this permit; it shall be a violation of the terms and conditions of this permit to discharge any pollutant not identified and authorized herein or to discharge in excess of the rates or quantities authorized herein or to violate any other conditions of this permit.

2. Other materials. Other materials ordinarily produced or used in the operation of this facility, which have been specifically identified in the application, may be discharged at the maximum frequency and maximum level identified in the application, provided:

(a) They are not

(i) Designated as toxic or hazardous under the provisions of Sections 307 and 311, respectively, of the Federal Water Pollution Control Act; Title 38, Section 420, Maine Revised Statutes; or other applicable State Law; or
(ii) Known to be hazardous or toxic by the licensee.

(b) The discharge of such materials will not violate applicable water quality standards.

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

(a) The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act, and 38 MRSA, §420 or Chapter 530.5 for toxic pollutants 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 requirement.
(b) Any person who violates any provision of the laws administered by the Department, including without limitation, a violation of the terms of any order, rule license, permit, approval or decision of the Board or Commissioner is subject to the penalties set forth in 38 MRSA, §349.

4. Duty to provide information. The permittee shall furnish to the Department, within a reasonable time, any information which the Department 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 Department upon request, copies of records required to be kept by this permit.

5. 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 a notification of planned changes or anticipated noncompliance does not stay any permit condition.

6. Reopener clause. The Department reserves the right to make appropriate revisions to this permit in order to establish any appropriate effluent limitations, schedule of compliance or other provisions which may be authorized under 38 MRSA, §414-A(5).

7. Oil and hazardous substances. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject under section 311 of the Federal Clean Water Act; section 106 of the Federal Comprehensive Environmental Response, Compensation and Liability Act of 1980; or 38 MRSA §§ 1301, et. seq.

8. Property rights. This permit does not convey any property rights of any sort, or any exclusive privilege.

9. Confidentiality of records. 38 MRSA §414(6) reads as follows. "Any records, reports or information obtained under this subchapter is available to the public, except that upon a showing satisfactory to the department by any person that any records, reports or information, or particular part or any record, report or information, other than the names and addresses of applicants, license applications, licenses, and effluent data, to which the department has access under this subchapter would, if made public, divulge methods or processes that are entitled to protection as trade secrets, these records, reports or information must be confidential and not available for public inspection or examination. Any records, reports or information may be disclosed to employees or authorized representatives of the State or the United States concerned with carrying out this subchapter or any applicable federal law, and to any party to a hearing held under this section on terms the commissioner may prescribe in order to protect these confidential records, reports and information, as long as this disclosure is material and relevant to any issue under consideration by the department."

10. Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.

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

12. Inspection and entry. The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the EPA 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 Clean Water Act, any substances or parameters at any location.

B. OPERATION AND MAINTENACE OF FACILITIES

1. General facility requirements.

(a) The permittee shall collect all waste flows designated by the Department as requiring treatment and discharge them into an approved waste treatment facility in such a manner as to

maximize removal of pollutants unless authorization to the contrary is obtained from the Department.

(b) The permittee shall at all times maintain in good working order and operate at maximum efficiency all waste water collection, treatment and/or control facilities.

(c) All necessary waste treatment facilities will be installed and operational prior to the discharge of any wastewaters.

(d) Final plans and specifications must be submitted to the Department for review prior to the construction or modification of any treatment facilities.

(e) The permittee shall install flow measuring facilities of a design approved by the Department.

(f) The permittee must provide an outfall of a design approved by the Department which is placed in the receiving waters in such a manner that the maximum mixing and dispersion of the wastewaters will be achieved as rapidly as possible.

2. 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. 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 which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

3. Need to halt or reduce activity 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.

4. 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.

5. Bypasses.

(a) Definitions.

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

(ii) 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 reasonably be 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 provisions of paragraphs (c) and (d) of this section.

(c) Notice.

(i) 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.

(ii) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph D(1)(f), below. (24-hour notice).

(d) Prohibition of bypass.

(i) Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:

(A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
(B) 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 preventive maintenance; and
(C) The permittee submitted notices as required under paragraph (c) of this section.

(ii) The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in paragraph (d)(i) of this section.

6. Upsets.

(a) Definition. Upset means an exceptional incident in which there is 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 (c) of this section are met. No determination made during 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:

(i) An upset occurred and that the permittee can identify the cause(s) of the upset;
(ii) The permitted facility was at the time being properly operated; and
(iii) The permittee submitted notice of the upset as required in paragraph D(1)(f) , below. (24 hour notice).
(iv) The permittee complied with any remedial measures required under paragraph B(4).

(d) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

C. MONITORING AND RECORDS

1. General Requirements. This permit shall be subject to such monitoring requirements as may be reasonably required by the Department including the installation, use and maintenance of monitoring equipment or methods (including, where appropriate, biological monitoring methods). The permittee shall provide the Department with periodic reports on the proper Department reporting form of monitoring results obtained pursuant to the monitoring requirements contained herein.

2. Representative sampling. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. If effluent limitations are based wholly or partially on quantities of a product processed, the permittee shall ensure samples are representative of times when production is taking place. Where discharge monitoring is required when production is less than 50%, the resulting data shall be reported as a daily measurement but not included in computation of averages, unless specifically authorized by the Department.

3. Monitoring and records.

(a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(b) Except for records of 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, 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. This period may be extended by request of the Department at any time.

(c) Records of monitoring information shall include:

(i) The date, exact place, and time of sampling or measurements;
(ii) The individual(s) who performed the sampling or measurements;
(iii) The date(s) analyses were performed;
(iv) The individual(s) who performed the analyses;
(v) The analytical techniques or methods used; and
(vi) The results of such analyses.

(d) Monitoring results must be conducted according to test procedures approved under 40 CFR part 136, unless other test procedures have been specified in the permit.

(e) State law provides that any person who tampers with or renders inaccurate any monitoring devices or method required by any provision of law, or any order, rule license, permit approval or decision is subject to the penalties set forth in 38 MRSA, §349.

D. REPORTING REQUIREMENTS

1. Reporting requirements.

(a) Planned changes. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

(i) 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

(ii) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under Section D(4).

(iii) 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 that are 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 Department 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 upon application to and approval of the Department pursuant to 38 MRSA, § 344 and Chapters 2 and 522.

(d) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(i) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Department for reporting results of monitoring of sludge use or disposal practices.

(ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Department.

(iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Department in the permit.

(e) Compliance schedules. Reports of compliance or noncompliance with, or 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.

(f) Twenty-four hour reporting.

(i) 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.

(ii) 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.
(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 Department in the permit to be reported within 24 hours.

(iii) The Department may waive the written report on a case-by-case basis for reports under paragraph (f)(ii) of this section if the oral report has been received within 24 hours.

(g) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (d), (e), and (f) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (f) 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 Department, it shall promptly submit such facts or information.

2. Signatory requirement. All applications, reports, or information submitted to the Department shall be signed and certified as required by Chapter 521, Section 5 of the Department's rules. State law provides that any person who knowingly makes any false statement, representation or certification in any application, record, report, plan or other document filed or required to be maintained by any order, rule, permit, approval or decision of the Board or Commissioner is subject to the penalties set forth in 38 MRSA, §349.

3. Availability of reports. Except for data determined to be confidential under A(9), above, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. As required by State law, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal sanctions as provided by law.

4. Existing manufacturing, commercial, mining, and silvicultural dischargers. In addition to the reporting requirements under this Section, all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Department 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 or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

(i) One hundred micrograms per liter (100 ug/l);
(ii) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
(iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or
(iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

(b) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following ``notification levels":

(i) Five hundred micrograms per liter (500 ug/l);
(ii) One milligram per liter (1 mg/l) for antimony;
(iii) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or
(iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

5. Publicly owned treatment works.

(a) All POTWs must provide adequate notice to the Department of the following:

(i) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA or Chapter 528 if it were directly discharging those pollutants.
(ii) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
(iii) For purposes of this paragraph, adequate notice shall include information on (A) the quality and quantity of effluent introduced into the POTW, and (B) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

(b) When the effluent discharged by a POTW for a period of three consecutive months exceeds 80 percent of the permitted flow, the permittee shall submit to the Department a projection of loadings up to the time when the design capacity of the treatment facility will be reached, and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans.

E. OTHER REQUIREMENTS

1. Emergency action - power failure. Within thirty days after the effective date of this permit, the permittee shall notify the Department of facilities and plans to be used in the event the primary source of power to its wastewater pumping and treatment facilities fails as follows.

(a) For municipal sources. During power failure, all wastewaters which are normally treated shall receive a minimum of primary treatment and disinfection. Unless otherwise approved, alternate power supplies shall be provided for pumping stations and treatment facilities. Alternate power supplies shall be on-site generating units or an outside power source which is separate and independent from sources used for normal operation of the wastewater facilities.

(b) For industrial and commercial sources. The permittee shall either maintain an alternative power source sufficient to operate the wastewater pumping and treatment facilities or halt, reduce or otherwise control production and or all discharges upon reduction or loss of power to the wastewater pumping or treatment facilities.

2. Spill prevention. (applicable only to industrial sources) Within six months of the effective date of this permit, the permittee shall submit to the Department for review and approval, with or without conditions, a spill prevention plan. The plan shall delineate methods and measures to be taken to prevent and or contain any spills of pulp, chemicals, oils or other contaminates and shall specify means of disposal and or treatment to be used.

3. **Removed substances.** Solids, sludges trash rack cleanings, filter backwash, or other pollutants removed from or resulting from the treatment or control of waste waters shall be disposed of in a manner approved by the Department.

4. **Connection to municipal sewer.** (applicable only to industrial and commercial sources) All wastewaters designated by the Department as treatable in a municipal treatment system will be cosigned to that system when it is available. This permit will expire 90 days after the municipal treatment facility becomes available, unless this time is extended by the Department in writing.

F. DEFINITIONS. For the purposes of this permit, the following definitions shall apply. Other definitions applicable to this permit may be found in Chapters 520 through 529 of the Department's rules

Average means the arithmetic mean of values taken at the frequency required for each parameter over the specified period. For bacteria, 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. Except, however, bacteriological tests may be calculated as a geometric mean.

Average weekly discharge limitation means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that 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 State. 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.

Composite sample means a sample consisting of a minimum of eight grab samples collected at equal intervals during a 24 hour period (or a lesser period as specified in the section on monitoring and reporting) and combined proportional to the flow over that same time period.

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 other similar activities.

Daily discharge means the discharge of a pollutant measured during a calendar day or any 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 measurement, the daily discharge is calculated as the average measurement of the pollutant over the day.

Discharge Monitoring Report ("DMR") means the EPA uniform 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.

Flow weighted composite sample means a composite sample consisting of a mixture of aliquots collected at a constant time interval, where the volume of each aliquot is proportional to the flow rate of the discharge.

Grab sample means an individual sample collected in a period of less than 15 minutes.

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

(1) Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and
(2) 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, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Maximum daily discharge limitation means the highest allowable daily discharge.

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.

Pass through means a discharge which exits the POTW into waters of the State 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 to implement the requirements of 40 CFR parts 122, 123 and 124. Permit includes an NPDES general permit (Chapter 529). Permit does not include any permit which has not yet been the subject of final agency action, such as a draft permit or a proposed permit.

Person means an individual, firm, corporation, municipality, quasi-municipal corporation, state agency, federal agency or other legal entity.

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 or vessel or other floating craft, from which pollutants are or may be discharged.

Pollutant means dredged spoil, solid waste, junk, incinerator residue, sewage, refuse, effluent, garbage, sewage sludge, munitions, chemicals, biological or radiological materials, oil, petroleum products or byproducts, heat, wrecked or discarded equipment, rock, sand, dirt and industrial, municipal, domestic, commercial or agricultural wastes of any kind.

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 for the treatment of pollutants owned by the State or any political subdivision thereof, any municipality, district, quasi-municipal corporation or other public entity.

Septage means, for the purposes of this permit, any waste, refuse, effluent sludge or other material removed from a septic tank, cesspool, vault privy or similar source which concentrates wastes or to which chemicals have been added. Septage does not include wastes from a holding tank.

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

Toxic pollutant includes 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. Toxic pollutant also includes those substances or combination of substances, including disease causing agents, which after discharge or upon exposure, ingestion, inhalation or assimilation into any organism, including humans either directly through the environment or indirectly through ingestion through food chains, will, on the basis of information available to the board either alone or in combination with other substances already in the receiving waters or the discharge, cause death, disease, abnormalities, cancer, genetic mutations, physiological malfunctions, including malfunctions in reproduction, or physical deformations in such organism or their offspring.

Wetlands means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient 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 means the aggregate toxic effect of an effluent measured directly by a toxicity test.

DEP INFORMATION SHEET

Appealing a Commissioner's Licensing Decision

Dated: May 2004 Contact: (207) 287-2811

SUMMARY

There are two methods available to an aggrieved person seeking to appeal a licensing decision made by the Department of Environmental Protection's (DEP) Commissioner: (1) in an administrative process before the Board of Environmental Protection (Board); or (2) in a judicial process before Maine's Superior Court. This INFORMATION SHEET, in conjunction with consulting statutory and regulatory provisions referred to herein, can help aggrieved persons with understanding their rights and obligations in filing an administrative or judicial appeal.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

DEP's *General Laws*, 38 M.R.S.A. § 341-D(4), and its *Rules Concerning the Processing of Applications and Other Administrative Matters* (Chapter 2), 06-096 CMR 2.24 (April 1, 2003).

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

The Board must receive a written notice of appeal within 30 calendar days of the date on which the Commissioner's decision was filed with the Board. Appeals filed after 30 calendar days will be rejected.

HOW TO SUBMIT AN APPEAL TO THE BOARD

Signed original appeal documents must be sent to: Chair, Board of Environmental Protection, c/o Department of Environmental Protection, 17 State House Station, Augusta, ME 04333-0017; faxes are acceptable for purposes of meeting the deadline when followed by receipt of mailed original documents within five (5) working days. Receipt on a particular day must be by 5:00 PM at DEP's offices in Augusta; materials received after 5:00 PM are not considered received until the following day. The person appealing a licensing decision must also send the DEP's Commissioner and the applicant a copy of the documents. All the information listed in the next section must be submitted at the time the appeal is filed. Only the extraordinary circumstances described at the end of that section will justify evidence not in the DEP's record at the time of decision being added to the record for consideration by the Board as part of an appeal.

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

The materials constituting an appeal must contain the following information at the time submitted:

1. *Aggrieved Status.* Standing to maintain an appeal requires the appellant to show they are particularly injured by the Commissioner's decision.
2. *The findings, conclusions or conditions objected to or believed to be in error.* Specific references and facts regarding the appellant's issues with the decision must be provided in the notice of appeal.
3. *The basis of the objections or challenge.* If possible, specific regulations, statutes or other facts should be referenced. This may include citing omissions of relevant requirements, and errors believed to have been made in interpretations, conclusions, and relevant requirements.
4. *The remedy sought.* This can range from reversal of the Commissioner's decision on the license or permit to changes in specific permit conditions.

5. *All the matters to be contested.* The Board will limit its consideration to those arguments specifically raised in the written notice of appeal.

6. *Request for hearing.* The Board will hear presentations on appeals at its regularly scheduled meetings, unless a public hearing is requested and granted. A request for public hearing on an appeal must be filed as part of the notice of appeal.

7. *New or additional evidence to be offered.* The Board may allow new or additional evidence as part of an appeal only when the person seeking to add information to the record can show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process or show that the evidence itself is newly discovered and could not have been presented earlier in the process. Specific requirements for additional evidence are found in Chapter 2, Section 24(B)(5).

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

1. *Be familiar with all relevant material in the DEP record.* A license file is public information made easily accessible by DEP. Upon request, the DEP will make the material available during normal working hours, provide space to review the file, and provide opportunity for photocopying materials. There is a charge for copies or copying services.

2. *Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing your appeal.* DEP staff will provide this information on request and answer questions regarding applicable requirements.

3. *The filing of an appeal does not operate as a stay to any decision.* An applicant proceeding with a project pending the outcome of an appeal runs the risk of the decision being reversed or modified as a result of the appeal.

WHAT TO EXPECT ONCE YOU FILE A TIMELY APPEAL WITH THE BOARD

The Board will formally acknowledge initiation of the appeals procedure, including the name of the DEP project manager assigned to the specific appeal, within 15 days of receiving a timely filing. The notice of appeal, all materials accepted by the Board Chair as additional evidence, and any materials submitted in response to the appeal will be sent to Board members along with a briefing and recommendation from DEP staff. Parties filing appeals and interested persons are notified in advance of the final date set for Board consideration of an appeal or request for public hearing. With or without holding a public hearing, the Board may affirm, amend, or reverse a Commissioner decision. The Board will notify parties to an appeal and interested persons of its decision.

II. APPEALS TO MAINE SUPERIOR COURT

Maine law allows aggrieved persons to appeal final Commissioner licensing decisions to Maine's Superior Court, see 38 M.R.S.A. § 346(1); 06-096 CMR 2.26; 5 M.R.S.A. § 11001; & MRCivP 80C. Parties to the licensing decision must file a petition for review within 30 days after receipt of notice of the Commissioner's written decision. A petition for review by any other person aggrieved must be filed within 40-days from the date the written decision is rendered. The laws cited in this paragraph and other legal procedures govern the contents and processing of a Superior Court appeal.

ADDITIONAL INFORMATION

If you have questions or need additional information on the appeal process, contact the DEP's Director of Procedures and Enforcement at (207) 287-2811.

Note: The DEP provides this INFORMATION SHEET for general guidance only; it is not intended for use as a legal reference. Maine law governs an appellant's rights.