



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE
GOVERNOR

AVERY T. DAY
ACTING COMMISSIONER

September 21, 2015

Mr. Charles Applebee
Water Quality Compliance Services Inc.
15 Mossy Oaks Drive
Wiscasset, ME 04578
waterqualityandcompliance@roadrunner.com

*Sent via electronic mail
Delivery confirmation requested*

**RE: *Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0102661
Maine Waste Discharge License (WDL) Application #W008102-6A-G-R
Finalized MEPDES Permit***

Dear: Mr. Applebee

Enclosed please find a copy of your **final** MEPDES permit and Maine WDL **renewal** which was approved by the Department of Environmental Protection. Please read this permit/license renewal 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.*"

Comments in writing should be submitted to my attention at the following address:

Maine Department of Environmental Protection
Bureau of Water Quality
Division of Water Quality Management
17 State House Station
Augusta, ME 04333-0017
Aaron.A.Dumont@maine.gov

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-3901 FAX: (207) 287-3435
RAY BLDG., HOSPITAL ST.

BANGOR
106 HOGAN ROAD
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 04769-2094
(207) 764-6477 FAX: (207) 764-1507

Vassalboro Sanitary District
September 21, 2015
Page 2 of 2

Sincerely,

A handwritten signature in cursive script, appearing to read "Aaron Dumont".

Aaron Dumont
Division of Water Quality Management
Bureau of Water Quality

Enclosure

cc:

Beth Dehaas, DEP/CMRO
Lori Mitchell, DEP/CMRO
Olga Vergara, EPA
Sandy Mojica, EPA



DEP INFORMATION SHEET

Appealing a Department Licensing Decision

Dated: March 2012

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. An aggrieved person seeking review of a licensing decision over which the Board had original jurisdiction may seek judicial review in Maine's Superior Court.

A judicial appeal of final action by the Commissioner or the Board regarding an application for an expedited wind energy development (35-A M.R.S.A. § 3451(4)) or a general permit for an offshore wind energy demonstration project (38 M.R.S.A. § 480-HH(1)) or a general permit for a tidal energy demonstration project (38 M.R.S.A. § 636-A) must be taken to the Supreme Judicial Court sitting as the Law Court.

This INFORMATION SHEET, in conjunction with a review of the statutory and regulatory provisions referred to herein, can help a person to understand his or her rights and obligations in filing an administrative or judicial appeal.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

The laws concerning the DEP's *Organization and Powers*, 38 M.R.S.A. §§ 341-D(4) & 346, the *Maine Administrative Procedure Act*, 5 M.R.S.A. § 11001, and the DEP's *Rules Concerning the Processing of Applications and Other Administrative Matters* ("Chapter 2"), 06-096 CMR 2 (April 1, 2003).

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

The Board must receive a written appeal within 30 days of the date on which the Commissioner's decision was filed with the Board. Appeals filed after 30 calendar days of the date on which the Commissioner's decision was filed with the Board 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 the Board's 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 a copy of the appeal documents and if the person appealing is not the applicant in the license proceeding at issue the applicant must also be sent a copy of the appeal documents. All of 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

Appeal materials must contain the following information at the time submitted:

1. *Aggrieved Status.* The appeal must explain how the person filing the appeal has standing to maintain an appeal. This requires an explanation of how the person filing the appeal may suffer a particularized injury as a result of 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 on the appeal 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, referred to as supplemental evidence, to be considered by the Board in an appeal only when the evidence is relevant and material and that 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 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.

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

1. *Be familiar with all relevant material in the DEP record.* A license application file is public information, subject to any applicable statutory exceptions, 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.* If a license has been granted and it has been appealed the license normally remains in effect pending the processing of the appeal. A license holder may proceed with a project pending the outcome of an appeal but the license holder 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 receipt of an appeal, including the name of the DEP project manager assigned to the specific appeal. The notice of appeal, any materials accepted by the Board Chair as supplementary evidence, and any materials submitted in response to the appeal will be sent to Board members with a recommendation from DEP staff. Persons filing appeals and interested persons are notified in advance of the 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 or remand the matter to the Commissioner for further proceedings. The Board will notify the appellant, a license holder, and interested persons of its decision.

II. JUDICIAL APPEALS

Maine law generally allows aggrieved persons to appeal final Commissioner or Board licensing decisions to Maine's Superior Court, see 38 M.R.S.A. § 346(1); 06-096 CMR 2; 5 M.R.S.A. § 11001; & M.R. Civ. P 80C. A party's appeal must be filed with the Superior Court within 30 days of receipt of notice of the Board's or the Commissioner's decision. For any other person, an appeal must be filed within 40 days of the date the decision was rendered. Failure to file a timely appeal will result in the Board's or the Commissioner's decision becoming final.

An appeal to court of a license decision regarding an expedited wind energy development, a general permit for an offshore wind energy demonstration project, or a general permit for a tidal energy demonstration project may only be taken directly to the Maine Supreme Judicial Court. See 38 M.R.S.A. § 346(4).

Maine's Administrative Procedure Act, DEP statutes governing a particular matter, and the Maine Rules of Civil Procedure must be consulted for the substantive and procedural details applicable to judicial appeals.

ADDITIONAL INFORMATION

If you have questions or need additional information on the appeal process, for administrative appeals contact the Board's Executive Analyst at (207) 287-2452 or for judicial appeals contact the court clerk's office in which your appeal will be filed.

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.



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

DEPARTMENT ORDER

IN THE MATTER OF

| | | |
|------------------------------------|---|---------------------------|
| VASSALBORO SANITARY DISTRICT |) | MAINE POLLUTANT DISCHARGE |
| PUBLICLY OWNED TREATMENT WORKS |) | ELIMINATION SYSTEM PERMIT |
| VASSALBORO, KENNEBEC COUNTY, MAINE |) | AND |
| ME0102661 |) | WASTE DISCHARGE LICENSE |
| W008102-6A-G-R |) | RENEWAL |
| CEMETERY STREET |) | |
| APPROVAL |) | |

In compliance with the provisions of the *Federal Water Pollution Control Act*, Title 33 U.S.C. § 1251, *Conditions of licenses*, 38 M.R.S.A. § 414-A, and applicable regulations, the Department of Environmental Protection (Department) has considered the application of the Vassalboro Sanitary District (VSD), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

On December 15, 2014, the Department accepted as complete for processing an application from VSD for renewal of combination Waste Discharge License (WDL) # W008102-6A-E-R / Maine Pollutant Discharge Elimination System (MEPDES) permit # ME0102661, which was issued by the Department on March 11, 2010 for a five-year term. The March 11, 2010 permit authorized the monthly average discharge of 0.029 million gallons per day (MGD) of secondary treated sanitary wastewater from a publicly owned treatment works (POTW) (Cemetery Street Facility) to Outlet Stream, Class B, in Vassalboro, Maine from June 1st – September 30th (summer) of each year and 0.043 MGD from October 1st – May 31st (non-summer) of each year.

PERMIT SUMMARY

a. Terms and conditions

This permitting action is different from the March 11, 2010 permit in that it:

1. Establishes a *Schedule of Compliance*, Special Condition E in accordance with *Waste Discharge License Conditions*, 06-096 CMR 523(7) (effective January 12, 2001) for the imposition of and compliance with water quality-based limitations for total phosphorus;
2. Establishes a monthly monitoring and reporting requirement for biochemical oxygen demand (BOD₅) percent removal and total suspended solids (TSS) percent removal;
3. The permittee must conduct an Industrial Waste Survey (IWS) any time a new industrial user proposes to discharge within its jurisdiction; an existing user proposes to make a significant change in its discharge; or at an alternative minimum, once every permit cycle, and submit the results to the Department;
4. Eliminating the waiver for percent removal requirements for BOD₅ and TSS when influent strength is less than 200 mg/L;
5. Incorporating monitoring and reporting requirements for the interim mercury limitations established by the Department for this facility pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S.A. § 420 and *Waste discharge licenses*, 38 M.R.S.A. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001); and
6. Establishes a new Total Residual Chlorine limit based upon summer seasonal flow limit of 0.029 MGD and not the winter seasonal flow limit of 0.043 MGD.

CONCLUSIONS

BASED on the findings in the attached **Fact Sheet** dated September 8, 2015, and subject to the Conditions listed below, the Department makes the following CONCLUSIONS:

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

CONCLUSIONS (cont'd)

- (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 waterbody are not met, the discharge will not cause or contribute to the failure of the waterbody to meet the standards of classification;
 - (d) Where the actual quality of any classified receiving waterbody 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 waterbody, 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 *Conditions of licenses*, 38 M.R.S.A. § 414-A(1)(D) and 414-A(1-B).

ACTION

THEREFORE, the Department APPROVES the application of VASSALBORO SANITARY DISTRICT (VSD) to discharge a monthly average of 0.029 MGD between June 1st – September 30th, and a monthly average of 0.043 MGD from October 1st – May 31st of secondary treated sanitary wastewater from the VSD's Cemetery Street Facility to the Outlet Stream, Class B, in Vassalboro, Maine, SUBJECT TO ALL APPLICABLE STANDARDS AND REGULATIONS AND THE FOLLOWING CONDITIONS:

1. "Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable to All Permits," revised July 1, 2002, copy attached.
2. The attached Special Conditions, including any effluent limitations and monitoring requirements.
3. This permit becomes effective upon the date of signature below and expires at midnight five (5) years after that date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the terms and conditions of this permit and all subsequent modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. *Maine Administrative Procedure Act*, 5 M.R.S.A. § 10002 and *Rules Concerning the Processing of Applications and Other Administrative Matters*, 06-096 CMR 2(21)(A) (amended August 25, 2013).

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

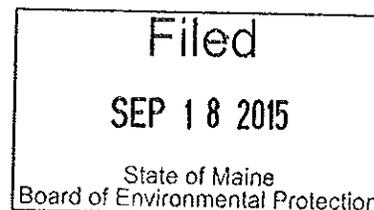
DONE AND DATED AT AUGUSTA, MAINE, THIS 18th DAY OF September 2015.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Michael Kuhn
for AVERY T. DAY, Acting Commissioner

Date of initial receipt of application December 15, 2014
Date of application acceptance December 15, 2014

Date filed with Board of Environmental Protection _____



This Order prepared by Aaron Dumont, Bureau of Water Quality

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

JUNE 1st - SEPTEMBER 30th (Summer season)

1. The permittee is authorized to discharge secondary treated sanitary wastewater from **Outfall #001A** to Outlet Stream in Vassalboro. Such discharges are limited and must be monitored by the permittee as specified below ⁽¹⁾:

| Effluent Characteristic | Discharge Limitations | | | | | | Minimum Monitoring Requirements | |
|---|-------------------------|---------------------|---------------------|----------------------------------|-----------------|----------------------|---------------------------------|--------------------|
| | Monthly Average | Weekly Average | Daily Maximum | Monthly Average | Weekly Average | Daily Maximum | Measurement Frequency | Sample Type |
| Flow [50050] | 0.029 MGD [03] | --- | --- | --- | --- | --- | Continuous [99/99] | Recorder [RC] |
| BOD ₅ [00310] | 7 lbs./day [26] | 11 lbs./day [26] | 12 lbs./day [26] | 30 mg/L [19] | 45 mg/L [19] | 50 mg/L [19] | 2/Month [02/30] | Grab [GR] |
| BOD ₅ Percent Removal ⁽²⁾ [81010] | --- | --- | --- | 85% [23] | --- | --- | 1/Month [01/30] | Calculate- [CA] |
| TSS [00530] | 7 lbs./day [26] | 11 lbs./day [26] | 12 lbs./day [26] | 30 mg/L [19] | 45 mg/L [19] | 50 mg/L [19] | 2/Month [02/30] | Grab [GR] |
| TSS Percent Removal ⁽²⁾ [81011] | --- | --- | --- | 85% [23] | --- | --- | 1/Month [01/30] | Calculate [CA] |
| Settleable Solids [00545] | --- | --- | --- | --- | --- | 0.3 ml/L [25] | 2/Month [02/30] | Grab [GR] |
| <i>E. coli</i> Bacteria ^(3,4) [31633] (May 15 th – September 30 th) | --- | --- | --- | 64/100 ml ⁽⁴⁾ [13] | --- | 427/100 ml [13] | 2/Month [02/30] | Grab [GR] |
| Total Residual Chlorine ⁽⁵⁾ [50060] | --- | --- | --- | 0.1 mg/L [19] | --- | 0.26 mg/L [19] | 5/Week [05/07] | Grab [GR] |
| Total Phosphorus ⁽⁶⁾ [00665] | Report lbs./day [26] | | | Report mg/L [19] | | Report mg/L [26] | 1/Month [01/30] | Grab [GR] |
| Total Phosphorus ⁽⁶⁾ [00665] (Beginning June 1, 2020) (June 1 st – September 30 th) | 0.33 lbs./day [26] | | | Report mg/L [19] | | Report mg/L [19] | 1/Month [01/30] | Grab [GR] |
| pH ⁽⁷⁾ [00400] | --- | --- | --- | --- | --- | 6.0 – 9.0 SU [12] | 1/Week [01/07] | Grab [GR] |
| Mercury (Total) ⁽⁸⁾ [71900] | --- | --- | --- | 8.8 ng/L [3M] | --- | 13.3 ng/L [3M] | 1/Year [01/YR] | Grab [GR] |

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

Footnotes: See Pages 7-8 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

OCTOBER 1st - MAY 31st (Non-summer)

2. The permittee is authorized to discharge secondary treated sanitary wastewater from **Outfall #001B** to Outlet Stream in Vassalboro. Such discharges are limited and must be monitored by the permittee as specified below⁽¹⁾:

| Effluent Characteristic | Discharge Limitations | | | | | | Minimum Monitoring Requirements | |
|--|-----------------------|---------------------|---------------------|----------------------------------|-----------------|----------------------|---------------------------------|-------------------|
| | Monthly Average | Weekly Average | Daily Maximum | Monthly Average | Weekly Average | Daily Maximum | Measurement Frequency | Sample Type |
| Flow [50050] | 0.043 MGD [03] | --- | --- | --- | --- | --- | Continuous [99/99] | Recorder [RC] |
| BOD ₅ [00310] | 7 lbs./day [26] | 11 lbs./day [26] | 12 lbs./day [26] | 30 mg/L [19] | 45 mg/L [19] | 50 mg/L [19] | 2/Month [02/30] | Grab [GR] |
| BOD ₅ Percent Removal ⁽²⁾ [81010] | --- | --- | --- | 85% [23] | --- | --- | 1/Month [01/30] | Calculate [CA] |
| TSS [00530] | 7 lbs./day [26] | 11 lbs./day [26] | 12 lbs./day [26] | 30 mg/L [19] | 45 mg/L [19] | 50 mg/L [19] | 2/Month [02/30] | Grab [GR] |
| TSS Percent Removal ⁽²⁾ [81011] | --- | --- | --- | 85% [23] | --- | --- | 1/Month [01/30] | Calculate [CA] |
| Settleable Solids [00545] | --- | --- | --- | --- | --- | 0.3 ml/L [25] | 2/Month [02/30] | Grab [GR] |
| <i>E. coli</i> Bacteria ^(3,4) [31633] (May 15 th - September 30 th) | --- | --- | --- | 64/100 ml ⁽⁴⁾ [13] | --- | 427/100 ml [13] | 2/Month [02/30] | Grab [GR] |
| Total Residual Chlorine ⁽⁵⁾ [50060] | --- | --- | --- | 0.1 mg/L [19] | --- | 0.26 mg/L [19] | 5/Week [05/07] | Grab [GR] |
| pH ⁽⁷⁾ [00400] | --- | --- | --- | --- | --- | 6.0 - 9.0 SU [12] | 1/Week [01/07] | Grab [GR] |
| Mercury (Total) ⁽⁸⁾ [71900] | --- | --- | --- | 8.8 ng/L [3M] | --- | 13.3 ng/L [3M] | 1/Year [01/YR] | Grab [GR] |

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

Footnotes: See Pages 7-8 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

Footnotes

1. **Sampling** – The permittee must conduct all effluent sampling and analysis 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 must be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services. Samples that are sent to another POTW licensed pursuant to *Waste discharge licenses*, 38 M.R.S.A. § 413 are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (last amended February 13, 2000). 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 this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report.
2. **Percent Removal** – The permittee must achieve a minimum of 85 percent removal of both total suspended solids and biochemical oxygen demand for all flows receiving secondary treatment. The percent removal is calculated based on influent and effluent concentration values. For influent concentrations an assumed value of 286 mg/L will be used for total suspended solids and biochemical oxygen demand.
3. ***E. coli* bacteria** – *E. coli* bacteria limits and monitoring requirements are seasonal and apply between May 15th and September 30th of each year. In accordance with 38 M.R.S.A. § 414-A(5), the Department may, at any time and with notice to the permittee, modify this permit to establish bacteria limitations on a year-round basis to protect the health and welfare of the public.
4. **Bacteria Reporting** – The monthly average fecal coliform bacteria limitation is a geometric mean limitation and sample results must be reported as such.
5. **Total Residual Chlorine** – Limitations and monitoring requirements are applicable whenever elemental chlorine or chlorine-based compounds are being used to disinfect the discharge(s). The permittee must utilize a USEPA-approved test method capable of bracketing the TRC limitations specified in this permitting action.
6. **Total Phosphorus** – Total phosphorus monitoring must be performed in accordance with **Attachment B** of this permit entitled, *Protocol For Total P Sample Collection and Analysis for Waste Water – May 1, 2014*, unless otherwise specified by the Department.

SPECIAL CONDITIONS

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

6. **pH Range Limitation** – The pH value of the effluent must not be lower than 6.0 SU nor higher than 9.0 SU at any time unless these limitations are exceeded due to natural causes. The permittee must provide oral notification of any exceedance within 24 hours from the time the permittee becomes aware of the circumstances and shall submit a written explanation of the exceedance within 5 days of the time the permittee becomes aware of the circumstances.

8. **Mercury** – The permittee must conduct all mercury monitoring required by this permit or required to determine compliance with interim limitations established pursuant to 06-096 CMR 519 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 must 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 A** of this permit for a Department report form for mercury test results. Compliance with the monthly average limitation established in Special Condition A of this permit will be based on the cumulative arithmetic mean of all mercury tests results that were conducted utilizing sampling Methods 1669 and analysis Method 1631E on file with the Department for this facility.

B. NARRATIVE EFFLUENT LIMITATIONS

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

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

3. The permittee must not discharge effluent that causes visible discoloration or turbidity in the receiving waters or otherwise impairs the uses designated for the classification of the receiving waters.

4. The permittee must not discharge effluent that lowers the quality of any classified body of water below such classification, or lowers the existing quality of any body of water if the existing quality is higher than the classification.

SPECIAL CONDITIONS

C. TREATMENT PLANT OPERATOR

The person who has management responsibility over the treatment facility must hold a minimum of a **Grade II** certificate (or higher) or must be a Maine Registered Professional Engineer pursuant to *Sewerage Treatment Operators*, 32 M.R.S.A. § 4171-4182 and *Regulations for Wastewater Operator Certification*, 06-096 CMR 531 (effective May 8, 2006). All proposed contracts for facility operation by any person must be approved by the Department before the permittee may engage the services of the contract operator.

D. NOTIFICATION REQUIREMENT

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

1. Any introduction of pollutants into the wastewater collection and treatment system from an indirect discharger in a primary industrial category discharging process wastewater; and
2. Any substantial change (increase or decrease) in the volume or character of pollutants being introduced into the wastewater collection and treatment system by a source introducing pollutants into the system at the time of permit issuance. For the purposes of this section, notice regarding substantial change must include information on:
 - (a) The quality and quantity of wastewater introduced to the wastewater collection and treatment system; and
 - (b) Any anticipated impact caused by the change in the quantity or quality of the wastewater to be discharged from the treatment system.
3. For the purposes of this section, adequate notice shall include information on:
 - (a) The quality and quantity of waste water introduced to the waste water collection and treatment system; and
 - (b) Any anticipated impact of the change in the quantity or quality of the waste water to be discharged from the treatment system.

SPECIAL CONDITIONS

E. SCHEDULE OF COMPLIANCE-PHOSPHORUS

On or before October 1, 2015 [ICIS code 95799]-VSD must submit to the Department for Review and approval a final alternatives analysis for upgrading or replacement of its three treatment facilities so as to be in compliance with Total Phosphorus limits.

On or before December 31, 2015 [ICIS code 95799]-VSD must commence funding research so as to secure adequate funds for upgrading or replacing existing treatment facilities so as to be in compliance with Total Phosphorus effluent limitations.

On or before August 1, 2016 [ICIS code 95799]-VSD must submit results of funding search, and if VSD is unable to secure adequate funding for upgrading or replacing existing facilities. If despite its best efforts, VSD is unable to secure adequate funding for upgrading or replacing existing treatment facilities so as to be in compliance with Total Phosphorus, VSD may request an amendment to this permit to revise the timeline in this Schedule of Compliance.

On or before October 1, 2017 [ICIS code 95799]-VSD shall submit to the Department for review and approval the final design of the preferred option that includes final plans, and a schedule for upgrading or replacing the existing facilities so as to be in compliance with Total Phosphorus.

On or before September 1, 2019 [ICIS code 95799]-Complete substantial construction and place into operation the preferred option in accordance with the approved plans and schedule agreed upon by the Department and VSD.

Beginning on June 1, 2020 the monthly average phosphorous limitation of 0.33 lbs./day is in effect.

F. MONITORING AND REPORTING

Monitoring results obtained during the previous month must be summarized for each month and reported on separate Discharge Monitoring Report (DMR) forms provided by the Department and **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 must be submitted to the Department-assigned inspector (unless otherwise specified by the Department) at the following address:

SPECIAL CONDITIONS

F. MONITORING AND REPORTING (cont'd)

Department of Environmental Protection
Bureau of Water Quality
Division of Water Quality Management
17 State House Station
Augusta, Maine 04333-0017

Alternatively, if the permittee submits an electronic DMR (eDMR), the completed eDMR must be electronically submitted to the Department by a facility authorized DMR Signatory not later than close of business on the **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 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.

G. LIMITATIONS FOR INDUSTRIAL USERS

Pollutants introduced into the wastewater collection and treatment system by a non-domestic source (user) must not pass through or interfere with the operation of the treatment system. The permittee must conduct an Industrial Waste Survey (IWS) any time a new industrial user proposes to discharge within its jurisdiction; an existing user proposes to make a significant change in its discharge; or at an alternative minimum, once every permit cycle, and submit the results to the Department. The IWS must identify, in terms of character and volume of pollutants, any Significant Industrial Users discharging into the POTW subject to Pretreatment Standards under section 307(b) of the federal Clean Water Act, 40 CFR Part 403 (general pretreatment regulations) or *Pretreatment Program*, 06-096 CMR 528 (last amended March 17, 2008).

H. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with: 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on December 15, 2014; 2) the terms and conditions of this permit; and 3) only from Outfall #001A (Summer) and #001B (Winter). Discharges of wastewater from any other point source are not authorized under this permit, and shall be reported in accordance with Standard Condition D(1)(f), *Twenty-four hour reporting*, of this permit.

SPECIAL CONDITIONS

I. WET WEATHER FLOW MANAGEMENT PLAN

The treatment facility staff must have a current written Wet Weather Flow Management Plan to direct the staff on how to operate the facility effectively during periods of high flow. The Department acknowledges that the existing collection system may deliver flows in excess of the monthly average design capacity of the treatment plant during periods of high infiltration and rainfall.

The plan must conform to Department guidelines for such plans and shall include operating procedures for a range of intensities, address solids handling procedures (including septic waste and other high strength wastes if applicable) and provide written operating and maintenance procedures during the events.

The permittee must review their plan at least annually and record any necessary changes to keep the plan up to date. The Department may require review and update of the plan as it is determined to be necessary.

J. OPERATION & MAINTENANCE (O&M) PLAN

The permittee must maintain a current written comprehensive Operation & Maintenance (O&M) Plan for the facility. The plan must provide a systematic approach by which the permittee must 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 must evaluate and modify the O&M Plan including site plan(s) and schematic(s) for the wastewater treatment facility to ensure that it is up-to-date. The O&M Plan must 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 wastewater treatment facility, the permittee must submit the updated O&M Plan to their Department inspector for review and comment.

SPECIAL CONDITIONS

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

By December 31 of each calendar year, the permittee must provide the Department with a certification describing any of the following that have occurred since the effective date of this permit *[ICIS Code 75305]*. See **Attachment C** of the Fact Sheet for an acceptable certification form to satisfy this Special Condition.

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

In addition, in the comments section of the certification form, the permittee must provide the Department with statements describing;

- (d) Changes in stormwater collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge; and
- (e) Increases in the type or volume of transported (hailed) wastes accepted by the facility.

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

L. REOPENING OF PERMIT FOR MODIFICATIONS

In accordance with 38 M.R.S.A. § 414-A(5) and 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 limitations 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.

M. 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 must remain in full force and effect, and must 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

Maine Department of Environmental Protection

Effluent Mercury Test Report

Name of Facility: _____ State License # W _____

MEPDES License # _____

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

SAMPLE COLLECTION INFORMATION

Sampling Date: ____ / ____ / ____ Sampling Time: _____ AM / PM
 mm dd yy

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.

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 and 1631 in accordance with instructions from the DEP.

By: _____ Date: _____
Title: _____

NOTE: PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

Form DEPLW 0112

December 15, 2009

ATTACHMENT B

Protocol for Total Phosphorus Sample Collection and Analysis for Waste Water and Receiving Water Monitoring Required by Permits

Approved Analytical Methods: EPA 200.7 (Rev. 44), 365.1 (Rev. 2.0), (Lachat), 365.3, 365.4; SM 3120 B, 4500-P B.5, 4500-P E, 4500-P F, 4500-P G, 4500-P H; ASTM D515-88(A), D515-88(B); USGS I-4471-97, I-4600-85, I-4610-91; OMAAOAC 973.55, 973.56

Sample Collection: The Maine DEP is requesting that total phosphorus analysis be conducted on composite effluent samples, unless a facility's Permit specifically designates grab sampling for this parameter. Facilities can use individual collection bottles or a single jug made out of glass or polyethylene. Bottles and/or jugs should be cleaned prior to each use with dilute HCL. This cleaning should be followed by several rinses with distilled water. Commercially purchased, pre-cleaned sample containers are an acceptable alternative. The sampler hoses should be cleaned, as needed.

Sample Preservation: During compositing the sample must be at 0-6 degrees C (without freezing). If the sample is being sent to a commercial laboratory or analysis cannot be performed the day of collection then the sample must be preserved using H₂SO₄ to obtain a sample pH of <2 su and refrigerated at 0-6 degrees C (without freezing). The holding time for a preserved sample is 28 days.

Note: Ideally, Total P samples are preserved as described above. However, if a facility is using a commercial laboratory then that laboratory may choose to add acid to the sample once it arrives at the laboratory. The Maine DEP will accept results that use either of these preservation methods.

Laboratory QA/QC: Laboratories must follow the appropriate QA/QC procedures that are described in each of the approved methods.

Sampling QA/QC: If a composite sample is being collected using an automated sampler, then once per month run a blank on the composite sampler. Automatically, draw distilled water into the sample jug using the sample collection line. Let this water set in the jug for 24 hours and then analyze for total phosphorus. Preserve this sample as described above.

ATTACHMENT C

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHAPTER 530.2(D)(4) CERTIFICATION

MEPDES# _____ Facility Name _____

| Since the effective date of your permit, have there been; | | NO | YES Describe in comments section |
|---|---|--------------------------|-------------------------------------|
| 1 | Increases in the number, types, and flows of industrial, commercial, or domestic discharges to the facility that in the judgment of the Department may cause the receiving water to become toxic? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 | Changes in the condition or operations of the facility that may increase the toxicity of the discharge? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3 | Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4 | Increases in the type or volume of hauled wastes accepted by the facility? | <input type="checkbox"/> | <input type="checkbox"/> |

COMMENTS:

Name (printed): _____

Signature: _____ Date: _____

This document must be signed by the permittee or their legal representative.

This form may be used to meet the requirements of Chapter 530.2(D)(4). This Chapter requires all dischargers having waived or reduced toxic testing to file a statement with the Department describing changes to the waste being contributed to their system as outlined above. As an alternative, the discharger may submit a signed letter containing the same information.

Scheduled Toxicity Testing for the next calendar year

| Test Conducted | 1 st Quarter | 2 nd Quarter | 3 rd Quarter | 4 th Quarter |
|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| WET Testing | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Priority Pollutant Testing | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Analytical Chemistry | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other toxic parameters ¹ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Please place an "X" in each of the boxes that apply to when you will be conducting any one of the three test types during the next calendar year.

¹ This only applies to parameters where testing is required at a rate less frequently than quarterly.

**MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
AND
WASTE DISCHARGE LICENSE**

FACT SHEET

Date: September 8, 2015

**MEPDES PERMIT: ME0102661
WASTE DISCHARGE LICENSE: W008102-6A-G-R**

NAME AND ADDRESS OF APPLICANT:

**VASSALBORO SANITARY DISTRICT (VSD)
P.O. BOX 183
NORTH VASSALBORO, ME 04962**

COUNTY: KENNEBEC

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

**VASSALBORO SANITARY DISTRICT
CEMETERY ROAD FACILITY
VASSALBORO, MAINE 04962**

RECEIVING WATER / CLASSIFICATION: OUTLET STREAM/CLASS B

COGNIZANT OFFICIAL AND TELEPHONE NUMBER:

**RAY BRETON
CHAIR OF BOARD OF TRUSTEES
1015 MAIN STREET
VASSALBORO, ME 04962**

FACILITY CONTRACT OPERATOR:

**MR. CHARLES APPLEBEE
(207) 882-7744
waterqualityandcompliance@roadrunner.com**

1. APPLICATION SUMMARY

- a. Application: The Vassalboro Sanitary District (VSD) has submitted a timely and complete application to the Department of Environmental Protection (Department) for a renewal of combination Waste Discharge License (WDL) #W008102-6A-E-R / Maine Pollutant Discharge Elimination System (MEPDES) permit # ME0102661, which was issued by the Department on March 11, 2010, and expired on March 11, 2015. The March 11, 2010 permit authorized the monthly average discharge of up to 0.029 million gallons per day (MGD) of secondary treated sanitary wastewater from a publicly owned treatment works (POTW) (Cemetery Road) to Outlet Stream, Class B, in Vassalboro, Maine from June 1st – September 30th (summer) of each year and 0.043 MGD from October 1st – May 31st (non-summer) of each year.

2. PERMIT SUMMARY

- a. Terms and conditions

This permitting action is different from the March 11, 2010 permit in that it:

1. Establishes a *Schedule of Compliance*, Special Condition E in accordance with *Waste Discharge License Conditions*, 06-096 CMR 523(7) (effective January 12, 2001) for the imposition of and compliance with water quality-based limitations for total phosphorus;
2. Establishes a monthly monitoring and reporting requirement for biochemical oxygen demand (BOD₅) percent removal and total suspended solids (TSS) percent removal;
3. The permittee must conduct an Industrial Waste Survey (IWS) any time a new industrial user proposes to discharge within its jurisdiction; an existing user proposes to make a significant change in its discharge; or at an alternative minimum, once every permit cycle, and submit the results to the Department;
4. Eliminating the waiver for percent removal requirements for BOD₅ and TSS when influent strength is less than 200 mg/L;
5. Incorporating monitoring and reporting requirements for the interim mercury limitations established by the Department for this facility pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S.A. § 420 and *Waste discharge licenses*, 38 M.R.S.A. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001); and
6. Establishes a new Total Residual Chlorine limit based upon summer seasonal flow limit of 0.029 MGD and not the winter seasonal flow limit of 0.043 MGD.

2. PERMIT SUMMARY (cont'd)

- b. History: This section provides a summary of significant licensing/permitting actions and milestones that have been completed for the VSD's Cemetery Street Facility.

June 30, 1986 – The U.S. Environmental Protection Agency (USEPA) issued National Pollutant Discharge Elimination System (NPDES) permit #ME0100692 to the VSD for the discharge of secondary treated wastewater from three separate wastewater treatment facilities owned and operated by the VSD to Outlet Stream in Vassalboro. In addition to authorizing the discharge from the Cemetery Street Facility, the 6/30/86 NPDES permit also authorized the discharge of treated wastewater from the East Vassalboro and North Main Street Facilities. The 6/30/86 NPDES permit did not establish discharge flow limitations for the three facilities. The 6/30/86 NPDES permit superseded the previous NPDES permit issued on May 31, 1979.

March 14, 1990 – The USEPA issued permit modification #ME0100692 to the VSD to revise (reduce) the minimum monitoring frequency requirements for pH and *E. coli* bacteria from those established in the 6/30/86 permitting action.

February 15, 1995 – The Department issued a letter to the VSD stating that the facility was exempt from the requirements of the *Surface Water Toxics Control Program*, 06-096 CMR 530(5) (effective March 21, 2012), based on the licensed flow limitation, which was less than 50,000 gallons per day.

February 22, 2000 – The Department issued WDL #W008102-5L-C-R to the VSD for the monthly average discharge of up to 29,000 gallons per day of secondary treated wastewater to Outlet Stream in Vassalboro. The 2/22/00 WDL was the first license issued by the Department following an administrative decision to assign separate license numbers to the three individual wastewater treatment facilities owned and operated by the VSD. The 2/22/2000 WDL also assigned a new permit compliance system (PCS) tracking system number of MEU508102 to this facility. Prior to the 2/22/00 licensing action, all three of the VSD's treatment facilities contained the same PCS number (#ME0100692) and the Cemetery Street plant was distinguished from the others by assigning it an outfall identifier of #003. Therefore, compliance data for this facility is organized as follows: 1) on or prior to March 31, 2000: PCS# ME0100692, Pipe #003A; 2) between April 1, 2000 and January 31, 2005: PCS #MEU508102; and 3) following the assignment of a new MEPDES number associated with the 1/31/05 permitting action: MEPDES #ME0102661. The discharge from the VSD's Cemetery Street Facility was previously authorized in WDL #W002597-45-B-R issued on March 25, 1986 and WDL #W002597-45-A-N issued on September 23, 1985.

May 23, 2000 – The Department initiated a modification of the 2/22/00 WDL by establishing interim average and maximum concentration limits for mercury.

2. PERMIT SUMMARY (cont'd)

January 12, 2001 – The Department received authorization from the USEPA to administer the National Pollutant Discharge Elimination System (NPDES) permit program in Maine. From that date forward, the permit program has been referred to as the Maine Pollutant Discharge Elimination System (MEPDES) permit program and ME0102661 (same as the NPDES permit) will be the primary reference number for the Cemetery Street facility.

January 31, 2005 – The Department issued MEPDES permit ME0102661/WDL #W008102-5L-D-R for a five-year term.

March 11, 2010 – The Department issued MEPDES permit ME0102661/WDL #W008101-6A-E-R for a five-year term.

January 8, 2013 – The Department initiated a modification of the 3/11/2010 permit to reduce the monitoring frequency for mercury to once per year.

December 15, 2014 – The VSD submitted, and the Department accepted as complete for processing, a timely and complete application to the Department for the renewal of ME0102661/WDL #W008101-6A-G-R.

- c. Source Description: The Vassalboro Sanitary District owns and operates the Cemetery Street municipal waste water treatment facility located on Cemetery Street for the treatment of sanitary waste water generated by a total of approximately 70 commercial and residential users in the Town of Vassalboro. There are no significant industrial users contributing flows to the treatment works, the facility is not required to implement a pretreatment program, there are no combined sewer overflow (CSO) points associated with the collection system, and the gravity sewer collection system is 100% separated. The VSD is not authorized to accept septage at the Cemetery Street Facility.

A map showing the location of the VSD's Cemetery Street, North Main Street, East Vassalboro Facilities and the receiving water is included as Fact Sheet **Attachment A**.

- d. Wastewater Treatment: Sanitary wastewater generated by users in the northern end of the sewer portion of the Town of Vassalboro is conveyed to the Cemetery Street Facility via a gravity sewer collection system and four (4) pump stations referred to as Oak Grove Pumping Station, Willow Street Pumping Station, Cemetery Street Pumping Station and South Main Street Pumping Station on the sewer system layout included as Fact Sheet **Attachment A**.

2. PERMIT SUMMARY (cont'd)

The VSD provides a primary level of treatment via five (5) septic tanks (three 4,000-gallon and two 8,000-gallon), which are located in various sections of the collection system. Following primary treatment (settling) the wastewater is conveyed to an open sand filtration system that is used to provide a secondary level of treatment. The filtration system consists of three (3) approximately 7,600 square foot (80-foot wide by 95-foot long) filter beds that are operated in parallel. The filter beds contain 3 feet of filter sand over 8 to 14 inches of ¾-inch underdrain stone over 4 inches of sand bedding. A portion of the secondary treated (filtered) wastewater exiting the filtration system is chlorinated and recirculated to the filter beds to control growth in the filter media. The remaining effluent from the filter beds is collected in a single effluent pipe and is conveyed to a dosing tank measuring approximately 9 feet wide by 13 feet long for chlorination and dechlorination using a tablet chlorination and dechlorination system. See **Attachment B** of this Fact Sheet.

Final effluent is conveyed for discharge to Outlet Stream via a 6-inch diameter PVC outfall pipe that extends into the receiving waters to a depth of approximately four (4) feet below the surface of the water at mean low water. The outfall pipe is not fitted with diffusers or other mechanisms that would enhance mixing of the effluent with the receiving waters.

3. CONDITIONS OF PERMIT

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 the 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 Department rule *Surface Water Toxics Control Program*, 06-096 CMR 530 (effective March 21, 2012), 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 July 29, 2012), 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

Classification of major river basins, 38 M.R.S.A. § 467(4)(H)(2) classifies tributaries of the Sebasticook River, unless otherwise specified and which includes Outlet Stream at the point of discharge, as a Class B water. *Standards for classification of fresh surface waters*, 38 M.R.S.A. § 465(3) describes the standards for Class B waters.

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2012 Integrated Water Quality Monitoring and Assessment Report, prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists the China Lake Outlet (ABD Assessment Unit ME0103000309_328R01) located at Cemetery Street in Vassalboro as “Category 3: Rivers and Streams with Insufficient Data or Information to Determine if Designated Uses are Attained (One or More Uses may be Impaired).” The Report states that 2002 and 2007 aquatic life assessments determined the waters were attaining water quality standards.

The Report lists all of Maine’s fresh waters as, “Category 4-A: Waters Impaired by Atmospheric Deposition of Mercury.” Impairment in this context refers to a statewide fish consumption advisory due to elevated levels of mercury in some fish tissues. The Report states, “All freshwaters are listed in Category 4A (TMDL Completed) due to USEPA approval of a Regional Mercury TMDL. Maine has a fish consumption advisory for fish taken from all freshwaters due to mercury. Many fish from any given waters 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.” 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.” 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.” 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.

The draft 2014 Report will move this stream segment into “Category 5-A: Rivers and Streams Impaired by Pollutants Other Than Those Listed in 5-B Through 5-D (TMDL Required)” and update the length from 4.27 miles to 7.8 miles, extending into Winslow, Maine. Original listing of this segment in Category 3 was based on data collected at biomonitoring station 604 (downstream of Rt. 137 in Winslow) but this location was not included in 4.27-mile segment.

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

New 5-A listing in 2014 cycle for Aquatic Life Use - algae (periphyton) impairment; biomonitoring at station S-604 showed Class C in 2002 and 2012, and non-attainment in 2007. The new impairment listing in 2014 is because the 2012 report only addresses macro invertebrate data, not algae data, and it's the presence of algae that is the cause for the proposed non-attainment listing. Although the 2014 Report has not been finalized or approved by the USEPA at this time, the Department is taking this new information into consideration in establishing effluent limitations and monitoring requirements to ensure the discharge does not cause or contribute to non-attainment of water quality standards.

The Department has no information that the discharge from the permittee, as conditioned, causes or contributes to non-attainment of applicable Class B water quality standards.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

- a. Flow: The previous permitting action established a monthly average discharge flow limitation of 0.029 MGD (29,000 gallons per day, GPD) to be monitored on a continuous basis. In order to ensure that there is no net increase in phosphorus loading to the receiving water during the warm season when phosphorus has the highest potential to affect water quality, this permitting action is carrying forward the monthly average discharge flow limit of 0.029 MGD during the warm season (June 1 through September 30) of each year and is establishing a monthly average discharge flow limitation of 0.043 MGD during the cold season (October 1 through May 31) of each year. This permitting action is carrying forward all mass-based effluent limits based on the previously established flow limit of 0.029 MGD to ensure that there is no net increase of pollutants discharged to the receiving water.

In conjunction with carrying forward seasonal flow limitations the Department is establishing outfall identifiers that correspond with seasonal flow limitations. For the Summer Season of June 1st through September 30th the outfall identifier will be 001A, and for the Winter Season of October 1st through May 31st the outfall identifier will be 001B.

The Department reviewed 12 Discharge Monitoring Reports (DMRs) that were submitted for the period summer period of June 30 – September 30 for calendar years 2011-2014. A review of data indicates the following:

Flow June – September (DMRs=12)

| Value | Limit (MGD) | Range (MGD) | Mean (MGD) |
|-----------------|-------------|---------------|------------|
| Monthly Average | 0.029 | 0.003 – 0.030 | 0.020 |

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

The Department reviewed 36 Discharge Monitoring Reports (DMRs) that were submitted for the period summer period of October 31 – May 31 for calendar years 2011-2014. A review of data indicates the following:

Flow October – May (DMRs=36)

| Value | Limit (MGD) | Range (MGD) | Mean (MGD) |
|-----------------|-------------|---------------|------------|
| Monthly Average | 0.043 | 0.003 – 0.029 | 0.019 |

- b. Dilution Factors: The Department established applicable dilution factors for the discharge in accordance with freshwater protocols established in *Surface Water Toxics Control Program*, 06-096 CMR 530 (last amended March 21, 2012). The previous permitting action established dilution factors based on the increased non-summer season discharge flow limitation of 0.043 MGD. In this permitting action, the Department is revising the dilution factors associated with the discharge based on the summer season flow limit of 0.029 MGD which is representative of effluent discharges to the receiving water when water quality impacts are at their potential highest.

With a monthly average flow limit of 0.029 MGD, dilution factors associated with the discharge from the VSD's Cemetery Road Street Facility may be calculated as follows:

$$\text{Modified Acute: } \frac{1}{4} \text{ 1Q10} = 0.57 \text{ cfs} \Rightarrow \frac{(0.57 \text{ cfs})(0.6464) + 0.029 \text{ MGD}}{0.029 \text{ MGD}} = 13.7:1$$

$$\text{*Acute: 1Q10} = 2.3 \text{ cfs} \Rightarrow \frac{(2.3 \text{ cfs})(0.6464) + 0.029 \text{ MGD}}{0.029 \text{ MGD}} = 52.3:1$$

$$\text{*Chronic: 7Q10} = 2.3 \text{ cfs} \Rightarrow \frac{(2.3 \text{ cfs})(0.6464) + 0.029 \text{ MGD}}{0.029 \text{ MGD}} = 52.3:1$$

$$\text{Harmonic Mean}^1 = 6.9 \text{ cfs} \Rightarrow \frac{(6.9 \text{ cfs})(0.6464) + 0.029 \text{ MGD}}{0.029 \text{ MGD}} = 154.8:1$$

*The 1Q10 and 7Q10 flow rates are equal as the source has a legal minimum flow requirement of 2.3 cfs.

06-096 CMR 530(4)(B)(1) states that analyses using numeric acute criteria for aquatic life must be based on $\frac{1}{4}$ of the 1Q10 stream design flow to prevent substantial acute toxicity within any mixing zone. The regulation goes on to say that 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, up to including all of it.

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

The Department has determined that the VSD's outfall pipe does not achieve rapid and complete mixing with the receiving water. Consequently, the Department is utilizing the default stream flow of $\frac{1}{4}$ of the 1Q10 in acute evaluations.

¹ The harmonic mean dilution factor is approximated by multiplying the chronic dilution factor by three (3). This multiplying factor is based on guidelines for estimation of human health dilution presented in the U.S. EPA publication, "Technical Support Document for Water Quality-Based Toxics Control" (Office of Water; EPA/505/2-90-001, page 88), and represents an estimation of harmonic mean flow on which human health dilutions are based in a riverine 7Q10 flow situation.

c. Biochemical Oxygen Demand (BOD₅) and Total Suspended Solids (TSS):

The previous permitting action established, and this permitting action is carrying forward, monthly average and weekly average technology-based effluent limits of 30 mg/L and 45 mg/L, respectively, for BOD₅ and TSS pursuant to the secondary treatment regulation at 40 CFR 133.102 and 06-096 CMR 525(3)(III). The previous permit also established daily maximum technology-based effluent limit of 50 mg/L for both BOD₅ and TSS based on a Department best professional judgment of best practicable treatment for secondary treated wastewater.

The mass-based limits were calculated using the summer season monthly average discharge flow limit of 0.029 MGD as follows:

Monthly Average Mass Limit: $(30 \text{ mg/L})(8.34 \text{ lbs./gallon})(0.029 \text{ MGD}) = 7 \text{ lbs./day}$

Weekly Average Mass Limit: $(45 \text{ mg/L})(8.34 \text{ lbs./gallon})(0.029 \text{ MGD}) = 11 \text{ lbs./day}$

Daily Maximum Mass Limit: $(50 \text{ mg/L})(8.34 \text{ lbs./gallon})(0.029 \text{ MGD}) = 12 \text{ lbs./day}$

This permitting action is also carrying forward the requirement for a minimum of 85% removal of BOD₅ & TSS pursuant to 06-096 CMR 525(3)(III)(a)(3) and (b)(3). The permittee has not demonstrated that it qualifies for special considerations pursuant to 06-096 CMR 525(3)(IV) to maintain a waiver from the 85% removal requirement when influent concentration is less than 200 mg/L, which was established in the previous permit. Therefore, this permitting action is eliminating the waiver from the 85% removal requirement provided in the previous permitting action when influent concentration is less than 200 mg/L.

The permittee's wastewater treatment system does not contain an influent sampling location that is representative of raw wastewater conditions. According to the USEPA's *Onsite Wastewater Treatment Systems Manual*, dated February 2002, table 3-7 entitled "Constituent Mass Loadings and Concentrations in Typical Residential Wastewater" high end range of values, influent values for BOD₅ and TSS may be assumed to be 286 mg/L and 300 mg/L, respectively. Therefore, this permitting action authorizes the permittee to assume an influent BOD₅ and TSS concentration value of 286 mg/L for purposes of calculating the monthly percent removal value.

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

A summary of BOD₅ and data as reported on the DMRs submitted to the Department for the summer seasons of June-September calendar years 2011-2014 is as follows:

BOD₅ mass June-September (DMRs = 12)

| Value | Limit (lbs./day) | Range (lbs./day) | Mean (lbs./day) |
|-----------------|------------------|------------------|-----------------|
| Monthly Average | 7 | 0.15 – 9.00 | 2.05 |
| Weekly Average | 11 | 0.20 – 27.00 | 4.33 |
| Daily Maximum | 12 | 0.20 – 27.00 | 4.33 |

BOD₅ concentration June-September (DMRs = 12)

| Value | Limit (mg/L) | Range (mg/L) | Mean (mg/L) |
|-----------------|--------------|--------------|-------------|
| Monthly Average | 30 | 2 – 48 | 14.0 |
| Weekly Average | 45 | 2 – 142 | 29.10 |
| Daily Maximum | 50 | 2 – 142 | 29.10 |

A summary of BOD₅ and data as reported on the DMRs submitted to the Department for the non-summer seasons of October- May calendar years 2011-2014 is as follows:

BOD₅ mass October-May (DMRs = 22)

| Value | Limit (lbs./day) | Range (lbs./day) | Mean (lbs./day) |
|-----------------|------------------|------------------|-----------------|
| Monthly Average | 7 | 0.08 – 8.48 | 2.54 |
| Weekly Average | 11 | 0.11 – 11.0 | 3.74 |
| Daily Maximum | 12 | 0.11 – 11.0 | 3.74 |

BOD₅ concentration October-May (DMRs = 22)

| Value | Limit (mg/L) | Range (mg/L) | Mean (mg/L) |
|-----------------|--------------|--------------|-------------|
| Monthly Average | 30 | 2 – 62 | 17.6 |
| Weekly Average | 45 | 2 – 100 | 25.2 |
| Daily Maximum | 50 | 2 – 100 | 25.2 |

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

A summary of TSS and data as reported on the DMRs submitted to the Department for the summer seasons of June-September calendar years 2011-2014 is as follows:

TSS Mass June-September (DMRs =12)

| Value | Limit (lbs./day) | Range (lbs./day) | Mean (lbs./day) |
|-----------------|------------------|------------------|-----------------|
| Monthly Average | 7 | 0.10 – 2.20 | 1.16 |
| Weekly Average | 11 | 0.10 – 2.70 | 1.59 |
| Daily Maximum | 12 | 0.10 – 2.70 | 1.59 |

TSS Concentration June-September (DMRs =12)

| Value | Limit (mg/L) | Range (mg/L) | Mean (mg/L) |
|-----------------|--------------|--------------|-------------|
| Monthly Average | 30 | 3.8 – 10.0 | 5.8 |
| Weekly Average | 45 | 4.80 – 14.00 | 7.60 |
| Daily Maximum | 60 | 4.80 – 14.00 | 7.60 |

A summary of TSS and data as reported on the DMRs submitted to the Department for the summer seasons of October-May calendar years 2011-2014 is as follows:

TSS Mass October-May (DMRs =27)

| Value | Limit (lbs./day) | Range (lbs./day) | Mean (lbs./day) |
|-----------------|------------------|------------------|-----------------|
| Monthly Average | 7 | 0.06 – 3.29 | 1.30 |
| Weekly Average | 11 | 0.11 – 5.10 | 1.80 |
| Daily Maximum | 12 | 0.11 – 5.10 | 1.80 |

TSS concentration October-May (DMRs =27)

| Value | Limit (mg/L) | Range (mg/L) | Mean (mg/L) |
|-----------------|--------------|--------------|-------------|
| Monthly Average | 30 | 3.0 – 16.30 | 8.52 |
| Weekly Average | 45 | 3.0 – 37.00 | 11.24 |
| Daily Maximum | 60 | 3.0 – 37.00 | 11.24 |

Minimum monitoring frequency requirements in MEPDES permits are prescribed by 06-096 CMR Chapter 523§5(i). The USEPA has published guidance entitled, *Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies* (USEPA Guidance April 1996). In addition, the Department has supplemented the EPA guidance with its own guidance entitled, *Performance Based Reduction of Monitoring Frequencies - Modification of EPA Guidance Released April 1996* (Maine DEP May 22, 2014). Both documents are being utilized to evaluate the compliance history for each parameter regulated by the previous permit to determine if a reduction in the monitoring frequencies are justified.

This permitting action is carrying forward the minimum monitoring frequency requirement of 2/Month.

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

- e. Settleable Solids: The previous permitting action established a daily maximum technology-based concentration limit of 0.3 ml/L and a minimum monitoring frequency requirement of once per month for settleable solids. This permitting action is carrying forward the daily maximum concentration limit of 0.3 ml/L as it is considered by the Department to be BPT for secondary treated sanitary wastewater, and the minimum monitoring frequency requirement twice per month (2/Month) based on a Department BPJ determination of the level of monitoring necessary to assess compliance with this parameter in consideration of the facility's past demonstrated performance.

It is noted that a summary of settleable solids data as reported on the monthly DMRs for the period of January 31, 2011 through February, 2015 (n=39) indicates the daily maximum settleable solids concentration discharge has been in compliance with the 0.3 ml/L limit 100% of the time.

- f. Escherichia coli bacteria: The previous permitting action established, and this permitting action is carrying forward, seasonal monthly average and daily maximum *Escherichia coli* bacteria limitations of 64 colonies/100 ml (geometric mean) and 427 colonies/100 ml (instantaneous), respectively, that are in effect between May 15 and September 30, inclusive, of each year.

During calendar year 2005, Maine's Legislature approved a new daily maximum water quality standard of 236 colonies/100 ml for Class B and Class C waters. The Department has determined that end-of-pipe limitations for the instantaneous concentration standard of 427 colonies/100 mL will be achieved through available dilution of the effluent with the receiving waters and need not be revised in MEPDES permits for facilities with adequate dilution (at least 1.1:1 for facilities in Class B waters).

A review of the bacterial testing data as reported on the monthly DMRs for the period of May 31, 2011 through September 30, 2014 indicates the permittee to have been in compliance with the permit limits 85% of the time. A statistical summary of the reported *E. coli* bacteria test results is as follows:

***E. coli* Bacteria (DMRs=20)**

| Value | Limit (col/100 ml) | Range (col/100 ml) | Mean (col/100 ml) |
|-----------------|-----------------------|-----------------------|----------------------|
| Monthly Average | 64 | 1 – 378 | 40 |
| Daily Maximum | 427 | 1 – 2,420 | 189 |

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

- g. Total Residual Chlorine (TRC): The previous permitting action established a daily maximum water quality-based concentration limit of 0.15 mg/L for the Non-summer season and monthly average flow of 0.043, and a monthly average technology-based concentration limit of 0.1 mg/L for TRC, as well as a minimum monitoring frequency requirement of five times per week. This permit is establishing acute and chronic dilution factors associated with the discharge water quality-based concentration thresholds for the (Summer Season) months June 1st – September 30th using the monthly average flow of 0.029 MGD. The TRC discharge may be calculated as follows:

| Acute (A) Criterion | Chronic (C) Criterion | Mod. A & C Dilution Factors | Calculated | |
|------------------------|--------------------------|--------------------------------|--------------------|----------------------|
| | | | Acute Threshold | Chronic Threshold |
| 0.019 mg/L | 0.011 mg/L | 13.7:1 (A) 52.3:1 (C) | 0.26 mg/L | 0.60 mg/L |

The Department has established a daily maximum BPT limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. For facilities that need to dechlorinate the discharge in order to meet water quality-based thresholds, the Department has established daily maximum and monthly average BPT limits of 0.3 mg/L and 0.1 mg/L, respectively. VSD dechlorinates the effluent prior to discharge in order to achieve compliance with the water quality-based thresholds. The calculated acute water quality-based threshold of 0.26 mg/L is more stringent than the daily maximum technology-based standard of 0.3 mg/L and is therefore being established in this permitting action. The monthly average technology-based standard of 0.1 mg/L is more stringent than the calculated chronic water quality-based threshold of 0.6 mg/L and is therefore being forward in this permitting action.

A summary of TRC data as reported on the monthly DMRs for the period of May 31, 2011 through October 30, 2014 is as follows:

Total residual chlorine (DMRs=15)

| Value | Limit (mg/L) | Range (mg/L) | Mean (mg/L) |
|-----------------|--------------|--------------|-------------|
| Monthly Average | 0.1 | 0.02 – 0.07 | 0.05 |
| Daily Maximum | 0.15 | 0.04 – 0.11 | 0.08 |

This permitting action is carrying forward the minimum monitoring frequency of five times per week (5/Week) based on a Department BPJ determination of the level of monitoring necessary to assess compliance with this parameter in consideration of the facility's past demonstrated performance. Although bacteria limitations are seasonal and apply between May 15 and September 30 of each year, TRC monitoring must be conducted during any periods that chlorine-based compounds are in use at the facility.

6 EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

- h. pH: The previous permitting action established a technology based pH range limitation of 6.0 –9.0 standard units pursuant to 06-096 CMR 525(3)(III)(c) along with a monitoring frequency of 1/Week, both of which are being carried forward in this permitting action.
- i. Whole Effluent Toxicity (WET), Priority Pollutant, and Analytical Chemistry Testing: 38 M.R.S.A. § 414-A and 38 M.R.S.A. § 420 prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA. 06-096 CMR 530 sets forth effluent monitoring requirements and procedures to establish safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected and narrative and numeric water quality criteria are met. 06-096 CMR 584 sets forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

06-096 CMR 530(2)(A) states, “...all licensed dischargers of industrial process wastewater or domestic wastes discharging to surface waters of the State must meet the testing requirements of this section. Dischargers of other types of wastewater are subject to this subsection when and if the Department determines that toxicity of effluents may have reasonable potential to cause or contribute to exceedences of narrative or numerical water quality criteria.”

06-096 CMR 5302(A) specifies that following dischargers are exempt from testing requirements of the toxics rule unless the Department determines that there is a need for testing based on the nature, location or circumstances of an individual discharge.

- (1) *Discharges from individual discharge points licensed to discharge less than 50,000 gallons per day of solely domestic wastewater and with a chronic dilution factor of at least 50 to 1, provided no holding tank wastes containing chemicals are accepted by the facility;*
- (2) *Discharges from residential overboard discharge systems; or*
- (3) *Discharges from combined sewer overflow discharge points, provided the owner of the sewerage system is conducting or participating in a discharge abatement program.*

The discharge from the VSD is less than 50,000 gpd, the chronic dilution factor is greater than 50:1, and the wastewater has domestic-like characteristics. Therefore, the Department concludes that there is not a need for testing based on the nature, location or circumstances of an individual discharge. However, should there be a substantial change in the characteristics of the discharge in the future the Department may reopen this permit pursuant to Special Condition L, *Reopening of Permit for Modifications*, to incorporate the applicable whole effluent toxicity (WET), priority pollutant or analytical testing requirements cited above.

6 EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

- j. Mercury: Pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S.A. § 420 and *Waste discharge licenses*, 38 M.R.S.A. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001), the Department issued a Notice of Interim Limits for the Discharge of Mercury to the permittee on May 23, 2000, thereby administratively modifying MEPDES #ME0102661/WDL # W008101-6A-D-R by establishing interim monthly average and daily maximum effluent concentration limits of 8.8 parts per trillion (ppt) and 13.3 ppt, respectively, and a minimum monitoring frequency requirement of two (2) tests per year for mercury. On February 6, 2012, the Department issued a minor revision to the March 11, 2008 permit thereby revising the minimum monitoring frequency requirement from twice per year to once per year pursuant to 38 M.R.S.A. § 420(1-B)(F).
- k. Total Phosphorus: *Waste Discharge License Conditions*, 06-096 CMR 523 (effective January 12, 2001) specifies that water quality based limits are necessary when it has been determined that a discharge has a reasonable potential to cause or contribute to an excursion above any State water quality standard including State narrative criteria¹. In addition, 06-096 CMR 523 specifies that water quality based limits may be based upon criterion derived from a proposed State criterion, or an explicit State policy or regulation interpreting its narrative water quality criterion, supplemented with other relevant information which may include: USEPA's Water Quality Standards Handbook, October 1983, risk assessment data, exposure data, information about the pollutant from the Food and Drug Administration, and current USEPA criteria documents.

USEPA's Quality Criteria for Water 1986 (Gold Book) puts forth an in-stream phosphorus concentration goal of less than 0.1 mg/L in streams or other flowing waters not discharging directly to lakes or impoundments, to prevent nuisance algal growth. The use of the 0.1 mg/L Gold Book value is consistent with the requirements of 06-096 CMR 523 noted above for use in a reasonable potential (RP) calculation.

Based on the above rationale, the Department has chosen to utilize the Gold Book value of 0.1 mg/L. It is the Department's intent to continue to make determinations of actual attainment or impairment based upon environmental response indicators from specific water bodies. The use of the Gold Book value of 0.1 mg/L for use in the RP calculation will enable the Department to establish water quality based limits in a manner that is reasonable and that appropriately establishes the potential for impairment, while providing an opportunity to acquire environmental response indicator data, numeric nutrient indicator

6 EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

data, and facility data as needed to refine the establishment of site specific water quality based limits for phosphorus. This permit may be reopened during the term of the permit to modify any reasonable potential calculations, phosphorus limits, or monitoring requirements based on new site-specific data.

The Vassalboro Sanitary District has conducted total phosphorus testing during the summer of 2014. Based upon the most recent laboratory test results dated October 2, 2014, the arithmetic mean concentration discharged for the period is 2.6 mg/L (2,600 ug/L) and is considered representative of the discharge from all three facilities owned and operated by the VSD which discharge to Outlet Stream in close proximity to each other. For the background concentration in Outlet Stream, the permittee conducted upstream sampling of its discharge in the summer of 2014. Two sampling events took place at the Stanley Road location where the outlet for China Lake (Outlet Stream) begins. These results dated October 2, 2014 indicating the background total phosphorus concentration is 0.021 mg/L. Due to the chronic effect of phosphorus and proximity of the three VSD facilities to each other, the Summer Season flow of all three facilities was combined to yield the 0.079 MGD used in the calculation below.

Using the following calculation and criteria, VSD does have a reasonable potential to exceed the EPA's Total P Ambient Water Quality Goal of 0.1 mg/L (100 ug/L) for phosphorus for rivers and streams not feeding lakes, and potential to exceed the Department's draft ambient water quality criteria of 0.030 mg/L for phosphorus:

Reasonable Potential Analysis

$$Cr = \frac{QeCe + QsCs}{Qr}$$

| | | |
|--|---|------------|
| Qe = effluent flow (three facilities combined) | = | 0.079 MGD |
| Ce = effluent pollutant concentration | = | 2.6 mg/L |
| Qs = 7Q10 flow of receiving water | = | 1.5 MGD |
| Cs = upstream concentration | = | 0.021 mg/L |
| Qr = receiving water flow (1.5 MGD + 0.079) | = | 1.579 MGD |
| Cr = receiving water concentration | | |

$$Cr = \frac{(0.079 \text{ MGD} \times 2.6 \text{ mg/L}) + (1.5 \text{ MGD} \times 0.021 \text{ mg/L})}{1.579 \text{ MGD}} = 0.150 \text{ mg/L}$$

Cr = 0.150 mg/L > 0.1 mg/L ⇒ **Yes, Reasonable Potential**
 Cr = 0.150 mg/L > 0.030 mg/L ⇒ **Yes, Reasonable Potential**

6 EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

Therefore, a seasonal water quality based concentration and mass limitation along with a monitoring and reporting requirement for total phosphorus is being established in this permitting action. The calculation is as follows:

Given:

Mean Total P Effluent Concentration = 2,600 ug/L (Based on 10/2/14 test results)
Mean Total P Background in Outlet Stream = 21 ug/L (Based on 10/2/14 test results)
EPA Total P AWQ Goal = 100 ug/L (rivers and streams not feeding lakes)
DEP Draft Total P AWQ Threshold = 30 ug/L (Class B classification)
Effluent flow = 0.079 MGD (three facilities combined)
7Q10 of Outlet Stream = 2.3 cfs or 1.5 MGD
DF = 20:1 based on the following calculation: $\frac{1.5 \text{ MGD} + 0.079 \text{ MGD}}{0.079 \text{ MGD}} = 20$

Allowable end of pipe effluent concentration based on full permitted flow of 0.079 MGD
Utilizing EPA Total P AWQ Goal of 100 ug/L

Solution

$100 \text{ ug/L} - 21 \text{ ug/L} = 79 \text{ ug/L}$ (remaining assimilative capacity)

$\frac{2,600 \text{ ug/L}}{20} = 130 \text{ ug/L}$ (will exceed remaining assimilative capacity)

$\frac{X \text{ ug/L}}{20} = 79 \text{ ug/L}$

$X = 1,580 \text{ ug/L} = 1.58 \text{ mg/L}$

For all three facilities

Monthly average mass limit: $(0.079 \text{ MGD})(8.34 \text{ lbs/gal})(1.58 \text{ mg/L}) = 1.0 \text{ lbs/day}$

For the VSD Cemetery Street facility $(0.029 \text{ MGD})(8.34 \text{ lbs/gal})(1.58 \text{ mg/L}) = 0.38 \text{ lbs/day}$

Conditions of licenses, 38 M.R.S.A. § 414-A(2), Schedules of Compliance, authorizes the Department to establish schedules of compliance for water quality based limitations within the terms and conditions of a license. Said law states "Within the terms and conditions of a license, the department may establish a schedule of compliance for a final effluent limitation based on a water quality standard adopted after July 1, 1977. When a final effluent limitation is based on new or more stringent technology-based treatment requirements, the department may establish a schedule of compliance consistent with the time limitations permitted for compliance under the Federal Water Pollution Control Act, Public Law 92-500, as amended. A schedule of compliance may include interim and final dates for attainment of specific standards necessary to carry out the purposes of this

6 EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

subchapter and must be as short as possible, based on consideration of the technological, economic and environmental impact of the steps necessary to attain those standards.”

In addition, 06-096 CMR 523(7), *Schedules of Compliance*, states in part, “*if a permit establishes a schedule of compliance which exceeds 1 year from the date of permit issuance, the schedule shall set forth interim requirements and the dates for their achievement.*

- (i) The time between interim dates shall not exceed 1 year, except that in the case of a schedule for compliance with standards for sewage sludge use and disposal, the time between interim dates shall not exceed six months.*
- (ii) If the time necessary for completion of any interim requirement (such as the construction of a control facility) is more than 1 year and is not readily divisible into stages for completion, the permit shall specify interim dates for the submission of reports of progress toward completion of the interim requirements and indicate a projected completion date.”*

VSD hired Hoyle Tanner and Associates to review the condition of the current treatment facilities and evaluate future uses and capabilities of the existing treatment facilities. The Hoyle Tanner Engineering Report *Future Wastewater Discharge Options for the Town of Vassalboro* dated December 2014 took into considerations phosphorus removal. The report presented various engineering alternatives. Special Condition E of this permit establishes the following schedule of compliance:

On or before October 1, 2015 [ICIS code 95799]–VSD must submit to the Department for Review and approval a final alternatives analysis for upgrading or replacement of its three treatment facilities so as to be in compliance with Total Phosphorus limits.

On or before December 31, 2015 [ICIS code 95799]–VSD must commence funding research so as to secure adequate funds for upgrading or replacing existing treatment facilities so as to be in compliance with Total Phosphorus effluent limitations.

On or before August 1, 2016 [ICIS code 95799] – VSD must submit results of funding search, and if VSD is unable to secure adequate funding for upgrading or replacing existing facilities, If despite its best efforts, VSD is unable to secure adequate funding for upgrading or replacing existing treatment facilities so as to be in compliance with Total Phosphorus, VSD may request an amendment to this permit to revise the timeline in this Schedule of Compliance.

On or before October 1, 2017 [ICIS code 95799]–VSD shall submit to the Department for review and approval the final design of the preferred option that includes final plans, and a schedule for upgrading or replacing the existing facilities so as to be in compliance with Total Phosphorus.

6 EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

On or before September 1, 2019 [ICIS code 95799] –Within 12 months of commencing construction, complete substantial construction and place into operation the preferred option in accordance with the approved plans and schedule agreed upon by the Department and VSD.

Beginning on June 1, 2020 the monthly average phosphorous limitation of 0.38 lbs./day is in effect.

7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

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

8. PUBLIC COMMENTS

Public notice of this application was made in the *Kennebec Journal and Morning Sentinel* newspapers on or about December 15, 2014. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses*, 06-096 CMR 522 (effective January 12, 2001).

9. DEPARTMENT CONTACTS

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

Aaron Dumont
Division of Water Quality Management
Bureau of Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 592-7161
e-mail: Aaron.A.Dumont@maine.gov

10. RESPONSE TO COMMENTS

During the period of July 21, 2015 through the effective date of this final agency action, the Department solicited comments on the draft MEPDES permit. The Department received two substantive comments on the draft permit from Compliance Staff. It is noted that minor typographical and grammatical errors identified in comments were not summarized in this section, but were corrected, where necessary, in the final permit.

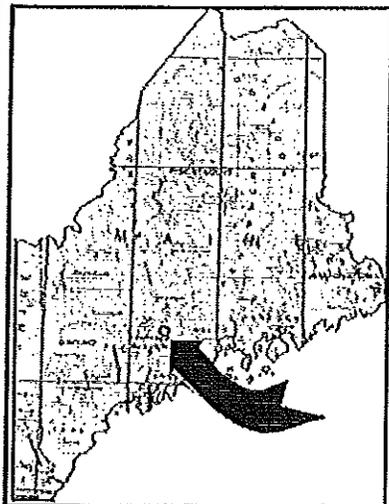
Comment #1: During the draft comment period, Department Compliance staff noted that the seasonal limits for *E. coli* bacteria specified in the draft permit (June 1 – September 30) differed from those specified in statute, *Standards for classification of fresh surface waters*, 38 M.R.S.A. § 465(3)(B), (May 15 – September 30).

Response #1: The Department has revised the final permit to condition the permit with seasonal *E. coli* bacteria limits that are effective from May 15 through September 30 of each year to comply with applicable water quality standards.

Comment #2: During the draft comment period, Department Compliance staff noted that the permit might not be finalized before the first item of the Schedule of Compliance was due on September 15th, 2015.

Response #2: The Department has revised the final permit to condition the first due date item one Scheduled of Compliance from September 15th, 2015 to October 1st, 2015.

ATTACHMENT A



Vassalboro

ME0102652

LOCUS

GROVE RD

MAPLE ST

LOCUS

ME0102661

MAIN ST

002407

CEMETERY ST

LOMBARD DAM RD

002918

GRAY ROAD

EVANS RD

VASSALBORO SANITARY DISTRICT
 MEPDES PERMIT ATTACHMENT A
 MEPDES Permits (from north to south)
 #ME0102652 North Main Street
 #ME0102661 Cemetery Street
 #ME0100692 East Vassalboro

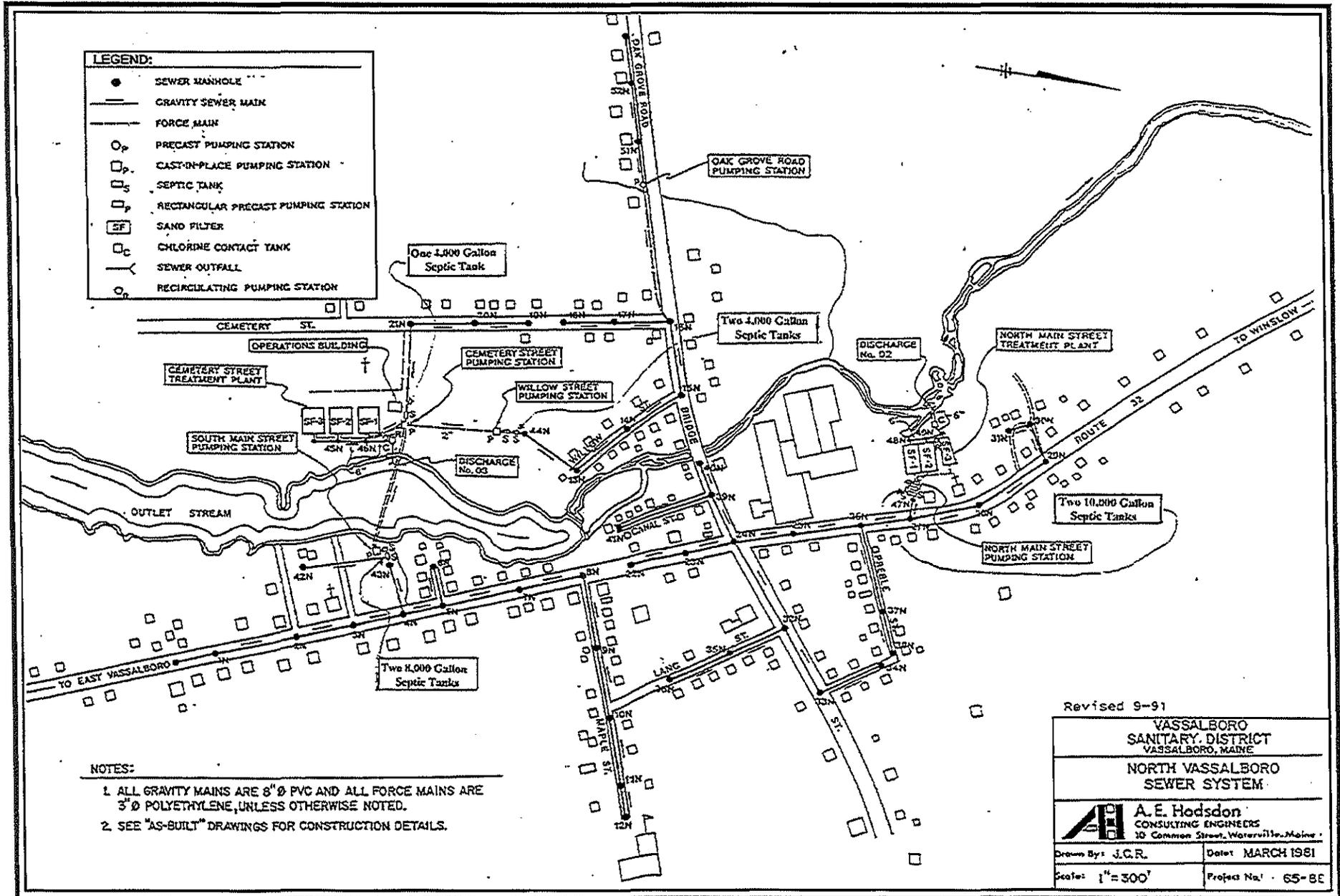


LOCUS

ME0100692

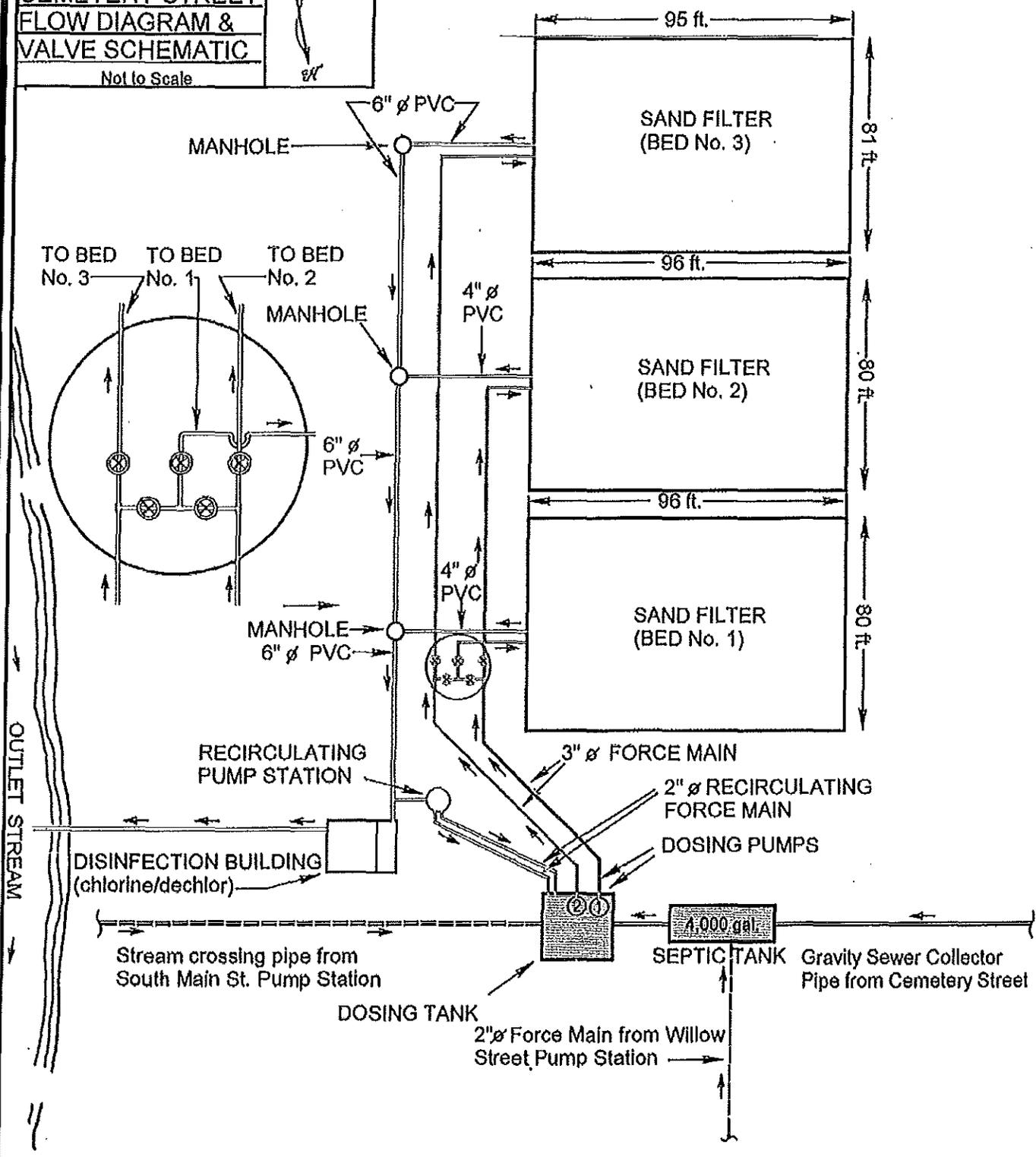


VASSALBORO SANITARY DISTRICT
MEPDES PERMIT ATTACHMENT A



ATTACHMENT B

ATTACHMENT B
 MEPDES PERMIT #ME0102652
 CEMETERY STREET
 FLOW DIAGRAM &
 VALVE SCHEMATIC
 Not to Scale



ATTACHMENT C



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHAPTER 530.2(D)(4) CERTIFICATION

PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
Commissioner

MEPDES# _____ Facility Name _____

| Since the effective date of your permit, have there been; | | NO | YES Describe in comments section |
|---|---|--------------------------|-------------------------------------|
| 1 | Increases in the number, types, and flows of industrial, commercial, or domestic discharges to the facility that in the judgment of the Department may cause the receiving water to become toxic? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 | Changes in the condition or operations of the facility that may increase the toxicity of the discharge? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3 | Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4 | Increases in the type or volume of hauled wastes accepted by the facility? | <input type="checkbox"/> | <input type="checkbox"/> |

COMMENTS:

Name (printed): _____

Signature: _____ Date: _____

This document must be signed by the permittee or their legal representative.

This form may be used to meet the requirements of Chapter 530.2(D)(4). This Chapter requires all dischargers having waived or reduced toxic testing to file a statement with the Department describing changes to the waste being contributed to their system as outlined above. As an alternative, the discharger may submit a signed letter containing the same information.

Scheduled Toxicity Testing for the next calendar year

| Test Conducted | 1 st Quarter | 2 nd Quarter | 3 rd Quarter | 4 th Quarter |
|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| WET Testing | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Priority Pollutant Testing | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Analytical Chemistry | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other toxic parameters ¹ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Please place an "X" in each of the boxes that apply to when you will be conducting any one of the three test types during the next calendar year.

¹ This only applies to parameters where testing is required at a rate less frequently than quarterly.

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 04769-2094
(207) 764-0477 FAX: (207) 760-3143

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

CONTENTS

| SECTION | TOPIC | PAGE |
|---------|---|------|
| A | GENERAL PROVISIONS | |
| | 1 General compliance | 2 |
| | 2 Other materials | 2 |
| | 3 Duty to Comply | 2 |
| | 4 Duty to provide information | 2 |
| | 5 Permit actions | 2 |
| | 6 Reopener clause | 2 |
| | 7 Oil and hazardous substances | 2 |
| | 8 Property rights | 3 |
| | 9 Confidentiality | 3 |
| | 10 Duty to reapply | 3 |
| | 11 Other laws | 3 |
| | 12 Inspection and entry | 3 |
| B | OPERATION AND MAINTENANCE OF FACILITIES | |
| | 1 General facility requirements | 3 |
| | 2 Proper operation and maintenance | 4 |
| | 3 Need to halt reduce not a defense | 4 |
| | 4 Duty to mitigate | 4 |
| | 5 Bypasses | 4 |
| | 6 Upsets | 5 |
| C | MONITORING AND RECORDS | |
| | 1 General requirements | 6 |
| | 2 Representative sampling | 6 |
| | 3 Monitoring and records | 6 |
| D | REPORTING REQUIREMENTS | |
| | 1 Reporting requirements | 7 |
| | 2 Signatory requirement | 8 |
| | 3 Availability of reports | 8 |
| | 4 Existing manufacturing, commercial, mining, and silvicultural dischargers | 8 |
| | 5 Publicly owned treatment works | 9 |
| E | OTHER PROVISIONS | |
| | 1 Emergency action - power failure | 9 |
| | 2 Spill prevention | 10 |
| | 3 Removed substances | 10 |
| | 4 Connection to municipal sewer | 10 |
| F | DEFINITIONS | 10 |

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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).

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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 of 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 MAINTENANCE 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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

(il) 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.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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).

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

- (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.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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 contaminants 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.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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.