STATE OF MAINE

Department of Environmental Protection

Paul R. LePage
GOVERNOR

Patricia W. Aho
COMMISSIONER

December 4, 2012

Mr. James Lowery
United Technologies –Pratt and Whitney
113 Wells Road
North Berwick, ME. 03906

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit # ME0022861
Maine Waste Discharge License (WDL) Application #W002749-5N-H-R
**Final Permit**

Dear Mr. Lowery:

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.*"

If you have any questions regarding the matter, please feel free to call me at 287-7693.

Sincerely,

Gregg Wood
Division of Water Quality Management
Bureau of Land and Water Quality

Enc.
cc: Matt Hight, DEP/SMRO
Sandy Mojica, USEPA

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

**DEPARTMENT ORDER**

**IN THE MATTER OF**

| | | |
|---|---|---|
| UNITED TECHNOLOGIES - PRATT AND WHITNEY | ) | MAINE POLLUTANT DISCHARGE |
| NORTH BERWICK, YORK COUNTY, MAINE | ) | ELIMINATION SYSTEM PERMIT |
| INDUSTRIAL MANUFACTURING | ) | AND |
| ME0022861 | ) | WASTE DISCHARGE LICENSE |
| W002749-5N-H-R **APPROVAL** | ) | **RENEWAL** |

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

## APPLICATION SUMMARY

UTPW has submitted a timely and complete application to the Department for the renewal of Waste Discharge License (WDL) #W002749-5L-F-R / Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0022861 (permit hereinafter), which was issued on December 21, 2007, and is due to expire on December 21, 2012. The 12/21/07 MEPDES permit authorized the daily maximum discharge of up to 0.05 million gallons per day of treated process waste waters to the Great Works River, Class B, in North Berwick, Maine.

## PERMIT SUMMARY

**This permitting action is carrying forward the terms and conditions of the12/21/07 permitting action in that it is:**

1. Eliminating the monthly average concentration reporting requirement for total arsenic as the most recent statistical evaluation on the most current 60 months of analytical chemistry data indicates there are no exceedences or reasonable potential to exceed applicable ambient water quality criteria (AWQC).

**PERMIT SUMMARY (cont'd)**

2. Eliminating the monthly average concentration and mass limits for inorganic arsenic and a schedule of compliance (Special Condition J) for implementation of these limitations as the most recent statistical evaluation on the most current 60 months of analytical chemistry data indicates there are no exceedences or reasonable potential to exceed applicable AWQC.

3. Establishing a monthly average water quality based mass limit for total aluminum given the most recent statistical evaluation on the most current 60 months of analytical chemistry data indicates there are test results for aluminum that have a reasonable potential to exceed applicable AWQC.

4. Eliminating the monthly average water quality-based concentration limit for bis (2-ethylhexyl) phthalate based on a provision in the May 2012 revision to Department rule *Surface Water Toxics Control Program*, 06-096 CMR 530, that removed the requirement to establish concentration limits for toxic pollutants unless federal regulation establishes best practicable treatment (BPT) concentration limits.

5. Establishing monthly average and daily maximum water quality based mass limitations for total chromium based on applicable AWQC in Department rule, *Surface Water Quality Criteria for Toxic Pollutants,* 06-096 CMR 584 and establishes monthly average and daily maximum technology based concentration limits found in federal regulation 40 CFR, Part 433.13

6. Incorporating the average and maximum technology based concentration limits for total mercury that were original established in a May 23, 2000 license modification.

7. Establishing a monthly average water quality based mass limitation for total silver based on applicable AWQC in Department rule, *Surface Water Quality Criteria for Toxic Pollutants,* 06-096 CMR 584. A daily maximum technology based mass limit and monthly average and daily maximum technology based concentration limits are being established based on federal regulation 40 CFR, Part 433.13

8. Eliminating the chronic no observed effect level (C-NOEL) water quality based whole effluent toxicity (WET) limit for the water flea as the most recent statistical evaluation on the most current 60 months of WET data indicates there are no exceedences or reasonable potential to exceed the chronic water quality threshold.

9. Establishing a requirement to maintain a current written comprehensive Solvent Management Plan.

## CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated November 2, 2012, 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:

   (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 natural resource, that water quality will be maintained and protected;

   (c) The standards of classification of the receiving water body are met or, where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;

   (d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification that higher water quality will be maintained and protected; and

   (e) Where a discharge will result in lowering the existing water quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.

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

**ACTION**

THEREFORE, the Department APPROVES the above noted application of UNITED TECHNOLOGIES-PRATT AND WHITNEY to discharge up to a daily maximum of 0.05 million gallons per day (MGD) of treated process waste waters to the Great Works River, Class B, in North Berwick, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

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

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

3. This permit 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 the this permit, the terms and conditions of the 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) (effective April 1, 2003)]

DONE AND DATED AT AUGUSTA, MAINE, THIS 4th DAY OF December 2012.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Michael Kuhns
for Patricia W. Aho, Commissioner

Filed
DEC 5 2012
State of Maine
Board of Environmental Protection

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: October 4, 2012

Date of application acceptance: October 5 , 2012

Date filed with Board of Environmental Protection: _____.

This Order prepared by Gregg Wood, BUREAU OF LAND & WATER QUALITY

ME0022861 2012 11/29/12

## SPECIAL CONDITIONS

### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge **treated process waste waters via Outfall #003** to the Great Works River at North Berwick. Such discharges shall be limited and monitored by the permittee as specified below[(1)]:

| Effluent Characteristic | Discharge Limitations | | | | Minimum Monitoring Requirements | |
|---|---|---|---|---|---|---|
| | Monthly Average<br>as specified | Daily Maximum<br>as specified | Monthly Average<br>as specified | Daily Maximum<br>as specified | Measurement Frequency<br>as specified | Sample Type<br>as specified |
| **Flow** *[50050]* | --- | 0.05 MGD *[03]* | --- | --- | Continuous *[99/99]* | Recorder *[RC]* |
| **Oil and Grease** *[00556]* | 6.3 lbs./day *[26]* | 6.3 lbs./day *[26]* | 15 mg/L *[19]* | 15 mg/L *[19]* | 1/Quarter *[01/90]* | Grab *[GR]* |
| **Temperature** *[00011]* *(June 1 - Sept 30)* | --- | --- | --- | 82°F *[15]* | 1/Day *[01/01]* | Measure *[MS]* |
| **Total Suspended Solids** *[00530]* | 6.3 lbs./day *[26]* | 6.3 lbs./day *[26]* | 15 mg/L *[19]* | 15 mg/L *[19]* | 1/Quarter *[01/90]* | 24-Hour Composite *[24]* |
| **Phosphorous (Total)** [(2)] *[00665]* *(June 1 - Sept 30)* | 0.034 lbs./day *[26]* | 0.10 lbs./day *[26]* | 82 µg/L *[28]* | 240 µg/L *[28]* | 1/Month *[01/30]* | 24-Hour Composite *[24]* |
| **pH** *[00400]* | --- | --- | --- | 6.0 – 9.0 SU *[12]* | 1/Day *[01/01]* | Grab *[GR]* |

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

**Footnotes: See Pages 8 through 11 of this permit for applicable footnotes.**

**SPECIAL CONDITIONS**

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

| Effluent Characteristic | Discharge Limitations | | | | Minimum Monitoring Requirements | |
|---|---|---|---|---|---|---|
| | Monthly Average<br>as specified | Daily Maximum<br>as specified | Monthly Average<br>as specified | Daily Maximum<br>as specified | Measurement Frequency<br>as specified | Sample Type<br>as specified |
| **Aluminum (Total)** *[01105]* | 1.1 lbs./day *[26]* | --- | Report µg/L *[28]* | --- | 1/Quarter *[01/90]* | 24-Hour Composite *[24]* |
| **Bis (2-ethylhexyl) phthalate** *[16770]* | 0.025 lbs./day *[26]* | --- | Report µg/L *[28]* | --- | 1/Quarter *[01/90]* | 24-Hour Composite *[24]* |
| **Cadmium (Total)** *[01027]* | 0.00086 lbs./day *[26]* | 0.0036 lbs./day *[26]* | 3.1 µg/L *[28]* | 13.9 µg/L *[28]* | 1/Quarter *[01/90]* | 24-Hour Composite *[24]* |
| **Chromium (Total)** *[01034]* | 0.14 lbs./day *[26]* | 0.17 lbs./day *[26]* | 1,710 µg/L *[28]* | 2,770 µg/L *[28]* | ---(3) | 24-Hour Composite *[24]* |
| **Copper (Total)** *[01042]* | 0.025 lbs./day *[26]* | 0.028 lbs./day *[26]* | 91 µg/L *[28]* | 101 µg/L *[28]* | 1/Quarter *[01/90]* | 24-Hour Composite *[24]* |
| **Cyanide (Total)** *[00720]* | 0.06 lbs./day *[26]* | 0.20 lbs./day *[26]* | 201 µg/L *[28]* | 726 µg/L *[28]* | 1/Quarter *[01/90]* | Grab *[GR]* |
| **Lead (Total)** *[01051]* | 0.004 lbs./day *[26]* | 0.10 lbs./day *[26]* | 16 µg/L *[28]* | 87 µg/L *[28]* | 1/Quarter *[01/90]* | 24-Hour Composite *[24]* |
| **Mercury (Total)** (4) *[71900]* | --- | --- | 4.5 ng/L *[3M]* | 6.8 ng/L *[3M]* | 1/Year *[01/YR]* | Grab *[GR]* |
| **Nickel (Total)** *[01067]* | 0.14 lbs./day *[26]* | 1.1 lbs./day *[26]* | 480 µg/L *[28]* | 1,000 µg/L *[28]* | 1/Quarter *[01/90]* | 24-Hour Composite *[24]* |
| **Silver (Total** *[01067]* | 0.003 lbs./day *[26]* | 0.18 lbs./day *[26]* | 240 µg/L *[28]* | 430 µg/L *[28]* | ---(3) | 24-Hour Composite *[24]* |
| **Total Toxic Organics**(5) *[78232]* | --- | 0.89 lbs./day *[26]* | --- | 2.13 mg/L *[19]* | --- | 24-Hour Composite /Grab *[24]* |
| **Zinc (Total)** *[01092]* | 0.33 lbs./day *[26]* | 0.28 lbs./day *[26]* | 250 µg/L *[28]* | 250 µg/L *[28]* | 1/Year *[01/YR]* | 24-Hour Composite *[24]* |

**Footnotes:** **See Pages 8 through 11 of this permit for applicable footnotes.**

## SPECIAL CONDITIONS

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

***SURVEILLANCE LEVEL*** - Beginning upon issuance and lasting until 24 months prior to permit expiration and commencing again 12 months prior to permit expiration and lasting through permit expiration (Years 1,2,3 and 5 of the term of the permit)

| Effluent Characteristic | Discharge Limitations | | | | Minimum Monitoring Requirements | |
|---|---|---|---|---|---|---|
| | Monthly Average | Daily Maximum | Monthly Average | Daily Maximum | Measurement Frequency | Sample Type |
| **Whole Effluent Toxicity**(6) | | | | | | |
| **Acute – NOEL** | | | | | | |
| *Ceriodaphnia dubia* (Water flea) *[TDA3B]* | --- | --- | --- | Report % *[23]* | 1/2Years *[01/2Y]* | Composite *[24]* |
| *Salvelinus fontinalis* (Brook trout) *[TDA6F]* | --- | --- | --- | Report % *[23]* | 1/2 Years *[01/2Y]* | Composite *[24]* |
| **Chronic – NOEL** | | | | | | |
| *Ceriodaphnia dubia* (Water flea) *[TBP3B]* | --- | --- | --- | Report % *[23]* | 1/2Years *[01/2Y]* | Composite *[24]* |
| *Salvelinus fontinalis* (Brook trout) *[TDA6F]* | --- | --- | --- | Report % *[23]* | 1/2 Years *[01/2Y]* | Composite *[24]* |
| Analytical Chemistry (7,9) *[51168]* | --- | --- | --- | Report ug/L *[28]* | 1/2 Years *[01/2Y]* | Composite/Grab *[24]* |

***SCREENING LEVEL*** - Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (year 4 of the term of the permit) and every five years thereafter.

| | Monthly Average | Daily Maximum | Monthly Average | Daily Maximum | Measurement Frequency | Sample Type |
|---|---|---|---|---|---|---|
| **Whole Effluent Toxicity**(6) | | | | | | |
| **Acute – NOEL** | | | | | | |
| *Ceriodaphnia dubia* (Water flea) *[TDA3B]* | --- | --- | --- | Report % *[23]* | 2/Year *[02/YR]* | Composite *[24]* |
| *Salvelinus fontinalis* (Brook trout) *[TDA6F]* | --- | --- | --- | Report % *[23]* | 2/Year *[02/YR]* | Composite *[24]* |
| **Chronic – NOEL** | | | | | | |
| *Ceriodaphnia dubia* (Water flea) *[TBP3B]* | --- | --- | --- | Report % *[23]* | 2/Year *[02/YR]* | Composite *[24]* |
| *Salvelinus fontinalis* (Brook trout) *[TDA6F]* | --- | --- | --- | Report % *[23]* | 2/Year *[02/YR]* | Composite *[24]* |
| Analytical Chemistry (7,9) *[51168]* | --- | --- | --- | Report ug/L *[28]* | 1/Quarter *[01/90]* | Composite/Grab *[24]* |
| Priority Pollutant (8,9) *[50008]* | --- | --- | --- | Report ug/L *[28]* | 1/Year *[01/YR]* | Composite/Grab *[24]* |

**Footnotes:** **See Pages 8 through 11 of this permit for applicable footnotes.**

## SPECIAL CONDITIONS

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

**Footnotes:**

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

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

2. **Total Phosphorous** – Total phosphorus monitoring shall be performed in accordance with **Attachment B** of this permit, *Protocol For Total Phosphorous Sample Collection and Analysis for Waste Water and Receiving Water Monitoring Required by Permits, Finalized April, 2008*, unless otherwise specified by the Department.

3. **Total Chromium & Total Silver** – See Special Condition E, *06-096 CMR 530(2)(D)(4) Statement for Reduced/Waived Toxics Testing.*

4. **Mercury** - All mercury sampling (1/Year) required by this permit or required to determine compliance with interim limitations established pursuant to Department rule Chapter 519, shall be conducted in accordance with EPA's "clean sampling techniques" found in EPA Method 1669, Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels. All mercury analysis shall be conducted in accordance with EPA Method 1631, Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry. See **Attachment C,** *Effluent Mercury Test Report*, of this permit for the Department's form for reporting mercury test results.

   The limitation in the monthly average column in tables Special Condition A (2) of this permit are arithmetic means of all the mercury tests every conducted for the facility utilizing sampling Methods 1669 and analysis Method 1631E.

## SPECIAL CONDITIONS

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

**Footnotes:**

5. **Total Toxic Organics (TTO)** – The term TTO is the summation of all quantifiable values greater than 0.01 mg/L for the toxics organics specified at 40 CFR Part 433.11(e). In lieu of requiring monitoring for TTO, the permittee may make the following certification statement: "***Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation [or pretreatment standard] for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the permitting [or control] authority.***" This statement is to be included as a "comment" on the Discharge Monitoring Report once per calendar quarter. If monitoring is necessary to measure compliance with the TTO standard, the permittee need analyze for only those pollutants which would reasonably be expected to be present.

6. **Whole Effluent Toxicity (WET)** – Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions bracketing the critical acute and chronic thresholds of 3.4% and 2.9% respectively), which provides a point estimate of toxicity in terms of No Observed Effect Level, commonly referred to as NOEL or NOEC. A-NOEL is defined as the acute no observed effect level with survival as the end point. C-NOEL is defined as the chronic no observed effect level with survival, reproduction and growth as the end points. The critical acute and chronic thresholds were derived as the mathematical inverse of the applicable acute and chronic dilution factors of 29:1 and 34:1, respectively.

   a. **Surveillance level testing** – Beginning upon issuance of this permit and lasting through 24 months prior to permit expiration and commencing again 12 months prior to permit expiration and lasting through permit expiration (Years 1,2,3 and 5 of the term of the permit) the permittee shall initiate surveillance level WET testing at a minimum frequency of once every two years (reduced testing) for the water flea (Ceriodaphnia dubia) and the brook trout (Salvelinus fontinalis). Tests shall be conducted in a different calendar quarter each year.

   b. **Screening level testing** – Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter, the permittee shall conduct screening level WET testing at a minimum frequency of twice per year (2/Year) for both species. There shall be at least six (6) months between testing events. Acute and chronic tests shall be conducted on the water flea (*Ceriodaphnia dubia*) and the brook trout (*Salvelinus fontinalis*).

## SPECIAL CONDITIONS

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

**Footnotes:**

WET test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee shall evaluate test results being submitted and identify to the Department possible exceedences of the critical acute and chronic water quality thresholds of 3.4% and 2.9%, respectively.

Toxicity tests must be conducted by an experienced laboratory approved by the Department. The laboratory must follow procedures as described in the following USEPA methods manuals.

a. Short Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Water to Freshwater Organisms, Fourth Edition, October 2002, EPA-821-R-02-013.

b. Methods for Measuring the Acute Toxicity of Effluent and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, October 2002, EPA-821-R-02-012.

See **Attachment D** of this permit for the Department's WET report form. The permittee is also required to analyze the effluent for the parameters specified in the WET chemistry section, and the parameters specified in the analytical chemistry section of the form in **Attachment A** of this permit each time a WET test is performed.

7. **Analytical chemistry** – Refers to a suite of chemical tests in **Attachment A** of the permit.

   a. **Surveillance level testing** – – Beginning upon issuance of this permit and lasting through 24 months prior to permit expiration and commencing again 12 months prior to permit expiration and lasting through permit expiration (Years 1,2,3 and 5 of the term of the permit) the permittee shall conduct analytical chemistry testing at a minimum frequency of once every other year (1/2 Years). Tests are to be conducted in a different calendar quarter of each year.

   b. **Screening level testing** – Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter, the permittee shall conduct analytical chemistry testing at a minimum frequency of once per calendar quarter (1/Quarter) for four consecutive calendar quarters.

## SPECIAL CONDITIONS

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

**Footnotes:**

8. **Priority pollutant testing** – Refers to a suite of chemical tests in **Attachment A** of the permit.

   a. **Surveillance level testing** - Not required pursuant to 06-096 CMR 530.

   b. **Screening level testing** - Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter, the permittee shall conduct screening level priority pollutant testing at a minimum frequency of once per year (1/Year).

9. **Priority pollutant and analytical chemistry testing** - Shall be conducted on samples collected at the same time as those collected for whole effluent toxicity tests when applicable. Priority pollutant and analytical chemistry testing shall be conducted using methods that permit detection of a pollutant at existing levels in the effluent or that achieve minimum reporting levels of detection as specified by the Department.

   Test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee shall evaluate test results being submitted and identify to the Department, possible exceedences of the acute, chronic or human health AWQC as established in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (effective October 9, 2005). For the purposes of DMR reporting, enter a "1" for yes, testing done this monitoring period or "NODI-9" monitoring not required this period.

## SPECIAL CONDITIONS

### B. NARRATIVE EFFLUENT LIMITATIONS

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

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

3. The discharge shall not cause visible discoloration or turbidity in the receiving waters, which would impair the usages designated for the classification of the receiving waters.

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

### C. 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 October 5, 2012; 2) the terms and conditions of this permit; and 3) only from Outfall #003A. Discharges of wastewater from any other point source are not authorized under this permit, and shall be reported in accordance with Standard Condition B(5), *Bypasses*, of this permit.

### D. NOTIFICATION REQUIREMENTS

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

1. Any substantial change in the volume or character of pollutants being introduced into the waste water collection and treatment system by a source introducing pollutants to the system at the time of permit issuance.

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

Pursuant to 40 CFR Part 122.44, this permit provides a waiver from monitoring for chromium and silver, which are listed in the effluent guideline limitations at 40 CFR Part 433.13, except as required for analytical chemistry and priority pollutant testing established in this permit. **By December 31 of each calendar year**, the permittee shall provide the Department with a certification describing any of the following that have occurred since the effective date of this permit ***[PCS Code 95799]***: See **Attachment E** 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; and

(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 shall provide the Department with statements describing;

(d) Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge.

(e) Increases in the type or volume of hauled wastes accepted by the facility.

The Department reserves the right to reinstate annual (surveillance level) testing or other toxicity testing if new information becomes available that indicates the discharge may cause or have a reasonable potential to cause exceedences of ambient water quality criteria/thresholds.

### F. SOLVENT MANAGEMENT PLAN

This facility shall have a current written comprehensive Solvent Management Plan (SMP). The plan shall specify the toxic organic compounds used; the method of disposal used instead of dumping, such as reclamation, contract hauling, or incineration; and procedures for ensuring that toxic organics do not routinely spill or leak into the wastewater.

**The permittee shall review their SMP annually** and make the necessary revisions to reflect the most practices and the SMP shall be kept on-site at all times and made available to Department and EPA personnel upon request.

## SPECIAL CONDITIONS

### G. OPERATIONS AND MAINTENANCE (O&M) PLAN

This facility shall have a current written comprehensive Operation & Maintenance (O&M) Plan. The plan shall provide a systematic approach by which the permittee shall at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit.

**By December 31 of each year, or within 90 days of any process changes or minor equipment upgrades,** the permittee shall evaluate and modify the O&M Plan including site plan(s) and schematic(s) for the waste water treatment facility to ensure that it is up-to-date. The O&M Plan shall be kept on-site at all times and made available to Department and EPA personnel upon request.

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

### H. MONITORING AND REPORTING

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

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

Alternatively, if you are submitting 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 15$^{th}$ 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 (13$^{th}$) 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 (15$^{th}$) 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 15$^{th}$ day of the month following the completed reporting period.

## SPECIAL CONDITIONS

### I. REOPENING OF PERMIT FOR MODIFICATION

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

### J. SEVERABILITY

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

# ATTACHMENT A

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

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

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

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

**Last Revision - April 25, 2012**

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

**FRESH WATER VERSION**

Please see the footnotes on the last page.

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

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

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

Maine Department of Environmental Protection
WET and Chemical Specific Data Report Form
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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| V | BROMOFORM | 5 | | | | | | | | | |
| V | CARBON TETRACHLORIDE | 5 | | | | | | | | | |
| V | CHLOROBENZENE | 6 | | | | | | | | | |
| V | CHLORODIBROMOMETHANE | 3 | | | | | | | | | |
| V | CHLOROETHANE | 5 | | | | | | | | | |
| V | CHLOROFORM | 5 | | | | | | | | | |
| V | DICHLOROBROMOMETHANE | 3 | | | | | | | | | |
| V | ETHYLBENZENE | 10 | | | | | | | | | |
| V | METHYL BROMIDE (Bromomethane) | 5 | | | | | | | | | |
| V | METHYL CHLORIDE (Chloromethane) | 5 | | | | | | | | | |
| V | METHYLENE CHLORIDE | 5 | | | | | | | | | |
| V | TETRACHLOROETHYLENE (Perchloroethylene or Tetrachloroethene) | 5 | | | | | | | | | |
| V | TOLUENE | 5 | | | | | | | | | |
| V | TRICHLOROETHYLENE (Trichloroethene) | 3 | | | | | | | | | |
| V | VINYL CHLORIDE | 5 | | | | | | | | | |

**Notes:**

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

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

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

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

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

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

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

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

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

Comments:

# ATTACHMENT B

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

Approved Analytical Methods: EPA 365.1 (Rev. 2.0), 365.3, 365.4; SM 4500-P B.5, 4500-P E, 4500-P F; ASTM D515-88(A), D515-88(B); USGS 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 $H_2SO_4$ 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

Maine Department of Environmental Protection

# Effluent Mercury Test Report

Name of Facility: _____ Federal Permit # ME _____

Pipe # _____

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

## SAMPLE COLLECTION INFORMATION

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

Sampling Location:

Weather Conditions: _____

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

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

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

## ANALYTICAL RESULT FOR EFFLUENT MERCURY

Name of Laboratory: _____

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

Please Enter Effluent Limits for your facility

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

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

## CERTIFICATION

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

By: _____ Date: _____

Title: _____

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

# ATTACHMENT D

# MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
# WHOLE EFFLUENT TOXICITY REPORT
# FRESH WATERS

Facility Name _____ MEPDES Permit # _____

Facility Representative _____ Signature _____

**By signing this form, I attest that to the best of my knowledge that the information provided is true, accurate, and complete.**

Facility Telephone # _____ Date Collected _____ (mm/dd/yy) Date Tested _____ (mm/dd/yy)

Chlorinated? _____ Dechlorinated? _____

**Results** **% effluent**

| | water flea | trout |
|---|---|---|
| A-NOEL | | |
| C-NOEL | | |

Effluent Limitations

| | |
|---|---|
| A-NOEL | |
| C-NOEL | |

**Data summary**

| | water flea | | | trout | | |
|---|---|---|---|---|---|---|
| | % survival | | no. young | % survival | | final weight (mg) |
| QC standard | A>90 | C>80 | >15/female | A>90 | C>80 | > 2% increase |
| lab control | | | | | | |
| receiving water control | | | | | | |
| conc. 1 ( %) | | | | | | |
| conc. 2 ( %) | | | | | | |
| conc. 3 ( %) | | | | | | |
| conc. 4 ( %) | | | | | | |
| conc. 5 ( %) | | | | | | |
| conc. 6 ( %) | | | | | | |
| stat test used | | | | | | |

**place * next to values statistically different from controls**

**for trout show final wt and % incr for both controls**

Reference toxicant

| | water flea | | trout | |
|---|---|---|---|---|
| | A-NOEL | C-NOEL | A-NOEL | C-NOEL |
| toxicant / date | | | | |
| limits (mg/L) | | | | |
| results (mg/L) | | | | |

Comments _____

**Laboratory conducting test**

Company Name _____ Company Rep. Name (Printed) _____

Mailing Address _____ Company Rep. Signature _____

City, State, ZIP _____ Company Telephone # _____

**Report WET chemistry on DEP Form "ToxSheet (Fresh Water Version), March 2007."**

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

**FACT SHEET**

DATE: **November 2, 2012**

PERMIT NUMBER: **ME0022861**
WASTE DISCHARGE LICENSE: **W002749-5N-H-R**

NAME AND ADDRESS OF APPLICANT:

**UNITED TECHNOLOGIES - PRATT AND WHITNEY**
**113 Wells Road**
**North Berwick, ME. 03906**

COUNTY: **York County**

NAME AND ADDRESS WHERE DISCHARGE(S) OCCUR(S):

**UNITED TECHNOLOGIES - PRATT AND WHITNEY**
**113 Wells Road**
**North Berwick, ME. 03906**

RECEIVING WATER/CLASSIFICATION: **Great Works River/ Class B**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Mr. James Lowery**
**Environmental Engineer**
**Tel: (207) 676-4100 Ext. 2211**
**e-mail: james.lowery@pw.utc.com**

## 1. APPLICATION SUMMARY

a. Application: United Technologies – Pratt Whitney (UTPW/permittee hereinafter) has submitted a timely and complete application to the Department for the renewal of Waste Discharge License (WDL) #W002749-5L-F-R / Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0022861 (permit hereinafter), which was issued on December 21, 2007, and is due to expire on December 21, 2012. The 12/21/07 MEPDES permit authorized the daily maximum discharge of up to 0.05 million gallons per day of treated process waste waters to the Great Works River, Class B, in North Berwick, Maine. See **Attachment A** of this Fact Sheet for a location map.

## 1. APPLICATION SUMMARY (cont'd)

b. Source Description: The UTPW facility located in North Berwick, Maine, manufactures turbo fan jet engine components for military and commercial use. Production at the facility includes raw casting and stamping of parts, surface treatment including acid and alkali cleaning baths as well as nickel electroplating. Additional processes include de-burring, air scrubbing, pickling and stripping, grinding, milling, etching and painting. Average daily flows for the process waste waters discharged to the Great Works River via Outfall #003 have been approximately 32,000 gallons per day (gpd). UTPW identified a total of 32 waste streams contributing to discharges via Outfall #003 on "Figure A: Water Balance" included with UTPW's 12/28/2006 general application. The UTPW facility maintains coverage for storm water discharges associated with industrial activity under Multi-Sector General Permit #W008227-5Y-B-R approved by the Department on April 26, 2011.

c. Wastewater Treatment: Dilute process waste waters from the manufacturing operation are pumped to two tanks for the purposes of equalization. An in-line chemical metering system injects a polymer into the waste waters as it is pumped to a rapid mix tank. In the mix tank, sodium hydroxide is added as necessary for pH adjustment and aluminum sulfate is added to promote phosphorus removal.

From the rapid mix tanks, waste waters are pumped to a floc tank where polymer is added to facilitate flocculation of metals and other pollutants. From the floc tank, waste waters are conveyed to a clarifier (201,000 gallons) where flocculated particles are allowed to settle for removal. The sludge from the clarifier is pumped to another tank for thickening, then placed in a plate and frame filter press for de-watering. The de-watered sludge is dried and disposed of off-site as a hazardous material.

The supernatant from the clarifier is pumped to a basin then to three multi-media pressure filters for further polishing. The polished waste water is then pumped to a storage tank for discharge to the Great Works River via Outfall #003 or recycled back into the manufacturing process.

All sanitary waste waters generated at the facility are conveyed to the North Berwick Sanitary District's waste water treatment facility. The MEPDES permit number associated with that facility is ME0101885.

Final effluent is conveyed for discharge to the Great Works River via Outfall #003. The outfall extends out into the middle of the channel of the river (approximately 300 feet downstream of the confluence with the West River) and the end of the pipe is fitted with a diffuser. The diffuser consists of a polyvinylchloride (PVC) pipe measuring 8-inches in diameter with twenty (20) equally-spaced, 1.5-inch diameter ports to enhance mixing of the effluent with the receiving waters. The Department has determined that the discharge receives rapid and complete mixing with the receiving water.

## 2. PERMIT SUMMARY

a. Terms and Conditions - This permitting action is carrying forward the terms and conditions of the12/21/07 permitting action in that it is:

1 Eliminating the monthly average concentration reporting requirement for total arsenic as the most recent statistical evaluation on the most current 60 months of analytical chemistry data indicates there are no exceedences or reasonable potential to exceed applicable ambient water quality criteria (AWQC).

2. Eliminating the monthly average concentration and mass limits for inorganic arsenic and a schedule of compliance (Special Condition J) for implementation of these limitations as the most recent statistical evaluation on the most current 60 months of analytical chemistry data indicates there are no exceedences or reasonable potential to exceed applicable AWQC.

3. Establishing a monthly average water quality based mass limit for total aluminum given the most recent statistical evaluation on the most current 60 months of analytical chemistry data indicates there are test results for aluminum that have a reasonable potential to exceed applicable AWQC.

4. Eliminating the monthly average water quality-based concentration limits for bis (2-ethylhexyl) phthalate based on a provision in the May 2012 revision to Department rule *Surface Water Toxics Control Program*, 06-096 CMR 530, that removed the requirement to establish concentration limits for toxic pollutants unless federal regulation establishes best practicable treatment (BPT) concentration limits.

5. Establishing monthly average and daily maximum water quality based mass limitations for total chromium based on applicable AWQC in Department rule, *Surface Water Quality Criteria for Toxic Pollutants,* 06-096 CMR 584 and establishes monthly average and daily maximum technology based concentration limits found in federal regulation 40 CFR, Part 433.13

6. Incorporating the average and maximum technology based concentration limits for total mercury that were original established in a May 23, 2000 license modification.

7. Establishing a monthly average water quality based mass limitation for total silver based on applicable AWQC in Department rule, *Surface Water Quality Criteria for Toxic Pollutants,* 06-096 CMR 584. A daily maximum technology based mass limit and monthly average and daily maximum technology based concentration limits are being established based on federal regulation 40 CFR, Part 433.13

8. Eliminating the chronic no observed effect level (C-NOEL) water quality based whole effluent toxicity (WET) limit for the water flea as the most recent statistical evaluation on the most current 60 months of WET data indicates there are no exceedences or reasonable potential to exceed the chronic water quality threshold.

## 2. PERMIT SUMMARY (cont'd)

9. Establishing a requirement to maintain a current written comprehensive Solvent Management Plan.

b. History: This section provides a summary of significant licensing/permitting actions and milestones that have been completed for UTPW. Additional history is documented in the fact sheet of WDL #W002749-5L-E-R.

*February 7, 1997* – The U.S. Environmental Protection Agency (USEPA) issued a modification of National Pollutant Discharge Elimination System (NPDES) permit #ME0022861, which was issued on June 12, 1992 and subsequently modified on September 6, 1994. The 2/7/1997 and 9/6/1994 NPDES permit modifications and 6/12/1992 permit superseded the previous NPDES permit issued on January 31, 1997.

*May 25, 2000* – 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 thereby administratively modifying WDL #W002749-42-B-R (and modifications thereof) by establishing interim monthly average and daily maximum effluent concentration limits of 4.5 parts per trillion (ppt) and 6.8 ppt, respectively, and a minimum monitoring frequency requirement of four (4) tests per year for mercury.

*January 12, 2001* – The State of Maine received authorization from the USEPA to administer the NPDES permit program in Maine, excluding areas of special interest to Maine Indian Tribes. From that point forward, the program has been referred to as the Maine Pollutant Discharge Elimination System (MEPDES) program and MEPDES permit #ME0022861 has been utilized as the primary reference number for this facility.

*March 15, 2002* – The Department issued combination WDL #W002749-5L-E-R / MEPDES Permit #ME0022861 for the discharge of treated process waste waters for a five-year term. The 3/15/2002 WDL/MEPDES permit superseded WDL Modification #W002749-42-D-M issued on April 4, 1996, WDL Modification #W002749-42-C-M issued on August 22, 1994, and WDL #W002749-42-B-R issued on September 10, 1993.

*October 26, 2005* – UTPW submitted to the Department, for review and acceptance, a Notice of Intent (NOI) to Comply with the Maine Multi-Sector General Permit (MSGP) for Storm Water Discharges Associated with Industrial Activity. The NOI was accepted and assigned #MER05B446.

*April 10, 2006* – The Department amended the 3/15/2002 MEPDES permit to incorporate testing requirements of 06-096 CMR 530 (the toxics rule).

*December 21, 2007* –The Department issued combination WDL #W002749-5L-F-R / MEPDES permit #ME0022861 for a five-year term.

## 2. PERMIT SUMMARY (cont'd)

*February 6, 2012* – The Department issued a minor revision of the 12/21/07 WDL/MEPDES permit that reduced the monitoring frequency for total mercury from 4/Year to 1/Year.

*October 4, 2012* – UTPW submitted a timely and complete application to the Department to renew 12/12/07 WDL/MEPDES permit.

## 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 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, 38 M.R.S.A., § 420 and 06-096 CMR 530 require the regulation of toxic substances not to exceed levels set forth in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (effective October 9, 2005), and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

## 4. RECEIVING WATER QUALITY STANDARDS

*Classification of major river basins*, 38 M.R.S.A § 467(16)(B) classifies tributaries of Salmon Falls River which are not otherwise classified, which includes the Great Works River at the point of discharge, as Class B waters. *Standards for classification of fresh surface waters*, 38 M.R.S.A. § 465(4) describes the standards for Class B waters as follows;

*Class B waters must be of such quality that they are suitable for the designated uses of drinking water supply after treatment; fishing; agriculture; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited under Title 12, section 403; navigation; and as habitat for fish and other aquatic life. The habitat must be characterized as unimpaired.*

*The dissolved oxygen content of Class B waters may not be less than 7 parts per million or 75% of saturation, whichever is higher, except that for the period from October 1st to May 14th, in order to ensure spawning and egg incubation of indigenous fish species, the 7-day mean dissolved oxygen concentration may not be less than 9.5 parts per million and the 1-day minimum dissolved oxygen concentration may not be less than 8.0 parts per million in identified fish spawning areas. Between May 15th and September 30th, the number of*

*Escherichia coli bacteria of human and domestic animal origin in these waters may not exceed a geometric mean of 64 per 100 milliliters or an instantaneous level of 236 per 100 milliliters. In determining human and domestic animal origin, the department shall assess licensed and unlicensed sources using available diagnostic procedures.*

## 4. RECEIVING WATER QUALITY STANDARDS (cont'd)

*Discharges to Class B waters may not cause adverse impact to aquatic life in that the receiving waters must be of sufficient quality to support all aquatic species indigenous to the receiving water without detrimental changes in the resident biological community.*

## 5. RECEIVING WATER QUALITY CONDITIONS

*The State of Maine 2010 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 a 137.3-mile segment size of the Great Works River, main stem, above Route 9 bridge in North Berwick, and all tributaries, (Hydrologic Unit Code #ME0106000304 / Waterbody ID #625R) as, *"Category 2: Rivers and Streams Attaining Some Designated Uses – Insufficient Information for Other Uses."*

The Report lists all of Maine's fresh waters as, *"Category 4-B-3: Rivers and Streams With Waters Impaired Use, TMDL Required."* The report states the impairment is caused by atmospheric deposition of mercury; a regional scale TMDL has been approved. Maine has a fish consumption advisory for fish taken from all freshwaters due to mercury. Many waters and many fish from any given water, do not exceed the action level for mercury. However, because it is impossible for someone consuming a fish to know whether the mercury level exceeds the action level, The Maine Department of Health and 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 Maine law, 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 average and maximum mercury concentration limits for this facility and has no information at this time that the discharge from UTPW causes or contributes to the failure of the receiving water to meet the designated uses of its ascribed classification See the discussion in section 6(j)(8) of this Fact Sheet.

## 6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

a. Applicability of National Effluent Guideline Limitations: The USEPA has promulgated best practicable treatment (BPT)-based effluent limitations for the Metal Finishing Point Source Category at 40 Code of Federal Regulations (CFR) Part 433.13, which are applicable to the discharge from UTPW. The effluent guidelines regulates the following parameters: cadmium, chromium, copper, lead, nickel, silver, zinc, cyanide, total toxic organics (TTO), oil and grease, total suspended solids, and pH.

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

b. Flow: The previous permitting action established a daily maximum discharge flow limitation of 0.05 million gallons (MGD) (50,000 gallons per day) along with a continuous monitoring requirement for treated process waste waters discharged via Outfall #003, which is being carried forward in this permitting action as it remains representative of facility flows.

A review of the monthly Discharge Monitoring Reports (DMRs) submitted to the Department for the period August 2007 – July 2012 indicates values have been reported as follows:

**Flow (DMRs = 60)**

| Value | Limit (MGD) | Range (MGD) | Mean (MGD) |
|---|---|---|---|
| Daily maximum | 0.050 | 0.0293 – 0.049046 | 0.0416 |

c. Dilution Factors: Dilution factors associated with the permitted discharge flow of 0.05 MGD from the facility were derived in accordance with 06-096 CMR 530(4)(A) and were calculated as follows:

Acute: 1Q10 = 2.16 cfs $\Rightarrow \frac{(2.16 \text{ cfs})(0.6464) + (0.05 \text{ MGD})}{(0.05 \text{ MGD})} = 29{:}1$

Chronic: 7Q10 = 2.55 cfs $\Rightarrow \frac{(2.55 \text{ cfs})(0.6464) + (0.05 \text{ MGD})}{(0.05 \text{ MGD})} = 34{:}1$

Harmonic Mean[1]: = 7.65 cfs $\Rightarrow \frac{(7.65 \text{ cfs})(0.6464) + (0.05 \text{ MGD})}{(0.05 \text{ MGD})} = 100{:}1$

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

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

[1] Pursuant to 06-096 CMR 530(4)(a)(2)(c), the harmonic mean dilution factor is approximated by multiplying the 7Q10 flow by a factor of three (3).

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

The Department's Division of Environmental Assessment has determined that the discharge from UTPW achieves complete and rapid mixing with the receiving waters; therefore, the Department is utilizing the entire 1Q10 stream design flow in acute evaluations.

d. Temperature: The previous permitting action established a seasonal (June 1 – September 30) daily maximum water quality based temperature limit of 82°F. Department rule Chapter 582, *Regulations Relating to Temperature. Regulations Relating To Temperature*, 06-096 CMR 582 (last amended February 18, 1989) limits thermal discharges to an in-stream temperature increase (ΔT) of 0.5°F above the ambient receiving water temperature when the weekly average temperature of the receiving water is greater than or equal to 66° F or when the daily maximum temperature is greater than or equal to 73° F. The temperature thresholds are based on EPA water quality criterion for the protection of brook trout and Atlantic salmon. The weekly average temperature of 66°F was derived to protect for normal growth of the brook trout and the daily maximum threshold temperature of 73° F protects for the survival of juveniles and adult Atlantic salmon during the summer months. The Department interprets the term "weekly average temperature" to mean a seven (7) day rolling average. To promote consistency, the Department also interprets the ΔT of 0.5° F as a weekly rolling average criterion when the receiving water temperature is ≥66° F and <73° F.

The assimilative capacity of the Great Works River (thermal load that would cause the stream to increase by 0.5°F) at the 7Q10 stream design flow of 2.55 cfs can be calculated as follows:

$$(2.55 \text{ cfs})(0.6464)(0.5°F)(8.34 \text{ lbs./gallon})(10^6 \text{ gallons}) = 6.9 \times 10^6 \text{ BTU/day}$$

The maximum effluent temperature discharge (X°F) that at the full permitted flow rate of 0.05 MGD will, by itself, comply with the weekly rolling average limit of 0.5 °F (when the receiving water is ≤66°F and <73°F) and not exceed the assimilative capacity of the Great Works River ($6.9 \times 10^6$ BTU/day) may be calculated as follows:

$$(0.05 \text{ MGD})(X°F - 66°F)(8.34 \text{ lbs/gal}) = 6.9 \times 10^6 \text{ BTU/day}$$
$$X = 82.5°F$$

Therefore, this permitting action is carrying forward the seasonal (June 1 – September 30) daily maximum effluent temperature limitation of 82.0°F based on best professional judgment of the maximum effluent temperature the facility can discharge at full permitted flow while maintaining compliance with the in-stream temperature increase (ΔT) limit of 0.5°F above the ambient receiving water temperature when the weekly average temperature of the receiving water is greater than or equal to 66°F or when the daily maximum temperature is greater than or equal to 73°F.

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

A review of the monthly DMRs submitted to the Department for the period June 2008 – July 2012 indicates values have been reported as follows:

**Temperature (DMRs = 18)**

| Value | Limit (°F) | Range (°F) | Mean (°F) |
|---|---|---|---|
| Daily maximum | 82 | 64.1 – 74 | 70.8 |

On April 19, 1996, the U.S. EPA issued a memorandum to the Water Division Directors in all ten regions of the U.S. reminding them to convey to NPDES permitting authorities they can grant relief to regulated facilities that have a record of good compliance and pollutant discharges at levels below permit requirements. The EPA recommends the use of a document entitled, "*Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies*" (USEPA 1996) as the basis for determining these reduced monitoring frequencies. Monitoring requirements are not considered effluent limitations under section 402(o) of the Clean Water Act and therefore, anti-backsliding prohibitions would not be triggered by reductions in monitoring frequencies.

The EPA Guidance indicates "*...the basic premise underlying a performance-based reduction approach is that maintaining a low average discharge relative to the permit limits results in a low probability of the occurrence of a violation for a wide range of sampling frequencies.*" The monitoring frequency reductions in EPA's guidance were designed to maintain approximately the same level of reported violations as that experienced with the existing baseline sampling frequency in the permit. To establish baseline performance the long term average (LTA) discharge rate for each parameter is calculated using the most recent two-year data set of monthly average effluent data representative of current operating conditions. The LTA/permit limit ratio is calculated and then compared to the matrix in Table I of EPA's guidance to determine the potential monitoring frequency reduction. It is noted Table I of EPA's guidance was derived from a probability table that used an 80% effluent variability or coefficient of variation (cv). The permitting authority can take into consideration further reductions in the monitoring frequencies if the actual cv for the facility is significantly lower than the default 80% utilized by the EPA in Table I.

In addition to the parameter-by-parameter performance history via the statistical evaluation cited above, the EPA recommends the permitting authority take into consideration the facility enforcement history and the parameter-by-parameter compliance history and factors specific to the State or facility. If the facility has already been given monitoring reductions due to superior performance, the baseline may be a previous permit.

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

Though EPA's 1996 Guidance recommends evaluation of the most current two-years of effluent data for a parameter, the Department is considering the last five years, August 2007 – July 2012.

The review of the seasonal monitoring data for temperature data on page 9 of this Fact Sheet indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as follows:

June 1 – September 30

Long term average = 70.8°F
Monthly average limit = 82°F
Current monitoring frequency = 1/Day

$$\text{Ratio} = \frac{70.8°F}{82°F} = 86\%$$

According to Table I of the EPA Guidance, a 1/Day monitoring requirement should not be reduced. Therefore, the summertime temperature monitoring frequency remains at 1/Day in this permitting action.

e. Total Phosphorus (Total-P): The previous permitting action established seasonal (June 1 – September 30) daily maximum and monthly average concentration effluent limitations of 240 µg/L and 82 µg/L, respectively, for total-P along with a 2/Month monitoring requirement. The previous permitting action established seasonal (June 1 – September 30 of each year) daily maximum and monthly average mass effluent limitations of 0.10 lbs./day and 0.034 lbs./day, respectively, for total-P. According to the Fact Sheet associated with the previous permit, the mass limits were carried forward from the April 4, 1996 WDL, and, "*are water quality based limits established by the Department in the early 1990s to protect Leigh's Mill Pond (approximately 4 river miles downstream) from algal blooms.*" The mass limits were determined by desktop modeling by the Department. The concentration limits were established by back-calculating from the applicable mass limits and a daily maximum discharge flow limit of 0.05 MGD.

A review of the monthly DMRs submitted to the Department for the period August 2007 – July 2012 indicates values have been reported as follows:

**Total phosphorus concentration (DMRs = 20)**

| Value | Limit (ug/L) | Range (ug/L) | Mean (ug/L) |
|---|---|---|---|
| Monthly average | 82 | 3.0 - 57 | 13 |
| Daily maximum | 240 | 3.0 - 85 | 18 |

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

**Total phosphorus mass (DMRs = 20)**

| Value | Limit (lbs/day) | Range (lbs/day) | Mean (lbs/day) |
|---|---|---|---|
| Monthly average | 0.034 | 0.0004 – 0.010 | 0.0038 |
| Daily maximum | 0.10 | 0.0004 – 0.0153 | 0.0048 |

This permitting action is carrying forward the seasonal monthly average and daily maximum concentration and mass limitations based on the "anti-backsliding" provisions found in *Waste Discharge License Conditions,* 06-096 CMR 523(5)(l)(2) (effective January 12, 2001). Anti-backsliding provisions state that a permit may not be renewed, reissued, or modified on the basis of effluent guidelines promulgated under the Clean Water Act, subsequent to the original issuance of such permit, to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit, with certain exceptions.

As with temperature, the permittee has been monitoring total phosphorus dating back to the 1992. The review of the seasonal monitoring data for total phosphorus indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as follows:

June 1 – September 30

Long term average = 0.0038 lbs/day
Monthly average limit = 0.034 lbs/day
Current monitoring frequency = 2/Month

$$\text{Ratio} = \frac{0.0038 \text{ lbs/day}}{0.034 \text{ lbs/day}} = 11\%$$

According to Table I of the EPA Guidance, a 2/Month monitoring requirement can be reduced to 1/6 months. Given monitoring for total phosphorus is only being conducted between June 1 and September 30 of each year, the Department is making a best professional judgment to reduce the monitoring frequency to 1/Month for total-P to continue to assess whether the discharge is causing or contributing to non-attainment of the standards of classification for the receiving waters in Great Works River and the more sensitive Leigh's Mill Pond.

f. Total Suspended Solids (TSS): The previous permitting action established monthly average and daily maximum concentration limits of 15 mg/L and 15 mg/L respectively. In addition, the permit established monthly average and daily maxim mass limits of 6.3 lbs and 6.3 lbs/day respectively along with a minimum monitoring frequency requirement of once per month for TSS. The mass limits were calculated as follows:

Monthly Average/Daily Maximum Mass =
(0.05 MGD)(8.34 lbs./gallon)(15 mg/L) = 6.3 lbs./day

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

The 3/15/02 permit stated that the daily maximum concentration limit had been carried forward in licensing/permitting actions since at least 1992 and was likely established as a technology based limitation based on a past demonstrated performance of the TSS historically discharged from the UTPW facility prior to 1992. The National Effluent Guideline Standards pursuant at 40 CFR, Part 433.13 establishes monthly average and daily maximum BPT-based limits of 31 mg/L and 60 mg/L, respectively, for TSS. The Fact Sheet of the previous permit stated "*Since the USEPA has promulgated effluent limitation guidelines for TSS in terms of both daily maximum and monthly average limitations, this permitting action must limit the discharge in these terms as well. To satisfy the minimum effluent limitation requirements of 40 CFR Part 433.13, this permitting action is establishing monthly average concentration and mass limits for TSS that are equivalent to the daily maximum limits.*

A review of the monthlyDMRs submitted to the Department for the period January 2008 – July 2012 indicates values have been reported as follows:

**Total suspended solids concentration (DMRs = 55)**

| Value | Limit (mg/L) | Range (mg/L) | Mean (mg/L) |
|---|---|---|---|
| Monthly average | 15 | 0.4 – 16 | 1.3 |
| Daily maximum | 15 | 0.4 - 16 | 1.3 |

**Total suspended solids mass (DMRs = 55)**

| Value | Limit (lbs/day) | Range (lbs/day) | Mean (lbs/day) |
|---|---|---|---|
| Monthly average | 6.3 | 0.057 – 3.05 | 0.28 |
| Daily maximum | 6.3 | 0.057 – 3.05 | 0.28 |

The "anti-backsliding" provisions found in *Waste Discharge License Conditions,* 06-096 CMR 523(5)(l)(2) (effective January 12, 2001) states that a permit may not be renewed, reissued, or modified on the basis of effluent guidelines promulgated under the Clean Water Act, subsequent to the original issuance of such permit, to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit, with certain exceptions.

Based on this performance data and anti-backsliding provisions of Department rule, this permitting action is carrying forward the monthly average and daily maximum mass and concentration limits of 6.3 lbs/day and 15 mg/L respectively.

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

The permittee has been monitoring TSS dating back to the 1992. The review of the year-round monitoring data for TSS indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as follows:

Long term average = 0.28 lbs/day
Monthly average limit = 6.3 lbs/day
Current monitoring frequency = 1/Month

$$\text{Ratio} = \frac{0.28 \text{ lbs/day}}{6.3 \text{ lbs/day}} = 4\%$$

According to Table I of the EPA Guidance, a 2/Month monitoring requirement can be reduced to 1/Quarter. Therefore this permitting action is reducing the monitoring frequency for TSS to 1/Quarter.

g. Oil and Grease (O&G): As with TSS, the previous permitting action established monthly average and daily maximum concentration limits of 15 mg/L and 15 mg/L respectively. In addition, the permit established monthly average and daily maxim mass limits of 6.3 lbs and 6.3 lbs/day respectively along with a minimum monitoring frequency requirement of once per month for O&G. The mass limits were calculated as follows:

Monthly Average/Daily Maximum Mass =
(0.05 MGD)(8.34 lbs./gallon)(15 mg/L) = 6.3 lbs./day

The 3/15/02 permit stated that the daily maximum concentration limit had been carried forward in licensing/permitting actions since at least 1992 and was likely established as a technology based limitation based on a past demonstrated performance of the TSS historically discharged from the UTPW facility prior to 1992. The National Effluent Guideline Standards pursuant at 40 CFR, Part 433.13 establishes monthly average and daily maximum BPT-based limits of 26 mg/L and 52 mg/L, respectively, for O&G. The fact sheet of the previous permit stated *"this limit was established as a Department best professional judgment (BPJ) of BPT, as this is the concentration at which oil & grease causes a visible sheen on the surface of waterbodies." Since the USEPA has promulgated effluent limitation guidelines for O&G in terms of both daily maximum and monthly average limitations, this permitting action must limit the discharge in these terms as well. To satisfy the minimum effluent limitation requirements of 40 CFR Part 433.13, this permitting action is establishing monthly average concentration and mass limits for O&G that are equivalent to the daily maximum limits.*

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

A review of the monthly DMRs submitted to the Department for the period January 2008 – July 2012 indicates values have been reported as follows:

**Oil & Grease (DMRs = 55)**

| Value | Limit (mg/L) | Range (mg/L) | Mean (mg/L) |
|---|---|---|---|
| Monthly average | 15 | <1.3 – 5.0 | 1.6 |
| Daily maximum | 15 | <1.3 – 5.0 | 1.6 |

**Oil & Grease mass (DMRs = 55)**

| Value | Limit (lbs/day) | Range (lbs/day) | Mean (lbs/day) |
|---|---|---|---|
| Monthly average | 6.3 | 0.95 – 2.0 | 0.56 |
| Daily maximum | 6.3 | 0.95 – 2.0 | 0.56 |

The "anti-backsliding" provisions found in *Waste Discharge License Conditions,* 06-096 CMR 523(5)(l)(2) (effective January 12, 2001) states that a permit may not be renewed, reissued, or modified on the basis of effluent guidelines promulgated under the Clean Water Act, subsequent to the original issuance of such permit, to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit, with certain exceptions.

Based on this performance data and anti-backsliding provisions of Department rule, this permitting action is carrying forward the monthly average and daily maximum mass and concentration limits (6.3 lbs/day and 15 mg/L respectively) for O&G.

The permittee has been monitoring O&G dating back to the 1992. The review of the year-round monitoring data for O&G indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as follows:

Long term average = 0.56 lbs/day
Monthly average limit = 6.3 lbs/day
Current monitoring frequency = 1/Month

$$\text{Ratio} = \frac{0.56 \text{ lbs/day}}{6.3 \text{ lbs/day}} = 9\%$$

According to Table I of the EPA Guidance, a 2/Month monitoring requirement can be reduced to 1/Quarter. Therefore this permitting action is reducing the monitoring frequency for O&G to 1/Quarter.

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

h. Total Toxic Organics (TTO): The previous permitting action established, and this permitting action is carrying forward, a daily maximum concentration limit of 2.13 mg/L for TTO. In accordance with the requirements of 06-096 CMR Chapter 523(6)(f)(2), this permitting action is establishing a daily maximum technology-based mass limit for TTO as follows:

Daily Maximum Mass = (0.05 MGD)(8.34 lbs./gallon)(2.13 mg/L) = 0.89 lbs./day

The term TTO is the summation of all quantifiable values greater than 0.01 mg/L for the toxics organics specified at 40 CFR Part 433.11(e). The limit was established based on the BPT-based effluent guideline promulgated at 40 CFR Part 433.13. Special Condition A, Footnote #5 of the previous permit authorized the permittee to make a certification statement in accordance with 40 CFR Part 433.12(a&b) in lieu of TTO monitoring. 40 CFR Part 433.12 states,

> *In lieu of requiring monitoring for TTO, the permitting authority (or, in the case of indirect dischargers, the control authority) may allow dischargers to make the following certification statement: "Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation [or pretreatment standard] for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the permitting [or control] authority." For direct dischargers, this statement is to be included as a "comment" on the Discharge Monitoring Report required by 40 CFR 122.44(i), formerly 40 CFR 122.62(i). For indirect dischargers, the statement is to be included as a comment to the periodic reports required by 40 CFR 403.12(e). If monitoring is necessary to measure compliance with the TTO standard, the industrial discharger need analy[z]e for only those pollutants which would reasonably be expected to be present.*

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

> *(b) In requesting the certification alternative, a discharger shall submit a solvent management plan that specifies to the satisfaction of the permitting authority (or, in the case of indirect dischargers, the control authority) the toxic organic compounds used; the method of disposal used instead of dumping, such as reclamation, contract hauling, or incineration; and procedures for ensuring that toxic organics do not routinely spill or leak into the wastewater. For direct dischargers, the permitting authority shall incorporate the plan as a provision of the permit.*

Special Condition F, *Solvent Management Plan (SMP),* of this permit requires the permittee to maintain a current written comprehensive SMP. The plan shall specify the toxic organic compounds used; the method of disposal used instead of dumping, such as reclamation, contract hauling, or incineration; and procedures for ensuring that toxic organics do not routinely spill or leak into the wastewater.

The permittee shall review their SMP annually and make the necessary revisions to reflect the most practices and the SMP shall be kept on-site at all times and made available to Department and EPA personnel upon request

i. pH: The previous permitting action established, and this permitting action is carrying forward, a daily maximum pH range limitation of 6.0 – 9.0 standard units (SU) based on the BPT-based effluent guidelines promulgated at 40 CFR Part 433.13. This permitting action is carrying forward a minimum monitoring frequency requirement of once per day for pH.

j. 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.

## 6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

WET, priority pollutant and analytical chemistry testing, as required by 06-096 CMR 530, is included in this permit in order to characterize the effluent. WET monitoring is required to assess and protect against impacts upon water quality and designated uses caused by the aggregate effect of the discharge on specific aquatic organisms. Acute and chronic WET tests are performed on invertebrate water flea (*Ceriodaphnia dubia*) and vertebrate brook trout (*Salvelinus fontinalis*). Chemical-specific monitoring is required to assess the levels of individual toxic pollutants in the discharge, comparing each pollutant to acute, chronic, and human health water quality criteria. Priority pollutant and analytical chemistry testing refers to the analysis for levels of pollutants listed in **Attachment A** of the permit.

06-096 CMR 530(2)(A) specifies the dischargers subject to the rule as, *"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."* UTPW discharges industrial process waste waters to surface waters and is therefore subject to the testing requirements of the toxics rule.

Chapter 530 §(3)(E) states *"... that a discharge contains pollutants or WET at levels that have a reasonable potential to cause or contribute to an exceedence of water quality criteria, appropriate water quality-based limits must be established in any licensing action."*

06-096 CMR 530(4)(C) states "*The background concentration of specific chemicals must be included in all calculations using the following procedures. The Department may publish and periodically update a list of default background concentrations for specific pollutants on a regional, watershed or statewide basis. In doing so, the Department shall use data collected from reference sites that are measured at points not significantly affected by point and non-point discharges and best calculated to accurately represent ambient water quality conditions." "The Department shall use the same general methods as those in section 4(D) to determine background concentrations. For pollutants not listed by the Department, an assumed concentration of 10% of the applicable water quality criteria must be used in calculations."* The Department has no information on the background levels of metals in the water column in the Great Works River. Therefore, a default background concentration of 10% of applicable water quality criteria is being used in the calculations of this permitting action.

## 6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

06-096 CMR 530(4)(E) states "*In allocating assimilative capacity for toxic pollutants, the Department shall hold a portion of the total capacity in an unallocated reserve to allow for new or changed discharges and non-point source contributions. The unallocated reserve must be reviewed and restored as necessary at intervals of not more than five years. The water quality reserve must be not less than 15% of the total assimilative quantity.*" However, in May 2012, Maine law 38 M.R.S.A. §464, ¶¶ J was enacted which reads as follows, "*For the purpose of calculating waste discharge license limits for toxic substances, the department may use any unallocated assimilative capacity that the department has set aside for future growth if the use of that unallocated assimilative capacity would avoid an exceedance of applicable ambient water quality criteria or a determination by the department of a reasonable potential to exceed ambient water quality criteria..*"

On August 24, 2012, the Department conducted statistical evaluations based on 15% of the ambient water quality criteria reserve being withheld (Report ID 461) and 0% of the reserve of the criteria being withheld (Report ID 462) to determine if the unallocated assimilative capacity would avoid an exceedance or avoid a reasonable potential to exceed applicable ambient water quality criteria for toxic pollutants. Report ID 461 indicates the Berwick Sewer District no longer has a reasonable potential to exceed the chronic ambient water quality criteria for bis(2ethylhexyl) phthalate or copper and South Berwick no longer has a reasonable potential to exceed the chronic ambient water quality criteria for silver. Therefore, the department is utilizing the full 15% of the unallocated assimilative capacity in the statistical evaluation when establishing limits for toxic pollutants in waste discharge licenses for facilities in the Great Works River and Salmon Falls River watersheds.

06-096 CMR 530(4)(F) requires evaluation of toxic pollutant impacts on a watershed basis. This section of the rule states, "*Where there is more than one discharge into the same fresh or estuarine receiving water or watershed, the Department shall consider the cumulative effects of those discharges when determining the need for and establishment of the level of effluent limits. The Department shall calculate the total allowable discharge quantity for specific pollutants, less the water quality reserve and background concentration, necessary to achieve or maintain water quality criteria at all points of discharge, and in the entire watershed.*

Chapter 530 §4(F) states in part "*Where there is more than one discharge into the same fresh or estuarine receiving water or watershed, the Department shall consider the cumulative effects of those discharges when determining the need for and establishment of the level of effluent limits. The Department shall calculate the total allowable discharge quantity for specific pollutants, less the water quality reserve and background concentration, necessary to achieve or maintain water quality criteria at all points of discharge, and in the entire watershed. The total allowable discharge quantity for pollutants must be allocated consistent with the following principles.*

## 6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

*Evaluations must be done for individual pollutants of concern in each watershed or segment to assure that water quality criteria are met at all points in the watershed and, if appropriate, within tributaries of a larger river.*

*The total assimilative capacity, less the water quality reserve and background concentration, may be allocated among the discharges according to the past discharge quantities for each as a percentage of the total quantity of discharges, or another comparable method appropriate for a specific situation and pollutant. Past discharges of pollutants must be determined using the average concentration discharged during the past five years and the facility's licensed flow.*

*The amount of allowable discharge quantity may be no more than the past discharge quantity calculated using the statistical approach referred to in section 3(E) [Section 3.3.2 and Table 3-2 of USEPA's "Technical Support Document for Water Quality-Based Toxics Control"] of the rule, but in no event may allocations cause the water quality reserve amount to fall below the minimum referred to in 4(E) [15% of the total assimilative capacity]. Any difference between the total allowable discharge quantity and that allocated to existing dischargers must be added to the reserve.*

Chapter 530 §(3)(D)(1) states "*For specific chemicals, effluent limits must be expressed in total quantity that may be discharged and in effluent concentration. In establishing concentration, the Department may increase allowable values to reflect actual flows that are lower than permitted flows and/or provide opportunities for flow reductions and pollution prevention provided water quality criteria are not exceeded. With regard to concentration limits, the Department may review past and projected flows and set limits to reflect proper operation of the treatment facilities that will keep the discharge of pollutants to the minimum level practicable.*" However, in May 2012, Maine law 38 M.R.S.A. §464, ¶¶ K was enacted which reads as follows, "*Unless otherwise required by an applicable effluent limitation guideline adopted by the department, any limitations for metals in a waste discharge license may be expressed only as mass-based limits.*" There are applicable effluent limitation guidelines adopted by the Department or the USEPA for metals subject to Effluent Limitations Guidelines (ELGs) for the Metal Finishing Point Source Category found at 40 CFR Part 433. Federal regulation 40 CFR, Part 433, establishes BPT (technology based) concentration limits for total cadmium, total chromium, total copper, total lead, total nickel, total silver, total zinc and total cyanide. Therefore, concentration limits for pollutants identified in the most recent statistical evaluation conducted on October 24, 2012, (Report ID #479) that exceed or have a reasonable potential to exceed applicable ambient water quality criteria that are not subject to the ELG's are not being established in this permitting action.

See **Attachment D** of this Fact Sheet for Department guidance that establishes protocols for establishing waste load allocations. The guidance states that the most protective of water quality becomes the facility's allocation. According to the 10/24/12 statistical evaluation (Report ID #479), pollutants of concern from a water quality perspective at the UTPW facility include total aluminum, bis(2-ethylhexyl) phthalate, total cadmium, total copper and total nickel.

## 6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

This permit provides for reconsideration of effluent limits and monitoring schedules after evaluation of toxicity testing results. The monitoring schedule includes consideration of results currently on file, the nature of the wastewater, existing treatment, and receiving water characteristics.

06-096 CMR 530(2)(B) categorizes dischargers subject to the toxics rule into one of four levels (Levels I through IV). Level II dischargers are those *"having a chronic dilution factor of at least 20 but less than 100 to 1."* The chronic dilution factor associated with the discharge from UTPW is 34 to 1; thus, the facility is considered a Level II facility for purposes of toxics testing. 06-096 CMR 530(2)(D) specifies routine WET, priority pollutant, and analytical chemistry test schedules for Level II dischargers as follows:

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

| Level | WET Testing | Priority pollutant testing | Analytical chemistry |
|---|---|---|---|
| II | 2 per year | 1 per year | 4 per year |

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

| Level | WET Testing | Priority pollutant testing | Analytical chemistry |
|---|---|---|---|
| II | 1 per year | None required | 2 per year |

A review of the data on file with the Department for the UTPW indicates that, to date, they have fulfilled the WET and chemical-specific testing requirements of the previous permitting action. See **Attachment B** of this Fact Sheet for a summary of the WET test results, and **Attachment C** of this Fact Sheet for a summary of chemical-specific test dates and arsenic test results.

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

a. WET Evaluation:

The previous permitting action established chronic No Observed Effect Level (C-NOEL) limits of 2.9% for the water flea and the brook trout based on a statistical evaluation conducted at the time of permit renewal. No other limits were established for WET species. On October 24, 2012, the Department conducted a statistical evaluation on the most recent 60 months of WET test results on file with the Department for the UTPW in accordance with the statistical approach outlined above. The 10/24/12 statistical evaluation indicates there are no test results in the most current 60 months for the water flea or the brook trout that exceed or have a reasonable potential to exceed the critical acute or chronic water quality thresholds of 3.4 of 2.9% respectively.

Therefore, this permitting action is eliminating the chronic limit of 2.9% (mathematical inverse of the applicable chronic dilution factor of 34:1) for the water flea.

06-096 CMR 530(2)(D)(3)(c) states, in part, *"dischargers in Level II may reduce surveillance testing to one WET or specific chemical series every other year provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedence."* Therefore, the facility qualifies for reduced surveillance level testing for both the water flea and the brook trout. This permitting action is establishing reduced surveillance level WET testing to a minimum frequency of once every two years. Screening level WET testing is being established at a minimum frequency of twice per year for both the water flea and brook trout based on 06-096 CMR 530.

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

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

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

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

This permitting action establishes Special Condition E, *06-096 CMR 530(2)(D)(4) Statement For Reduced Toxics Testing.* It is noted, however, that if future WET testing indicates the discharge exceeds critical water quality thresholds, this permit will be reopened in accordance with Special Condition J, *Reopening of Permit For Modification,* to establish effluent limitations and monitoring requirements as necessary.

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

b. Analytical chemistry and Priority Pollutant Evaluation:

As with WET testing, on October 24, 2012, the Department conducted a statistical evaluation on the most recent 60 months of chemical-specific tests results on file with the Department for UTPW in accordance with the statistical approach outlined above. The 10/24/12 statistical evaluation (Report ID #479) indicates the discharge from the UTPW facility has demonstrated a reasonable potential (RP) to exceed ambient water quality criteria (AWQC) thresholds for total aluminum, bis (2-ethylhexyl) phthalate, total cadmium, total copper and total nickel. Further discussion and evaluation of metals for which the USEPA has established effluent guidelines limitations applicable to this discharge, follows in this section.

06-096 CMR 530(3) states, *"the Department shall establish appropriate discharge prohibitions, effluent limits and monitoring requirements in waste discharge licenses if a discharge contains pollutants that are or may be discharged at levels that cause, have reasonable potential to cause, or contribute to an ambient excursion in excess of a numeric or narrative water quality criteria or that may impair existing or designated uses."*

The Department must establish the more stringent of either a technology-based or water quality-based limit in the case where both standards exist for a given parameter to assure compliance with both the Clean Water Act (CWA) and State law. Also see Section 301(b) (1) c of the CWA. Additionally, the anti-backsliding provisions of 06-096 CMR 523 prohibit the Department from issuing a permit with less stringent limitations than the comparable effluent limitations in the previous permit on the basis of effluent guidelines promulgated under the Clean Water Act (*i.e.*, effluent guideline limitations at 40 CFR Part 433.13), subsequent to the original issuance of such permit, to contain effluent limitations which are less stringent, with certain exceptions.

Therefore, this permitting action must establish the more stringent of either the BPT-based, water quality-based or previous permit limitation for those parameters listed at 40 CFR Part 433.13, except for those guideline-listed pollutants that qualify for a 40 CFR Part 122.44 monitoring waiver. (See Special Condition E of this permit and discussion for chromium and silver in Section 6 of this Fact Sheet).

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

The Great Works River is a tributary to the Salmon Falls River. Other than UTPW, one municipal waste water treatment facility (North Berwick) discharges to the Great Works River and is subject to the Department's Chapter 530 testing requirements. As for the Salmon Falls River, there are two municipal facilities, Berwick and South Berwick. The UTPW facility discharges approximately 1.5 miles upstream of the North Berwick treatment facility. The Berwick facility discharges approximately 3.7 miles upstream of the South Berwick facility. The confluence of the Great Works River and the Salmon Falls River is located approximately 7 miles downstream of the North Berwick facility and one half mile below the South Berwick facility. See **Attachment A** of this Fact Sheet for a map illustrating the relative proximity of the facilities to each other.

As previously cited, Chapter 530 requires that AWQC must be met at the confluence of the Great Works River and the Salmon Falls River (below South Berwick) as well as at the individual discharge points on the Great Works River and the Salmon Falls River after taking into consideration historic discharge levels for all four facilities as well as an allocation dedicated to background (10% of AWQC) and a reserve (0% of AWQC).

The Department has prepared guidance that establishes protocols for establishing waste load allocations. See **Attachment D** of this Fact Sheet. The guidance states that the most protective of water quality becomes the facility's allocation. According to the 10/24/12 statistical evaluation, all parameters of concern for UTPW are to be limited based on the individual allocation method due the low dilution factors associated with the facility.

**Individual allocation**

In the individual allocation, the Department continues to utilize the formula it has used in permitting actions since October 2005 taking into consideration background (10% of AWQC) and a reserve (0% of AWQC). The formula is as follows:

EOP concentration = [Dilution factor x 0.90 x AWQC] + [0.10 x AWQC]

Mass limit = (EOP concentration in mg/L)(8.34 lbs/gal)(Permit flow limit in MGD)

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

1. **Aluminum (Total)**

The previous permitting action did not establish any mass or concentration limits for total aluminum as there are no BPT concentration limits established in 40 CFR Part 423 and the statistical evaluation conducted at the time of permit renewal indicated there were no test results for total aluminum that exceeded or had a reasonable potential to exceed applicable AWQC. Given the most current statistical evaluation (Report ID #479) indicates there is a reasonable potential for the UTPW discharge to exceed the chronic AWQC, water quality based monthly average total aluminum limitations can be calculated as follows:

Chronic AWQC = 87 ug/L
Chronic dilution factor = 34:1

End-of-pipe (EOP) concentration = [Dilution factor x 0.90 x AWQC] + [0.10 x AWQC]

EOP = [34 x 0.90 x 87 ug/L] + [0.10 x 87 ug/L] = 2,671 ug/L

Based on a permitted flow of 0.050 MGD, EOP mass limits are as follows:

$$\frac{(2{,}671 \text{ ug/L})(8.34)(0.050 \text{ MGD})}{1{,}000 \text{ ug/mg}} = \textbf{1.1 lbs/day}$$

Because there is no BPT concentration limit established in 40 CFR Part 433, and taking into consideration the May 2012 revision to Chapter 530, no concentration limits for total aluminum are being established in this permit but the permittee is required to report concentration results. A monitoring frequency of 1/Quarter is being established to be consistent the screening level analytical chemistry requirement of 06-096 CMR 530.

2. **Bis(2-ethylhexyl)phthalate**

The previous permitting action did establish water quality based monthly average mass (0.025 lbs/day) and concentration (90.3 ug/L) limits for bis(2-ethylhexyl)phthalate as a statistical evaluation conducted at the time of permit renewal indicated there were test results for bis(2-ethylhexyl)phthalate that had a reasonable potential to exceed applicable AWQC. Given the results of the most current statistical evaluation (Report ID #479) indicating a continued reasonable potential to exceed the human health (water and organisms) AWQC, monthly average water quality based bis(2-ethylhexyl)phthalate limitations can be calculated as follows:

Human health (w&o) AWQC = 0.80 ug/L
Harmonic mean dilution factor = 100:1

EOP concentration = [Dilution factor x 0.90 x AWQC] + [0.10 x AWQC]

EOP = [100 x 0.90 x 0.80 ug/L] + [0.10 x 0.80 ug/L] = 72 ug/L

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

Based on a permitted flow of 0.050 MGD, EOP mass limits are as follows:

$$\frac{(72 \text{ ug/L})(8.34)(0.050 \text{ MGD})}{1{,}000 \text{ ug/mg}} = 0.03 \text{ lbs/day}$$

A review of the monthly DMRs submitted to the Department for the period January 2008 – July 2012 indicates values have been reported as follows:

**Bis(2ethylhexyl)phthalate concentration (DMRs = 55)**

| Value | Limit (ug/L) | Range (ug/L) | Mean (ug/L) |
|---|---|---|---|
| Monthly average | 90.3 | <2.0 – 69 | 8.9 |

It is noted the mass calculations above utilize the calculated EOP concentration of 72 ug/L (based on reserving 10% background and 0% reserve from the AWQC) when calculating the applicable mass limitations given the facility has the authority to discharge at the full permitted flow of 0.05 MGD. However the previous permit established a concentration limit of 90 ug/L (based on withholding 10% background and 15% reserve from the AWQC times a factor of 1.5) based on a 1995 Department policy that all permits issued must contain concentration limits as well as mass limits. EPA's *Technical Support Document For Water Quality-Based Toxics Control, March 1991*, Chapter 5, Section 5.7 recommends that permit limits on both mass and concentration be specified for effluents discharging into waters with less than 100 fold dilution to ensure attainment of water quality standards. As not to penalize facilities for operating at flows less than the permitted design flow of the waste water treatment plant, the Technical Support Document recommends allowing the concentration based limits to vary in accordance with flow reductions. In addition, 40 CFR, Part 133.101(f) authorizes a permit/license writer to increase the calculated end-of-pipe concentrations limits by a factor of 1.5 which represents effluent concentration limits that are achievable through proper operation and maintenance of the treatment plant.

Because there is no BPT concentration limit established in 40 CFR Part 423, and taking into consideration the May 2012 revision to Chapter 530, no concentration limits are being established for bis(2-ethylhexyl) phthalate or any other parameter with water quality based limits so the 1.5 factor is no longer applicable. This permit does require the permittee to report concentration test results on the DMRs.

**Bis(2ethylhexyl)phthalate mass (DMRs = 55)**

| Value | Limit (lbs/day) | Range (lbs/day) | Mean (lbs/day) |
|---|---|---|---|
| Monthly average | 0.025 | 0.00023 – 0.0193 | 0.0040 |

Pursuant to the "anti-backsliding" provisions found in *Waste Discharge License Conditions,* 06-096 CMR 523(5)(l)(2) (effective January 12, 2001), this permitting action is carrying forward the monthly average mass limit of 0.025 lbs/day from the December 21, 2007, permitting action.

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

As for the monitoring frequency, the permittee has been monitoring for bis(2-ethylhexhl)phthalate on a 1/Month basis since January 2008. The review of the year-round monitoring data for bis(2-ethylhexhl)phthalate indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as follows:

Long term average = 0.0040 lbs/day
Monthly average limit = 0.025 lbs/day
Current monitoring frequency = 1/Month

$$\text{Ratio} = \frac{0.004 \text{ lbs/day}}{0.025 \text{ lbs/day}} = 16\%$$

According to Table I of the EPA Guidance, a 1/Month monitoring requirement can be reduced to 1/6 months. However, to be consistent with monitoring requirements of *Surface Water Toxics Control Program,* 06-096 CMR 530, the Department is making a best professional judgment to limit the monitoring frequency reduction to 1/Quarter (equivalent to screening level testing for Level II dischargers) for bis(2ethylhexhl)phthalate in this permitting action.

3. **Cadmium (Total):**

The previous permitting action established monthly average water quality-based concentration/mass limitations of 3.1 µg/L/0.00086 lbs./day and daily maximum water quality based concentration/mass limitations of 13.9 µg/L/0.0036 lbs./day, respectively, for total cadmium as a statistical evaluation conducted at the time of permit renewal indicated the discharge from the UTPW facility had numerous test results that a reasonable potential to exceed acute and chronic AWQC for total cadmium. Given the results of most current statistical evaluation (Report ID #479) indicating a continued reasonable potential to exceed the chronic AWQC for cadmium, monthly average water quality based limitations for cadmium can be calculated as follows:

Chronic AWQC = 0.08 ug/L
Chronic dilution factor = 34:1

EOP concentration = [Dilution factor x 0.90 x AWQC] + [0.10 x AWQC]

EOP = [34 x 0.90 x 0.08 ug/L] + [0.10 x 0.08 ug/L] = 2.4 ug/L

Based on a permitted flow of 0.050 MGD, EOP mass limits are as follows:

$$\frac{(2.4 \text{ ug/L})(8.34)(0.050 \text{ MGD})}{1{,}000 \text{ ug/mg}} = 0.0010 \text{ lbs/day}$$

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

A review of the monthly DMRs submitted to the Department for the period January 2008 – July 2012 indicates values have been reported as follows:

**Cadmium (Total) concentration (DMRs = 55)**

| Value | Limit (ug/L) | Range (ug/L) | Mean (ug/L) |
|---|---|---|---|
| Monthly average | 3.1 | <0.1 – 0.8 | 0.05 |
| Daily maximum | 13.9 | <0.1 – 0.8 | 0.05 |

Federal regulation 40 CFR Part 433, does establish BPT (technology based) limits for total cadmium. The monthly average limitation is 260 ug/L and the daily maximum limit is 690 ug/L. Taking into consideration the anti-backsliding provisions found in *Waste Discharge License Conditions,* 06-096 CMR 523(5)(l)(2) (effective January 12, 2001), this permitting action is carrying forward the monthly average and daily maximum water quality based concentration limits of 3.1 ug/L and 13.9 ug/L respectively, for total cadmium.

**Cadmium (Total) mass (DMRs = 55)**

| Value | Limit (lbs/day) | Range (lbs/day) | Mean (lbs/day) |
|---|---|---|---|
| Monthly average | 0.00086 | <0.0001 – 0.0003 | 0.0001 |
| Daily maximum | 0.0036 | <0.0001 – 0.0003 | 0.0001 |

Pursuant to the "anti-backsliding" provisions found in *Waste Discharge License Conditions,* 06-096 CMR 523(5)(l)(2) (effective January 12, 2001), this permitting action is carrying forward the monthly average and daily maximum mass limit of 0.00086 lbs/day and 0.0036 lbs/day respectively, established in the December 21, 2007, permitting.

As for the monitoring frequency, the permittee has been monitoring for total cadmium since 1992 given the federal regulations establish BPT limits for cadmium. The review of the year-round monitoring data for cadmium indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as follows:

Long term average = 0.0001 lbs/day
Monthly average limit = 0.00086 lbs/day
Current monitoring frequency = 1/Month

$$\text{Ratio} = \frac{0.0001 \text{ lbs/day}}{0.00086 \text{ lbs/day}} = 12\%$$

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

According to Table I of the EPA Guidance, a 1/Month monitoring requirement can be reduced to 1/6 months. However, to be consistent with monitoring requirements of *Surface Water Toxics Control Program,* 06-096 CMR 530, the Department is making a best professional judgment to limit the monitoring frequency reduction to 1/Quarter (equivalent to screening level testing for Level II dischargers) for total cadmium in this permitting action.

4. **Chromium (Total):**

The December 21, 2007, permit mistakenly did not establish any mass or concentration limits for total chromium even though federal regulation 40 CFR Part 433.13 has promulgated monthly average and daily maximum effluent guideline limitations of 1.71 mg/L (1,710 µg/L) and 2.77 mg/L (2,770 µg/L), respectively, for total chromium. The Department justified its action by citing federal 40 CFR Part 122.44, *Establishing limitations, standards, and other permit conditions (applicable to State NPDES programs see §123.25)*, which states,

*(2) Monitoring waivers for certain guideline-listed pollutants. (i) The Director may authorize a discharger subject to technology-based effluent limitations guidelines and standards in an NPDES permit to forego sampling of a pollutant found at 40 CFR Subchapter N of this chapter if the discharger has demonstrated through*

*sampling and other technical factors that the pollutant is not present in the discharge or is present only at background levels from intake water and without any increase in the pollutant due to activities of the discharger.*

*(ii) This waiver is good only for the term of the permit and is not available during the term of the first permit issued to a discharger.*

*(iii) Any request for this waiver must be submitted when applying for a reissued permit or modification of a reissued permit. The request must demonstrate through sampling or other technical information, including information generated during an earlier permit term that the pollutant is not present in the discharge or is present only at background levels from intake water and without any increase in the pollutant due to activities of the discharger.*

*(iv) Any grant of the monitoring waiver must be included in the permit as an express permit condition and the reasons supporting the grant must be documented in the permit's fact sheet or statement of basis.*

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

At the time of issuance of the December 21, 2007, permit, the Department had a total of 58 chromium test results on file for the facility (within the most recent 60 months period ending October 2007) and none had been detected above the Department's reporting limit of 10 µg/L. Therefore, the Department did not establish limits in the permit and granted a monitoring waiver for chromium under the provisions of 40 CFR Part 122.44, and established Special Condition H, *Monitoring Waiver For Certain Guideline-Listed Pollutants,* in the permit as required by 40 CFR Part 122.44 (a)(2)(iv) cited above.

The Department has no reason to believe detectable levels of total chromium are being discharged from the UTPW facility at this time given the manufacturing processes at the facility have not changed since issuance of the December 21, 2007, permitting action. Therefore, the Department is once again waiving the monitoring requirements for total chromium and incorporated the certification requirements 40 CFR Part 122.44 (a)(2)(iv) into Special Condition E, *06-096 CMR 530(2)(D)(4) Statement For Reduced Toxics Testing*, of this permit.

However, federal regulation 40 CFR Part 122.44, only speaks to a waiver from monitoring requirements not the establishment of permit limits especially given federal regulation 40 CFR Part 433, establishes technology based (BPT) concentration limits for total chromium. Therefore, this permitting action is establishing the federal BPT concentration limits of 1,710 µg/L (monthly average) and 2,770 µg/L (daily maximum) in this permit action.

As for mass limits Department rule, *Waste Discharge License Conditions*, 060-096 CMR Chapter 523(6)(f) and federal regulation 40 CFR 122.45(f) require that all pollutants limited in permits shall have limitations expressed in terms of mass. The Department imposes the more stringent of technology or water quality based limitations. Technology and water quality based mass limits for total chromium can be calculated as follows:

Technology based mass limits

With federal BPT concentration limits of 1,710 µg/L (monthly average) and 2,770 µg/L (daily maximum) mass limits can be calculated as follows

Monthly average: $\frac{(1{,}710 \text{ ug/L})(8.34)(0.050 \text{ MGD})}{1{,}000 \text{ ug/mg}} = 0.71$ lbs/day

Daily maximum: $\frac{(2{,}770 \text{ ug/L})(8.34)(0.050 \text{ MGD})}{1{,}000 \text{ ug/mg}} = 1.16$ lbs/day

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

Water quality based limits

*Surface Water Criteria for Toxic Pollutants*, 06-096 CMR, Chapter 584 does not establish AWQC for total chromium but does establish AWQC for chromium III and chromium IV. Chromium IV is the more toxic fraction of total chromium and is therefore being utilized to calculate water quality based mass limits for consideration in this permit. The calculated water based limits are as follows:

Monthly average:

Chronic AWQC = 11 ug/L
Chronic dilution factor = 34:1

EOP concentration = [Dilution factor x 0.90 x AWQC] + [0.10 x AWQC]

EOP = [34 x 0.90 x 11 ug/L] + [0.10 x 11 ug/L] = 338 ug/L

Based on a permitted flow of 0.050 MGD, EOP mass limits are as follows:

$$\frac{(338 \text{ ug/L})(8.34)(0.050 \text{ MGD})}{1{,}000 \text{ ug/mg}} = 0.14 \text{ lbs/day}$$

Daily maximum:

Acute AWQC = 16 ug/L
Chronic dilution factor = 29:1

EOP concentration = [Dilution factor x 0.90 x AWQC] + [0.10 x AWQC]

EOP = [29 x 0.90 x 16 ug/L] + [0.10 x 16 ug/L] = 419 ug/L

Based on a permitted flow of 0.050 MGD, EOP mass limits are as follows:

$$\frac{(419 \text{ ug/L})(8.34)(0.050 \text{ MGD})}{1{,}000 \text{ ug/mg}} = 0.17 \text{ lbs/day}$$

The calculations above and on the previous page indicate that the water quality based mass limitations of 0.14 lbs/day (monthly average) and 0.17 lbs/day (daily maximum) are more stringent than the technology based limits calculated and are therefore being established in this permitting action.

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

5. **Copper (Total):**

The previous permitting action established monthly average water quality-based concentration/mass limitations of 91 µg/L/0.025 lbs./day and daily maximum water quality based concentration/mass limitations of 101 µg/L/0.028 lbs./day, respectively, for total copper as a statistical evaluation conducted at the time of permit renewal indicated the discharge from the UTPW facility had numerous test results that a reasonable potential to exceed acute and chronic AWQC for total copper. Given the results of most current statistical evaluation (Report ID #479) indicating a continued reasonable potential to exceed the chronic AWQC for copper, monthly average water quality based limitations for copper can be calculated as follows:

Chronic AWQC = 2.36 ug/L
Chronic dilution factor = 34:1

EOP concentration = [Dilution factor x 0.90 x AWQC] + [0.10 x AWQC]

EOP = [34 x 0.90 x 2.36 ug/L] + [0.10 x 2.36 ug/L] = 72.45 ug/L

Based on a permitted flow of 0.050 MGD, EOP mass limits are as follows:

$$\frac{(72.45 \text{ ug/L})(8.34)(0.050 \text{ MGD})}{1{,}000 \text{ ug/mg}} = 0.030 \text{ lbs/day}$$

A review of the monthly DMRs submitted to the Department for the period January 2008 – July 2012 indicates values have been reported as follows:

**Copper (Total) concentration (DMRs = 55)**

| Value | Limit (ug/L) | Range (ug/L) | Mean (ug/L) |
|---|---|---|---|
| Monthly average | 91 | 8.9 – 61` | 27 |
| Daily maximum | 101 | 8.9 - 61 | 27 |

Federal regulation 40 CFR Part 433, does establish BPT (technology based) limits for total copper. The monthly average limitation is 2,070 ug/L and the daily maximum limit is 3,380 ug/L. Taking into consideration the anti-backsliding provisions found in *Waste Discharge License Conditions,* 06-096 CMR 523(5)(l)(2) (effective January 12, 2001), this permitting action is carrying forward the monthly average and daily maximum water quality based concentration limits of 91 ug/L and 101 ug/L respectively, for total copper established in the December 21, 2007 permit.

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

**Copper (Total) mass (DMRs = 55)**

| Value | Limit (lbs/day) | Range (lbs/day) | Mean (lbs/day) |
|---|---|---|---|
| Monthly average | 0.025 | 0.0021 – 0.0143 | 0.0053 |
| Daily maximum | 0.028 | 0.0021 – 0.0143 | 0.0053 |

Pursuant to the "anti-backsliding" provisions found in *Waste Discharge License Conditions,* 06-096 CMR 523(5)(l)(2) (effective January 12, 2001), this permitting action is carrying forward the monthly average and daily maximum mass limits of 0.025 lbs/day and 0.028 lbs/day respectively for total copper established in the December 21, 2007, permitting action.

As for the monitoring frequency, the permittee has been monitoring for total copper since 1992 given the federal regulations establish BPT limits for copper. The review of the year-round monitoring data for copper indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as follows:

Long term average = 0.0053 lbs/day
Monthly average limit = 0.025 lbs/day
Current monitoring frequency = 1/Month

$$\text{Ratio} = \frac{0.0053 \text{ lbs/day}}{0.025 \text{ lbs/day}} = 21\%$$

According to Table I of the EPA Guidance, a 1/Month monitoring requirement can be reduced to 1/6 months. However, to be consistent with monitoring requirements of *Surface Water Toxics Control Program,* 06-096 CMR 530, the Department is making a best professional judgment to limit the monitoring frequency reduction to 1/Quarter (equivalent to screening level testing for Level II dischargers) for total copper in this permitting action.

6. **Cyanide (Total/Amenable to chlorination):**

The previous permitting action established monthly average water quality-based concentration/mass limitations of 201 µg/L/0.06 lbs./day and daily maximum water quality based concentration/mass limitations of 726 µg/L/0.20 lbs./day, respectively, for total cyanide as calculations comparing water quality based limits calculated from acute and chronic AWQC established in *Surface Water Criteria for Toxic Pollutants*, 06-096 CMR, Chapter 584 were more stringent than technology based limits established in federal regulation found at 40 CFR Part 433. The results of the most current statistical evaluation (Report ID #479) indicates the discharge from the UTPW facility does not have a reasonable potential to exceed applicable AWQC for cyanide (amenable to chlorination). Therefore, because 40 CFR Part 433, does establish BPT (technology based) limits for total cyanide a comparison between water quality based and technology based limitations must be conducted. The calculations are as follows:

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

Technology based mass limits

With federal BPT concentration limits of 650 µg/L (monthly average) and 1,200 µg/L (daily maximum) mass limits can be calculated as follows

Monthly average: $\frac{(650 \text{ ug/L})(8.34)(0.050 \text{ MGD})}{1{,}000 \text{ ug/mg}} = 0.27$ lbs/day

Daily maximum: $\frac{(1{,}200 \text{ ug/L})(8.34)(0.050 \text{ MGD})}{1{,}000 \text{ ug/mg}} = 0.50$ lbs/day

Water quality based limits

*Surface Water Criteria for Toxic Pollutants*, 06-096 CMR, Chapter 584 does not establish AWQC for total cyanide but does establish AWQC for cyanide – amenable to chlorination and is therefore being utilized to calculate water quality based mass limits for consideration in this permit. The calculated water based limits are as follows:

Monthly average:

Chronic AWQC = 5.2 ug/L
Chronic dilution factor = 34:1

EOP concentration = [Dilution factor x 0.90 x AWQC] + [0.10 x AWQC]

EOP = [34 x 0.90 x 5.2 ug/L] + [0.10 x 5.2 ug/L] = 160 ug/L

Based on a permitted flow of 0.050 MGD, EOP mass limits are as follows:

$$\frac{(160 \text{ ug/L})(8.34)(0.050 \text{ MGD})}{1{,}000 \text{ ug/mg}} = 0.067 \text{ lbs/day}$$

Daily maximum:

Acute AWQC = 22 ug/L
Chronic dilution factor = 29:1

EOP concentration = [Dilution factor x 0.90 x AWQC] + [0.10 x AWQC]

EOP = [29 x 0.90 x 22 ug/L] + [0.10 x 22 ug/L] = 576 ug/L

Based on a permitted flow of 0.050 MGD, EOP mass limits are as follows:

$$\frac{(576 \text{ ug/L})(8.34)(0.050 \text{ MGD})}{1{,}000 \text{ ug/mg}} = 0.24 \text{ lbs/day}$$

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

A review of the monthly DMRs submitted to the Department for the period January 2008 – July 2012 indicates values have been reported as follows:

**Cyanide (Total) concentration (DMRs = 55)**

| Value | Limit (ug/L) | Range (ug/L) | Mean (ug/L) |
|---|---|---|---|
| Monthly average | 201 | <2 – 15 | 1.2 |
| Daily maximum | 726 | <2 – 15 | 1/2 |

Federal regulation 40 CFR Part 423, does establish BPT (technology based) limits for total cyanide. The monthly average limitation is 650 ug/L and the daily maximum limit is 1,200 ug/L. Taking into consideration the anti-backsliding provisions found in *Waste Discharge License Conditions,* 06-096 CMR 523(5)(l)(2) (effective January 12, 2001), this permitting action is carrying forward the monthly average and daily maximum water quality based concentration limits of 201 ug/L and 726 ug/L respectively, for total cyanide established in the December 21, 2007 permit.

**Cyanide (Total) mass (DMRs = 55)**

| Value | Limit (lbs/day) | Range (lbs/day) | Mean (lbs/day) |
|---|---|---|---|
| Monthly average | 0.06 | 0.0001 – 0.002 | 0.0006 |
| Daily maximum | 0.20 | 0.0001 – 0.002 | 0.0006 |

Pursuant to the "anti-backsliding" provisions found in *Waste Discharge License Conditions,* 06-096 CMR 523(5)(l)(2) (effective January 12, 2001), this permitting action is carrying forward the monthly average and daily maximum mass limit of 0.06 lbs/day and 0.20 lbs/day respectively, for total cyanide established in the December 21, 2007, permitting action.

As for the monitoring frequency, the permittee has been monitoring for total cyanide since 1992 given the federal regulations establish BPT concentration limit for cyanide. The review of the year-round monitoring data for cyanide indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as follows:

Long term average = 0.0006 lbs/day
Monthly average limit = 0.06 lbs/day
Current monitoring frequency = 1/Month

$$\text{Ratio} = \frac{0.0006 \text{ lbs/day}}{0.06 \text{ lbs/day}} = 1\%$$

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

According to Table I of the EPA Guidance, a 1/Month monitoring requirement can be reduced to 1/6 months. However, to be consistent with monitoring requirements of *Surface Water Toxics Control Program,* 06-096 CMR 530, the Department is making a best professional judgment to limit the monitoring frequency reduction to 1/Quarter (equivalent to screening level testing for Level II dischargers) for total cyanide in this permitting action.

7. **Lead (Total):**

The previous permitting action established monthly average water quality-based concentration/mass limitations of 16 µg/L/0.004 lbs./day and daily maximum water quality based concentration/mass limitations of 87 µg/L/0.10 lbs./day, respectively, for total lead as a calculations comparing water quality based limits calculated from acute and chronic AWQC established in *Surface Water Criteria for Toxic Pollutants*, 06-096 CMR, Chapter 584 were more stringent than technology based limits established in federal regulation found at 40 CFR Part 433. The results of the most current statistical evaluation (Report ID #479) indicates the discharge from the UTPW facility does not have a reasonable potential to exceed applicable AWQC for total lead. Therefore, because 40 CFR Part 423, does establish BPT (technology based) limits for total lead a comparison between water quality based and technology based limitations must be conducted. The calculations are as follows:

Technology based mass limits

With federal BPT concentration limits of 430 µg/L (monthly average) and 690 µg/L (daily maximum) mass limits can be calculated as follows

Monthly average: $\frac{(430 \text{ ug/L})(8.34)(0.050 \text{ MGD})}{1{,}000 \text{ ug/mg}} = 0.18$ lbs/day

Daily maximum: $\frac{(690 \text{ ug/L})(8.34)(0.050 \text{ MGD})}{1{,}000 \text{ ug/mg}} = 0.29$ lbs/day

Water quality based limits

*Surface Water Criteria for Toxic Pollutants*, 06-096 CMR, Chapter 584 does not establish AWQC for total cyanide but does establish AWQC for cyanide – amenable to chlorination and is therefore being utilized to calculate water quality based mass limits for consideration in this permit. The calculated water based limits are as follows:

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

Monthly average:

Chronic AWQC = 0.41 ug/L
Chronic dilution factor = 34:1

EOP concentration = [Dilution factor x 0.90 x AWQC] + [0.10 x AWQC]

EOP = [34 x 0.90 x 0.41 ug/L] + [0.10 x 0.41 ug/L] = 12.6 ug/L

Based on a permitted flow of 0.050 MGD, EOP mass limits are as follows:

$$\frac{(12.6 \text{ ug/L})(8.34)(0.050 \text{ MGD})}{1{,}000 \text{ ug/mg}} = 0.005 \text{ lbs/day}$$

Daily maximum:

Acute AWQC = 10.52 ug/L
Chronic dilution factor = 29:1

EOP concentration = [Dilution factor x 0.90 x AWQC] + [0.10 x AWQC]

EOP = [29 x 0.90 x 10.52 ug/L] + [0.10 x 10.52 ug/L] = 276 ug/L

Based on a permitted flow of 0.050 MGD, EOP mass limits are as follows:

$$\frac{(276 \text{ ug/L})(8.34)(0.050 \text{ MGD})}{1{,}000 \text{ ug/mg}} = 0.12 \text{ lbs/day}$$

A review of the monthly DMRs submitted to the Department for the period January 2008 – July 2012 indicates values have been reported as follows:

**Lead (Total) concentration (DMRs = 55)**

| Value | Limit (ug/L) | Range (ug/L) | Mean (ug/L) |
|---|---|---|---|
| Monthly average | 16 | <1.0 – 3.6 | 0.27 |
| Daily maximum | 87 | <1.0 – 3.6 | 0.27 |

Federal regulation 40 CFR Part 433, does establish BPT (technology based) limits for total lead. The monthly average limitation is 430 ug/L and the daily maximum limit is 690 ug/L. Taking into consideration the anti-backsliding provisions found in *Waste Discharge License Conditions,* 06-096 CMR 523(5)(l)(2) (effective January 12, 2001), this permitting action is carrying forward the monthly average and daily maximum water quality based concentration limits of 16 ug/L and 87 ug/L respectively, for total lead established in the December 21, 2007 permit.

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

**Lead (Total) mass (DMRs = 55)**

| Value | Limit (lbs/day) | Range (lbs/day) | Mean (lbs/day) |
|---|---|---|---|
| Monthly average | 0.004 | 0.0001 – 0.0007 | 0.0002 |
| Daily maximum | 0.10 | 0.0001 – 0.0007 | 0.0002 |

Pursuant to the "anti-backsliding" provisions found in *Waste Discharge License Conditions,* 06-096 CMR 523(5)(l)(2) (effective January 12, 2001), this permitting action is carrying forward the monthly average and daily maximum mass limit of 0.004 lbs/day and 0.10 lbs/day respectively for total lead established in the December 21, 2007, permitting action.

As for the monitoring frequency, the permittee has been monitoring for total lead since 1992 given the federal regulations establish BPT concentration limit for lead. The review of the year-round monitoring data for lead indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as follows:

Long term average = 0.0002 lbs/day
Monthly average limit = 0.004 lbs/day
Current monitoring frequency = 1/Month

$$\text{Ratio} = \frac{0.0002 \text{ lbs/day}}{0.004 \text{ lbs/day}} = 5\%$$

According to Table I of the EPA Guidance, a 1/Month monitoring requirement can be reduced to 1/6 months. However, to be consistent with monitoring requirements of *Surface Water Toxics Control Program,* 06-096 CMR 530, the Department is making a best professional judgment to limit the monitoring frequency reduction to 1/Quarter (equivalent to screening level testing for Level II dischargers) for total lead in this permitting action.

## 8. Mercury (Total)

Pursuant to Maine law, 38 M.R.S.A. §420 and Department rule, 06-096 CMR Chapter 519, *Interim Effluent Limitations and Controls for the Discharge of Mercury*, the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee on May 23, 2000, thereby administratively modifying WDL#W002749 by establishing interim monthly average and daily maximum effluent concentration limits of 4.5 parts per trillion (ppt) and 6.8 ppt, respectively, and a minimum monitoring frequency requirement of four tests per year for mercury. The interim mercury limits were scheduled to expire on October 1, 2001. However, effective June 15, 2001, the Maine Legislature enacted Maine law, 38 M.R.S.A. §413, sub-§11 specifying that interim mercury limits and monitoring requirements remain in effect. It is noted that the mercury

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

effluent limitations had not been incorporated into Special Condition A, *Effluent Limitations And Monitoring Requirements*, of the previous permit as the limits and monitoring frequencies were regulated separately through Maine law, 38 M.R.S.A. §413 and Department rule Chapter 519. .

Maine law 38 M.R.S.A., §420 1-B,(B)(1) states that a facility is not in violation of the AWQC for mercury if the facility is in compliance with an interim discharge limit established by the Department pursuant to section 413, subsection 11. A review of the Department's data base for the period November 2007 through the present indicates the permittee has been in compliance with the interim limits for mercury as results have been reported as follows;

**Mercury (n = 20)**

| Value | Limit (ng/L) | Range (ng/L) | Mean (ng/L) |
|---|---|---|---|
| Average, Maximum | 4.6/6.8 | 0.5 – 2.4 | 0.7 |

Pursuant to Maine law 38, M.R.S.A. §420, sub-§1-B, ¶F, the2/6/12 permitting modification reduced the monitoring frequency for mercury from 4/Year to 1/Year given the permittee had maintained at least 5 years of mercury testing data. In fact, the permittee has been monitoring mercury at frequency of 4/Year since June 2000 or 11 years. The limitations of 4.6 ng/L and 6.8 ng/L along with a monitoring frequency of 1/Year are being carried forward in this permitting action.

9. **Nickel (Total):**

The previous permitting action established monthly average water quality-based concentration/mass limitations of 480 µg/L/0.14 lbs./day and daily maximum water quality based concentration/mass limitations of 1,000 µg/L/1.1 lbs./day, respectively, for total nickel as a statistical evaluation conducted at the time of permit renewal indicated the discharge from the UTPW facility had numerous test results that a reasonable potential to exceed acute and chronic AWQC for total nickel. Given the results of most current statistical evaluation (Report ID #479) indicating a continued reasonable potential to exceed the chronic AWQC for nickel, monthly average water quality based limitations for nickel can be calculated as follows:

Chronic AWQC = 13.4 ug/L
Chronic dilution factor = 34:1

EOP concentration = [Dilution factor x 0.90 x AWQC] + [0.10 x AWQC]

EOP = [34 x 0.90 x 13.4 ug/L] + [0.10 x 13.4 ug/L] = 411 ug/L

Based on a permitted flow of 0.050 MGD, EOP mass limits are as follows:

$$\frac{(411 \text{ ug/L})(8.34)(0.050 \text{ MGD})}{1{,}000 \text{ ug/mg}} = 0.17 \text{ lbs/day}$$

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

A review of the monthly DMRs submitted to the Department for the period January 2008 – July 2012 indicates values have been reported as follows:

**Nickel (Total) concentration (DMRs = 55)**

| Value | Limit (ug/L) | Range (ug/L) | Mean (ug/L) |
|---|---|---|---|
| Monthly average | 480 | 43 – 466 | 141 |
| Daily maximum | 1,000 | 43-634 | 151 |

Federal regulation 40 CFR Part 423, does establish BPT (technology based) limits for total nickel. The monthly average limitation is 2,380 ug/L and the daily maximum limit is 3,980 ug/L. Taking into consideration the anti-backsliding provisions found in *Waste Discharge License Conditions,* 06-096 CMR 523(5)(l)(2) (effective January 12, 2001), this permitting action is carrying forward the monthly average and daily maximum water quality based concentration limits of 480 ug/L and 1,000 ug/L respectively, for total nickel established in the December 21, 2007, permit.

**Nickel (Total) mass (DMRs = 55)**

| Value | Limit (lbs/day) | Range (lbs/day) | Mean (lbs/day) |
|---|---|---|---|
| Monthly average | 0.14 | 0.0067 – 0.0413 | 0.030 |
| Daily maximum | 1.1 | 0.0067 – 0.0548 | 0.035 |

Pursuant to the "anti-backsliding" provisions found in *Waste Discharge License Conditions,* 06-096 CMR 523(5)(l)(2) (effective January 12, 2001), this permitting action is carrying forward the monthly average and daily maximum mass limit of 0.14 lbs/day and 1.1 lbs/day respectively for total nickel established in the December 21, 2007, permitting action.

As for the monitoring frequency, the permittee has been monitoring for total nickel since 1992 given the federal regulations establish BPT limits for nickel. The review of the year-round monitoring data for nickel indicates the ratios (expressed in percent) of the long term effluent average to the monthly average limits can be calculated as follows:

Long term average = 0.030 lbs/day
Monthly average limit = 0.14 lbs/day
Current monitoring frequency = 1/Month

$$\text{Ratio} = \frac{0.030 \text{ lbs/day}}{0.14 \text{ lbs/day}} = 21\%$$

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

According to Table I of the EPA Guidance, a 1/Month monitoring requirement can be reduced to 1/6 months. However, to be consistent with monitoring requirements of *Surface Water Toxics Control Program,* 06-096 CMR 530, the Department is making a best professional judgment to limit the monitoring frequency reduction to 1/Quarter (equivalent to screening level testing for Level II dischargers) for total nickel in this permitting action.

10. **Silver (Total):**

The December 21, 2007, permit mistakenly did not establish any mass or concentration limits for total silver even though federal regulation 40 CFR Part 433.13 has promulgated monthly average and daily maximum effluent guideline limitations of 240 µg/L and 430 µg/L respectively, for total silver. As with chromium, the Department justified its action by citing federal 40 CFR Part 122.44, *Establishing limitations, standards, and other permit conditions (applicable to State NPDES programs see §123.25)*, which states,

> *(2) Monitoring waivers for certain guideline-listed pollutants. (i) The Director may authorize a discharger subject to technology-based effluent limitations guidelines and standards in an NPDES permit to forego sampling of a pollutant found at 40 CFR Subchapter N of this chapter if the discharger has demonstrated through sampling and other technical factors that the pollutant is not present in the discharge or is present only at background levels from intake water and without any increase in the pollutant due to activities of the discharger.*
>
> *(ii) This waiver is good only for the term of the permit and is not available during the term of the first permit issued to a discharger.*
> *(iii) Any request for this waiver must be submitted when applying for a reissued permit or modification of a reissued permit. The request must demonstrate through sampling or other technical information, including information generated during an earlier permit term that the pollutant is not present in the discharge or is present only at background levels from intake water and without any increase in the pollutant due to activities of the discharger.*
>
> *(iv) Any grant of the monitoring waiver must be included in the permit as an express permit condition and the reasons supporting the grant must be documented in the permit's fact sheet or statement of basis.*

At the time of issuance of the December 21, 2007, permit, the Department had a total of 18 silver test results on file for the facility (within the most recent 60 months period ending October 2007) and none had been detected above the Department's reporting limit of 1.0 µg/L. Therefore, the Department did not establish limits in the permit and granted a monitoring waiver for silver under the provisions of 40 CFR Part 122.44, and established Special Condition H, *Monitoring Waiver For Certain Guideline-Listed Pollutants,* in the permit as required by 40 CFR Part 122.44 (a)(2)(iv) cited above.

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

The Department has no reason to believe detectable levels of total silver are being discharged from the UTPW facility at this time given the manufacturing processes at the facility have not changed since issuance of the December 21, 2007, permitting action. Therefore, the Department is once again waiving the monitoring requirements for total silver and incorporated the certification requirements 40 CFR Part 122.44 (a)(2)(iv) into Special Condition E, , *06-096 CMR 530(2)(D)(4) Statement For Reduced Toxics Testing.* of this permit.

However, federal regulation 40 CFR Part 122.44, only speaks to a waiver from monitoring requirements not the establishment of permit limits especially given federal regulation 40 CFR Part 423, establishes technology based (BPT) concentration limits for total silver. Therefore, this permitting action is establishing the federal BPT concentration limits of 240 µg/L (monthly average) and 430 µg/L (daily maximum) in this permit action.

As for mass limits Department rule, Waste Discharge License Conditions, 060-096 CMR Chapter 523(6)(f) and federal regulation 40 CFR 122.45(f) require that all pollutants limited in permits shall have limitations expressed in terms of mass. The Department imposes the more stringent of technology or water quality based limitations. Technology and water quality based mass limits for total silver can be calculated as follows:

Technology based mass limits

With federal BPT concentration limits of 240 µg/L (monthly average) and 430 µg/L (daily maximum) mass limits can be calculated as follows

Monthly average: $\frac{(240\ ug/L)(8.34)(0.050\ MGD)}{1{,}000\ ug/mg} = 0.10$ lbs/day

Daily maximum: $\frac{(430\ ug/L)(8.34)(0.050\ MGD)}{1{,}000\ ug/mg} = 0.18$ lbs/day

Water quality based limits

*Surface Water Criteria for Toxic Pollutants*, 06-096 CMR, Chapter 584 establishes a chronic AWQC of 0.23 ug/L for total silver but does not establish an acute AWQC for total silver. Therefore the monthly average water quality based mass limit can be calculated as follows:

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

Monthly average:

Chronic AWQC = 0.23 ug/L
Chronic dilution factor = 34:1

EOP concentration = [Dilution factor x 0.90 x AWQC] + [0.10 x AWQC]

EOP = [34 x 0.90 x 0.23 ug/L] + [0.10 x 0.23 ug/L] = 7.1 ug/L

Based on a permitted flow of 0.050 MGD, EOP mass limits are as follows:

$$\frac{(7.1 \text{ ug/L})(8.34)(0.050 \text{ MGD})}{1{,}000 \text{ ug/mg}} = 0.0030 \text{ lbs/day}$$

Given there is no acute AWQC established for total silver, this permit must establish the daily maximum limit based on the BPT concentration limit in federal regulation and can be calculated as follows:

Daily maximum: $\frac{(430 \text{ ug/L})(8.34)(0.050 \text{ MGD})}{1{,}000 \text{ ug/mg}} = 0.18 \text{ lbs/day}$

11. **Zinc (Total):**

The previous permitting action established monthly average water quality-based concentration/mass limitations of 250 µg/L/0.33 lbs./day and daily maximum water quality based concentration/mass limitations of 250 µg/L/0.028 lbs./day, respectively, for total zinc as a calculations comparing water quality based mass limits calculated from acute and chronic AWQC established in *Surface Water Criteria for Toxic Pollutants*, 06-096 CMR, Chapter 584 were more stringent than technology based limits established in federal regulation found at 40 CFR Part 423. The daily maximum mass limitation of 0.028 ug/L was incorrect due to a mathematical error in the Fact Sheet and then transferred to the permit. The limit should have been 0.28 lbs/day. The concentration limitations of 250 ug/L were originally established in a September 10, 1993, WDL action but the Fact Sheet of the WDL did not elaborate on the origin of the limits. The results of the most current statistical evaluation (Report ID #479) indicates the discharge from the UTPW facility does not have a reasonable potential to exceed applicable AWQC for total zinc. Therefore, because 40 CFR Part 423, does establish BPT (technology based) limits for total zinc a comparison between water quality based and technology based limitations must be conducted. The calculations are as follows:

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

Technology based mass limits

With federal BPT concentration limits of 1,480 µg/L (monthly average) and 2,610 µg/L (daily maximum) mass limits can be calculated as follows

Monthly average: $\frac{(1{,}480 \text{ ug/L})(8.34)(0.050 \text{ MGD})}{1{,}000 \text{ ug/mg}} = 0.62$ lbs/day

Daily maximum: $\frac{(2{,}610 \text{ ug/L})(8.34)(0.050 \text{ MGD})}{1{,}000 \text{ ug/mg}} = 1.1$ lbs/day

Water quality based limits

*Surface Water Criteria for Toxic Pollutants*, 06-096 CMR, Chapter 584 establishes an acute and chronic AWQC of 30.6 ug/L for total zinc. Therefore, the monthly average and daily maximum water quality mass limits can be calculated as follows:

Monthly average:

Chronic AWQC = 30.6 ug/L
Chronic dilution factor = 34:1

EOP concentration = [Dilution factor x 0.90 x AWQC] + [0.10 x AWQC]

EOP = [34 x 0.90 x 30.6 ug/L] + [0.10 x 30.6 ug/L] = 939 ug/L

Based on a permitted flow of 0.050 MGD, EOP mass limits are as follows:

$$\frac{(939 \text{ ug/L})(8.34)(0.050 \text{ MGD})}{1{,}000 \text{ ug/mg}} = 0.39 \text{ lbs/day}$$

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

Daily maximum:

Acute AWQC = 30.6 ug/L
Acute dilution factor = 29:1

EOP concentration = [Dilution factor x 0.90 x AWQC] + [0.10 x AWQC]

EOP = [29 x 0.90 x 30.6 ug/L] + [0.10 x 30.6 ug/L] = 802 ug/L

Based on a permitted flow of 0.050 MGD, EOP mass limits are as follows:

$$\frac{(802 \text{ ug/L})(8.34)(0.050 \text{ MGD})}{1{,}000 \text{ ug/mg}} = 0.33 \text{ lbs/day}$$

A review of the monthly DMRs submitted to the Department for the period August 2007 – May 2012 indicates values have been reported as follows:

**Zinc (Total) concentration (DMRs = 11)**

| Value | Limit (ug/L) | Range (ug/L) | Mean (ug/L) |
|---|---|---|---|
| Monthly average | 250 | 6.2 – 71.8 | 25.5 |
| Daily maximum | 250 | 6.2 – 71.8 | 25.5 |

Federal regulation 40 CFR Part 423, does establish BPT (technology based) limits for total zinc. The monthly average limitation is 1,480 ug/L and the daily maximum limit is 2,610 ug/L. Taking into consideration the anti-backsliding provisions found in *Waste Discharge License Conditions,* 06-096 CMR 523(5)(l)(2) (effective January 12, 2001), this permitting action is carrying forward the monthly average and daily maximum water quality based concentration limits of 250 ug/L and 250 ug/L respectively, for total zinc established in the December 21, 2007 permit.

**Zinc (Total) mass (DMRs = 11)**

| Value | Limit (lbs/day) | Range (lbs/day) | Mean (lbs/day) |
|---|---|---|---|
| Monthly average | 0.33 | 0.001 – 0.0130 | 0.005 |
| Daily maximum | 0.28 | 0.001 – 0.0130 | 0.005 |

Pursuant to the "anti-backsliding" provisions found in *Waste Discharge License Conditions,* 06-096 CMR 523(5)(l)(2) (effective January 12, 2001), this permitting action is carrying forward the monthly average and daily maximum mass limit of 0.33 lbs/day and the corrected limit of 0.28 lbs/day respectively for total zinc established in the December 21, 2007, permitting action.

As for the monitoring frequency, the previous permit established a monitoring frequency of 1/Year that is being carried forward in this permitting action.

## 7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

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

## 8. PUBLIC COMMENTS

Public notice of this application was made in the *Portland Press Herald* newspaper on or about September 26, 2012. 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

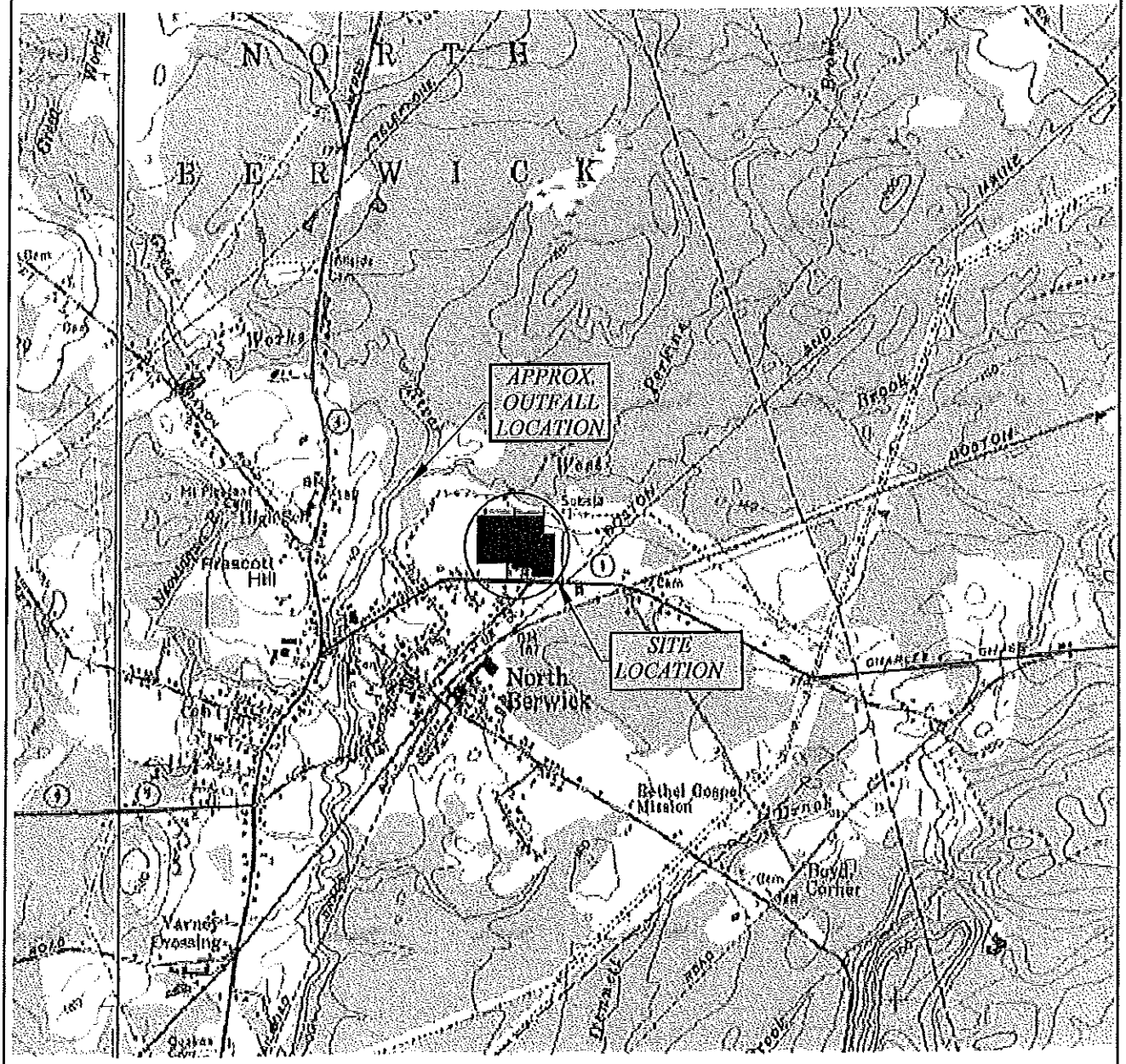
Additional information concerning this permitting action may be obtained from, and written comments sent to:

Gregg Wood
Division of Water Quality Management
Bureau of Land & Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 287-7693 Fax: (207) 287-3435
e-mail: gregg.wood@maine.gov

## 10. RESPONSE TO COMMENTS

During the period November 2, 2012, through the issuance date of the permit, the Department solicited comments on the proposed draft permit for the permittee's facility. The Department did not receive comments from the permittee, state or federal agencies or interested parties that resulted in any substantive change(s) in the terms and conditions of the permit. Therefore, the Department has not prepared a Response to Comments.

# ATTACHMENT A




*SOURCE: MAPTECH- TOPOSCOUT*
*MAINE COASTAL REGION*
*NORTH BERWICK, MAINE*

*United Technologies / Pratt & Whitney*
*North Berwick, Maine*

*SITE LOCATION MAP*

ACHERON ENGINEERING SERVICES
Engineering, Environmental & Geologic Consultants
Newport, Maine

| | | | |
|---|---|---|---|
| JOB NO: | 30743 | DWG NO: | A-1757 |
| SCALE: | NOT TO SCALE | DATE: | 12/6/05 |

*Plot Date:12/6/06 , File: A-1757*
*Plot Scale: 1:1 , Drawn By: BG*

# ATTACHMENT B

# WET TEST REPORT

**Data for tests conducted for the period**

02/Nov/2007 - 02/Nov/2012

**PRATT & WHITNEY** NPDES= ME002286 Effluent Limit: Acute (%) = 3.446 Chronic (%) = 2.944

| Species | Test | Percent | Sample date | Critical % | Exception | RP |
|---|---|---|---|---|---|---|
| TROUT | A_NOEL | 100 | 11/11/2007 | 3.446 | | |
| TROUT | A_NOEL | 100 | 04/05/2009 | 3.446 | | |
| TROUT | A_NOEL | 25 | 05/15/2011 | 3.446 | | |
| TROUT | A_NOEL | 100 | 05/01/2012 | 3.446 | | |
| TROUT | C_NOEL | 100 | 11/11/2007 | 2.944 | | |
| TROUT | C_NOEL | 100 | 04/05/2009 | 2.944 | | |
| TROUT | C_NOEL | 50 | 05/15/2011 | 2.944 | | |
| TROUT | C_NOEL | 100 | 05/01/2012 | 2.944 | | |
| WATER FLEA | A_NOEL | 26.40 | 11/11/2007 | 3.446 | | |
| WATER FLEA | A_NOEL | 50 | 08/05/2008 | 3.446 | | |
| WATER FLEA | A_NOEL | 100 | 04/05/2009 | 3.446 | | |
| WATER FLEA | A_NOEL | 54.60 | 11/14/2010 | 3.446 | | |
| WATER FLEA | A_NOEL | 100 | 05/15/2011 | 3.446 | | |
| WATER FLEA | A_NOEL | 100 | 05/01/2012 | 3.446 | | |
| WATER FLEA | C_NOEL | 3.40 | 11/11/2007 | 2.944 | | |
| WATER FLEA | C_NOEL | 50 | 08/05/2008 | 2.944 | | |
| WATER FLEA | C_NOEL | 25 | 04/05/2009 | 2.944 | | |
| WATER FLEA | C_NOEL | 25 | 11/14/2010 | 2.944 | | |
| WATER FLEA | C_NOEL | 100 | 05/15/2011 | 2.944 | | |
| WATER FLEA | C_NOEL | 50 | 05/01/2012 | 2.944 | | |

# ATTACHMENT C

# PRIORITY POLLUTANT DATA SUMMARY

Date Range: 02/Nov/2007 - 02/Nov/2012

Facility Name: **PRATT & WHITNEY** NPDES: **ME0022861**

| Test Date | Monthly (Flow MGD) | Daily (Flow MGD) | Total Test Number | Test # By Group M | V | BN | P | O | A | Clean | Hg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 01/07/2008 | 0.01 | 0.02 | 8 | 7 | 0 | 0 | 0 | 1 | 0 | F | 0 |
| 02/06/2008 | 0.01 | 0.03 | 8 | 6 | 0 | 1 | 0 | 1 | 0 | F | 0 |
| 03/04/2008 | 0.01 | 0.02 | 8 | 6 | 0 | 1 | 0 | 1 | 0 | F | 0 |
| 05/07/2008 | 0.02 | 0.01 | 7 | 5 | 0 | 1 | 0 | 1 | 0 | F | 0 |
| 06/04/2008 | 0.01 | 0.03 | 7 | 5 | 0 | 1 | 0 | 1 | 0 | F | 0 |
| 07/02/2008 | 0.02 | 0.03 | 8 | 6 | 0 | 1 | 0 | 1 | 0 | F | 0 |
| 08/04/2008 | 0.01 | 0.02 | 7 | 5 | 0 | 1 | 0 | 1 | 0 | F | 0 |
| 08/05/2008 | 0.01 | 0.05 | 21 | 10 | 0 | 0 | 0 | 11 | 0 | F | 0 |
| 09/04/2008 | 0.02 | 0.03 | 7 | 5 | 0 | 1 | 0 | 1 | 0 | F | 0 |
| 10/15/2008 | 0.02 | 0.02 | 8 | 6 | 0 | 1 | 0 | 1 | 0 | F | 0 |
| 11/15/2008 | 0.02 | 0.05 | 7 | 5 | 0 | 1 | 0 | 1 | 0 | F | 0 |
| 12/08/2008 | 0.01 | 0.02 | 6 | 5 | 0 | 0 | 0 | 1 | 0 | F | 0 |
| 01/08/2009 | 0.01 | 0.01 | 9 | 7 | 0 | 1 | 0 | 1 | 0 | F | 0 |

**Key:**

A = Acid O = Others P = Pesticides

BN = Base Neutral M = Metals V = Volatiles

| Test Date | Monthly (Flow MGD) | Daily (Flow MGD) | Total Test Number | Test # By Group M | V | BN | P | O | A | Clean | Hg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 02/04/2009 | 0.01 | 0.01 | 7 | 5 | 0 | 1 | 0 | 1 | 0 | F | 0 |
| 03/04/2009 | 0.02 | 0.03 | 7 | 5 | 0 | 1 | 0 | 1 | 0 | F | 0 |
| 04/05/2009 | 0.01 | 0.01 | 19 | 10 | 0 | 0 | 0 | 9 | 0 | F | 0 |
| 05/05/2009 | 0.01 | 0.01 | 7 | 5 | 0 | 1 | 0 | 1 | 0 | F | 0 |
| 05/06/2009 | 0.01 | 0.02 | 5 | 3 | 0 | 1 | 0 | 1 | 0 | F | 0 |
| 06/01/2009 | 0.01 | 0.02 | 3 | 1 | 0 | 1 | 0 | 1 | 0 | F | 0 |
| 06/10/2009 | 0.01 | 0.02 | 5 | 4 | 0 | 0 | 0 | 1 | 0 | F | 0 |
| 07/10/2009 | 0.02 | 0.01 | 7 | 5 | 0 | 1 | 0 | 1 | 0 | F | 0 |
| 07/14/2009 | 0.01 | 0.04 | 8 | 6 | 0 | 1 | 0 | 1 | 0 | F | 0 |
| 08/10/2009 | 0.01 | 0.02 | 6 | 4 | 0 | 1 | 0 | 1 | 0 | F | 0 |
| 08/11/2009 | 0.01 | 0.02 | 2 | 1 | 0 | 0 | 0 | 1 | 0 | F | 0 |
| 09/09/2009 | 0.02 | 0.02 | 8 | 6 | 0 | 1 | 0 | 1 | 0 | F | 0 |
| 10/27/2009 | 0.02 | 0.03 | 7 | 5 | 0 | 1 | 0 | 1 | 0 | F | 0 |
| 10/28/2009 | 0.05 | 0.02 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | F | 0 |
| 11/17/2009 | 0.02 | 0.02 | 6 | 4 | 0 | 1 | 0 | 1 | 0 | F | 0 |

**Key:**

A = Acid O = Others P = Pesticides

BN = Base Neutral M = Metals V = Volatiles

| Test Date | Monthly (Flow MGD) | Daily | Total Test Number | Test # By Group M | V | BN | P | O | A | Clean | Hg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 11/18/2009 | 0.02 | 0.02 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | F | 0 |
| 12/14/2009 | 0.02 | 0.03 | 6 | 4 | 0 | 1 | 0 | 1 | 0 | F | 0 |
| 12/15/2009 | 0.02 | 0.01 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | F | 0 |
| 01/12/2010 | 0.02 | 0.03 | 7 | 5 | 0 | 1 | 0 | 1 | 0 | F | 0 |
| 01/13/2010 | 0.02 | 0.02 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | F | 0 |
| 02/09/2010 | 0.02 | 0.02 | 7 | 5 | 0 | 1 | 0 | 1 | 0 | F | 0 |
| 03/22/2010 | 0.02 | 0.01 | 7 | 5 | 0 | 1 | 0 | 1 | 0 | F | 0 |
| 05/17/2010 | 0.03 | 0.03 | 8 | 5 | 0 | 1 | 0 | 2 | 0 | F | 0 |
| 06/01/2010 | 0.02 | 0.02 | 7 | 4 | 0 | 1 | 0 | 2 | 0 | F | 0 |
| 06/02/2010 | 0.02 | 0.00 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | F | 0 |
| 07/12/2010 | 0.02 | 0.02 | 7 | 5 | 0 | 0 | 0 | 2 | 0 | F | 0 |
| 07/13/2010 | 0.02 | 0.00 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | F | 0 |
| 08/17/2010 | 0.03 | 0.03 | 8 | 5 | 0 | 1 | 0 | 2 | 0 | F | 0 |
| 09/13/2010 | 0.03 | 0.02 | 8 | 5 | 0 | 1 | 0 | 2 | 0 | F | 0 |
| 10/04/2010 | 0.03 | 0.03 | 10 | 7 | 0 | 1 | 0 | 2 | 0 | F | 0 |

Key:

A = Acid O = Others P = Pesticides

BN = Base Neutral M = Metals V = Volatiles

| Test Date | Monthly (Flow MGD) | Daily (Flow MGD) | Total Test Number | Test # By Group M | V | BN | P | O | A | Clean | Hg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 11/02/2010 | 0.02 | 0.02 | 8 | 5 | 0 | 1 | 0 | 2 | 0 | F | 0 |
| 11/14/2010 | 0.02 | 0.02 | 19 | 10 | 0 | 0 | 0 | 9 | 0 | F | 0 |
| 12/06/2010 | 0.02 | 0.02 | 13 | 8 | 0 | 2 | 0 | 3 | 0 | F | 0 |
| 12/07/2010 | 0.02 | 0.00 | 2 | 1 | 0 | 0 | 0 | 1 | 0 | F | 0 |
| 02/07/2011 | 0.03 | 0.03 | 7 | 5 | 0 | 1 | 0 | 1 | 0 | F | 0 |
| 04/11/2011 | 0.02 | 0.02 | 8 | 6 | 0 | 1 | 0 | 1 | 0 | F | 0 |
| 05/02/2011 | 0.02 | 0.02 | 7 | 5 | 0 | 1 | 0 | 1 | 0 | F | 0 |
| 05/15/2011 | 0.02 | 0.02 | 19 | 10 | 0 | 0 | 0 | 9 | 0 | F | 0 |
| 06/06/2011 | 0.03 | 0.03 | 7 | 5 | 0 | 1 | 0 | 1 | 0 | F | 0 |
| 07/05/2011 | 0.03 | 0.02 | 7 | 5 | 0 | 1 | 0 | 1 | 0 | F | 0 |
| 08/01/2011 | 0.03 | 0.03 | 7 | 5 | 0 | 1 | 0 | 1 | 0 | F | 0 |
| 09/12/2011 | 0.03 | 0.02 | 8 | 5 | 0 | 1 | 0 | 2 | 0 | F | 0 |
| 10/03/2011 | 0.02 | 0.02 | 10 | 7 | 0 | 1 | 0 | 2 | 0 | F | 0 |
| 11/14/2011 | 0.02 | 0.02 | 8 | 5 | 0 | 1 | 0 | 2 | 0 | F | 0 |
| 12/12/2011 | 0.02 | 0.02 | 8 | 5 | 0 | 1 | 0 | 2 | 0 | F | 0 |

Key:

A = Acid O = Others P = Pesticides

BN = Base Neutral M = Metals V = Volatiles

| Test Date | Monthly (Flow MGD) | Daily (Flow MGD) | Total Test Number | Test # By Group M | V | BN | P | O | A | Clean | Hg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 01/09/2012 | 0.02 | 0.02 | 9 | 6 | 0 | 1 | 0 | 2 | 0 | F | 0 |
| 03/05/2012 | 0.03 | 0.02 | 8 | 5 | 0 | 1 | 0 | 2 | 0 | F | 0 |
| 04/02/2012 | 0.03 | 0.05 | 7 | 4 | 0 | 1 | 0 | 2 | 0 | F | 0 |
| 04/17/2012 | 0.03 | 0.03 | 2 | 1 | 0 | 0 | 0 | 1 | 0 | F | 0 |
| 06/04/2012 | 0.04 | 0.05 | 8 | 5 | 0 | 1 | 0 | 2 | 0 | F | 0 |
| 07/09/2012 | 0.04 | 0.04 | 8 | 5 | 0 | 1 | 0 | 2 | 0 | F | 0 |
| 08/06/2012 | 0.04 | 0.03 | 14 | 10 | 0 | 1 | 0 | 3 | 0 | F | 0 |

**Key:**

A = Acid O = Others P = Pesticides

BN = Base Neutral M = Metals V = Volatiles

# FACILITY CHEMICAL DATA REPORT

**Data Date Range:** 02/Nov/2007 - 02/Nov/2012

Facility name: **PRATT & WHITNEY** Permit Number: **ME0022861**

**Parameter:** ALUMINUM

| Test date | Result (ug/l) | Lsthan |
|---|---|---|
| 08/05/2008 | 440.000 | N |
| 04/05/2009 | 20.000 | Y |
| 11/14/2010 | 130.000 | N |
| 05/15/2011 | 1500.000 | N |
| 08/06/2012 | 398.000 | N |

Data Date Range: 02/Nov/2007 - 02/Nov/2012

Facility name: **PRATT & WHITNEY** Permit Number: **ME0022861**

**Parameter**: BIS(2-ETHYLHEXYL)PHTH.

| Test date | Result (ug/l) | Lsthan |
|---|---|---|
| 02/06/2008 | 11.000 | N |
| 03/04/2008 | 4.000 | N |
| 05/07/2008 | 3.000 | N |
| 06/04/2008 | 8.000 | N |
| 07/02/2008 | 2.000 | Y |
| 08/04/2008 | 15.000 | N |
| 09/04/2008 | 11.000 | N |
| 10/15/2008 | 22.000 | N |
| 11/15/2008 | 16.000 | N |
| 01/08/2009 | 9.000 | N |
| 02/04/2009 | 29.000 | N |
| 03/04/2009 | 18.000 | N |
| 05/05/2009 | 2.000 | N |
| 05/06/2009 | 13.000 | N |
| 06/01/2009 | 15.000 | N |
| 07/10/2009 | 15.000 | N |
| 07/14/2009 | 10.000 | N |
| 08/10/2009 | 2.000 | N |
| 09/09/2009 | 17.000 | N |
| 10/27/2009 | 13.000 | N |
| 11/17/2009 | 2.000 | Y |
| 12/14/2009 | 4.000 | N |
| 01/12/2010 | 11.000 | N |
| 02/09/2010 | 11.000 | N |
| 03/22/2010 | 2.000 | N |
| 05/17/2010 | 67.000 | N |
| 06/01/2010 | 69.000 | N |
| 08/17/2010 | 2.000 | Y |
| 09/13/2010 | 2.000 | N |
| 10/04/2010 | 2.000 | N |
| 11/02/2010 | 3.000 | Y |
| 12/06/2010 | 5.000 | N |
| 12/06/2010 | 4.000 | N |
| 02/07/2011 | 5.000 | N |
| 04/11/2011 | 3.000 | N |
| 05/02/2011 | 3.000 | Y |
| 06/06/2011 | 5.000 | Y |
| 07/05/2011 | 5.000 | Y |
| 08/01/2011 | 5.000 | Y |
| 09/12/2011 | 5.000 | Y |
| 10/03/2011 | 5.000 | Y |
| 11/14/2011 | 5.000 | Y |
| 12/12/2011 | 8.000 | N |
| 01/09/2012 | 2.000 | Y |
| 03/05/2012 | 2.000 | Y |

| | | |
|---|---|---|
| 04/02/2012 | 2.000 | Y |
| 06/04/2012 | 5.000 | Y |
| 07/09/2012 | 5.000 | Y |
| 08/06/2012 | 5.000 | Y |

# FACILITY CHEMICAL DATA REPORT

**Data Date Range:** 02/Nov/2007 - 02/Nov/2012

Facility name: **PRATT & WHITNEY** Permit Number: **ME0022861**

**Parameter**: CADMIUM

| Test date | Result (ug/l) | Lsthan |
|---|---|---|
| 01/07/2008 | 1.000 | Y |
| 02/06/2008 | 1.000 | Y |
| 03/04/2008 | 1.000 | Y |
| 05/07/2008 | 0.100 | N |
| 06/04/2008 | 0.100 | Y |
| 07/02/2008 | 0.100 | N |
| 08/04/2008 | 0.300 | N |
| 08/05/2008 | 5.000 | N |
| 09/04/2008 | 0.100 | Y |
| 10/15/2008 | 0.100 | Y |
| 11/15/2008 | 0.100 | Y |
| 12/08/2008 | 0.100 | Y |
| 01/08/2009 | 0.200 | N |
| 02/04/2009 | 0.170 | N |
| 03/04/2009 | 0.400 | N |
| 04/05/2009 | 0.700 | N |
| 05/05/2009 | 0.100 | Y |
| 06/10/2009 | 0.400 | Y |
| 07/10/2009 | 0.400 | Y |
| 07/14/2009 | 0.200 | Y |
| 08/10/2009 | 1.000 | Y |
| 09/09/2009 | 1.000 | Y |
| 10/27/2009 | 1.000 | Y |
| 11/17/2009 | 0.100 | Y |
| 12/14/2009 | 0.100 | Y |
| 01/12/2010 | 1.000 | Y |
| 02/09/2010 | 1.000 | Y |
| 03/22/2010 | 1.000 | Y |
| 05/17/2010 | 1.000 | Y |
| 06/01/2010 | 1.000 | Y |
| 07/12/2010 | 1.000 | Y |
| 08/17/2010 | 1.000 | Y |
| 09/13/2010 | 1.000 | Y |
| 10/04/2010 | 1.000 | Y |
| 11/02/2010 | 1.000 | Y |
| 11/14/2010 | 0.700 | N |
| 12/06/2010 | 1.000 | Y |
| 02/07/2011 | 1.000 | Y |
| 04/11/2011 | 1.000 | Y |
| 05/02/2011 | 1.000 | Y |
| 05/15/2011 | 0.500 | Y |
| 06/06/2011 | 1.000 | Y |
| 07/05/2011 | 1.000 | Y |
| 08/01/2011 | 1.000 | Y |
| 09/12/2011 | 1.000 | Y |

| | | |
|---|---|---|
| 10/03/2011 | 1.000 | Y |
| 11/14/2011 | 1.000 | Y |
| 12/12/2011 | 1.000 | Y |
| 01/09/2012 | 1.000 | Y |
| 03/05/2012 | 0.600 | N |
| 04/02/2012 | 0.800 | N |
| 06/04/2012 | 0.200 | Y |
| 07/09/2012 | 0.200 | Y |
| 08/06/2012 | 1.000 | Y |

# FACILITY CHEMICAL DATA REPORT

**Data Date Range:** 02/Nov/2007 - 02/Nov/2012

Facility name: **PRATT & WHITNEY** Permit Number: **ME0022861**

**Parameter:** COPPER

| Test date | Result (ug/l) | Lsthan |
|---|---|---|
| 01/07/2008 | 50.300 | N |
| 02/06/2008 | 34.100 | N |
| 03/04/2008 | 32.600 | N |
| 05/07/2008 | 19.900 | N |
| 06/04/2008 | 19.900 | N |
| 07/02/2008 | 20.700 | N |
| 08/04/2008 | 16.700 | N |
| 08/05/2008 | 12.000 | N |
| 09/04/2008 | 12.100 | N |
| 10/15/2008 | 26.200 | N |
| 11/15/2008 | 22.600 | N |
| 12/08/2008 | 24.700 | N |
| 01/08/2009 | 28.400 | N |
| 02/04/2009 | 61.100 | N |
| 03/04/2009 | 52.500 | N |
| 04/05/2009 | 23.000 | N |
| 05/05/2009 | 50.400 | N |
| 05/06/2009 | 29.700 | N |
| 06/10/2009 | 30.000 | N |
| 07/10/2009 | 30.000 | N |
| 07/14/2009 | 12.000 | N |
| 08/10/2009 | 18.000 | N |
| 09/09/2009 | 22.000 | N |
| 10/27/2009 | 16.000 | N |
| 11/17/2009 | 16.000 | N |
| 12/14/2009 | 25.000 | N |
| 01/12/2010 | 24.000 | N |
| 02/09/2010 | 58.000 | N |
| 03/22/2010 | 28.000 | N |
| 05/17/2010 | 24.000 | N |
| 06/01/2010 | 30.000 | N |
| 07/12/2010 | 24.000 | N |
| 08/17/2010 | 20.000 | N |
| 09/13/2010 | 26.000 | N |
| 10/04/2010 | 26.000 | N |
| 11/02/2010 | 21.000 | N |
| 11/14/2010 | 16.000 | N |
| 12/06/2010 | 33.000 | N |
| 12/06/2010 | 31.000 | N |
| 02/07/2011 | 29.000 | N |
| 04/11/2011 | 23.000 | N |
| 05/02/2011 | 23.000 | N |
| 05/15/2011 | 11.000 | N |
| 06/06/2011 | 34.000 | N |
| 07/05/2011 | 28.000 | N |

| | | |
|---|---|---|
| 08/01/2011 | 27.000 | N |
| 09/12/2011 | 15.600 | N |
| 10/03/2011 | 31.000 | N |
| 11/14/2011 | 34.000 | N |
| 12/12/2011 | 35.000 | N |
| 01/09/2012 | 44.000 | N |
| 03/05/2012 | 18.000 | N |
| 04/02/2012 | 14.000 | N |
| 06/04/2012 | 13.900 | N |
| 07/09/2012 | 8.900 | N |
| 08/06/2012 | 8.480 | N |

# FACILITY CHEMICAL DATA REPORT

**Data Date Range:** 02/Nov/2007 - 02/Nov/2012

Facility name: **PRATT & WHITNEY** Permit Number: **ME0022861**

**Parameter:** NICKEL

| Test date | Result (ug/l) | Lsthan |
|---|---|---|
| 01/07/2008 | 634.400 | N |
| 02/06/2008 | 332.600 | N |
| 03/04/2008 | 193.700 | N |
| 05/07/2008 | 184.100 | N |
| 06/04/2008 | 218.000 | N |
| 07/02/2008 | 172.000 | N |
| 08/04/2008 | 108.700 | N |
| 08/05/2008 | 83.000 | N |
| 09/04/2008 | 53.100 | N |
| 10/15/2008 | 117.300 | N |
| 11/15/2008 | 122.700 | N |
| 12/08/2008 | 87.700 | N |
| 01/08/2009 | 99.400 | N |
| 02/04/2009 | 158.300 | N |
| 03/04/2009 | 179.400 | N |
| 04/05/2009 | 99.000 | N |
| 05/05/2009 | 102.000 | N |
| 05/06/2009 | 154.400 | N |
| 06/10/2009 | 192.000 | N |
| 07/10/2009 | 192.000 | N |
| 07/14/2009 | 107.000 | N |
| 08/10/2009 | 84.000 | N |
| 09/09/2009 | 101.000 | N |
| 10/27/2009 | 89.000 | N |
| 11/17/2009 | 74.000 | N |
| 12/14/2009 | 83.000 | N |
| 01/12/2010 | 53.000 | N |
| 02/09/2010 | 115.000 | N |
| 03/22/2010 | 62.000 | N |
| 05/17/2010 | 73.000 | N |
| 06/01/2010 | 88.000 | N |
| 07/12/2010 | 101.000 | N |
| 08/17/2010 | 84.000 | N |
| 09/13/2010 | 124.000 | N |
| 10/04/2010 | 146.000 | N |
| 11/02/2010 | 223.000 | N |
| 11/14/2010 | 190.000 | N |
| 12/06/2010 | 151.000 | N |
| 12/06/2010 | 249.000 | N |
| 02/07/2011 | 71.000 | N |
| 04/11/2011 | 151.000 | N |
| 05/02/2011 | 98.000 | N |
| 05/15/2011 | 59.000 | N |
| 06/06/2011 | 103.000 | N |
| 07/05/2011 | 94.000 | N |

| | | |
|---|---|---|
| 08/01/2011 | 88.000 | N |
| 09/12/2011 | 102.000 | N |
| 10/03/2011 | 89.000 | N |
| 11/14/2011 | 98.000 | N |
| 12/12/2011 | 93.000 | N |
| 01/09/2012 | 112.000 | N |
| 03/05/2012 | 168.000 | N |
| 04/02/2012 | 134.000 | N |
| 04/17/2012 | 124.000 | N |
| 06/04/2012 | 77.800 | N |
| 07/09/2012 | 54.100 | N |
| 08/06/2012 | 56.000 | N |

# ATTACHMENT D

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

MEMORANDUM

DATE: October 2008

TO: Interested Parties

FROM: Dennis Merrill, DEP

SUBJECT: DEP's system for evaluating toxicity from multiple discharges

**********

Following the requirements of DEP's rules, Chapter 530, section 4(F), the Department is evaluating discharges of toxic pollutants into a freshwater river system in order to prevent cumulative impacts from multiple discharges. This is being through the use of a computer program known internally as "DeTox". The enclosed package of information is intended to introduce you to this system.

Briefly, the DeTox program evaluates each wastewater facility within a watershed in three different ways in order to characterize its effluent: 1) the facility's past history of discharges, 2) its potential toxicity at the point of discharge on an individual basis, and 3) the facility's contribution to cumulative toxicity within a river segment in conjunction with other facilities. The value that is most protective of water quality becomes the value that is held in the DeTox system as an allocation for the specific facility and pollutant.

The system is not static and uses a five-year "rolling" data window. This means that, over time, old test results drop off and newer ones are added. The intent of this process is to maintain current, uniform facility data to estimate contributions to a river's total allowable pollutant loading prior to each permit renewal.

Many facilities are required to do only a relatively small amount of pollutant testing on their effluent. This means, statistically, the fewer tests done, the greater the possibility of effluent limits being necessary based on the facility's small amount of data. To avoid this situation, most facilities, especially those with low dilution factors, should consider conducting more than the minimum number of tests required by the rules.

Attached you will find three documents with additional information on the DeTox system:

- Methods for evaluating the effects of multiple discharges of toxic pollutants
- Working definitions of terms used in the DeTox system
- Reviewing DeTox Reports
- Prototype facility and pollutant reports

If you have questions as you review these, please do not hesitate to contact me at Dennis.L.Merrill@maine.gov or 287-7788.

Maine Department of Environmental Protection

Methods for evaluating the effects of multiple discharges of toxic pollutants.

Reference: DEP Rules, Chapter 530, section 4(F)

To evaluate discharges of toxic pollutants into a freshwater river system and prevent cumulative impacts from multiple discharges, DEP uses a computer program called "DeTox that functions as a mathematical evaluation tool.

It uses physical information about discharge sources and river conditions on file with the Department, established water quality criteria and reported effluent test information to perform these evaluations. Each toxic pollutant and associated water quality criterion for acute, chronic and/or human health effects is evaluated separately.

Each facility in a river drainage area has an assigned position code. This "address" is used to locate the facility on the river segment and in relation to other facilities and tributary streams. All calculations are performed in pounds per day to allow analysis on a mass balance. Pollutants are considered to be conservative in that once in the receiving water they will not easily degrade and have the potential to accumulate.

The process begins with establishing an assimilative capacity for each pollutant and water quality criterion at the most downstream point in the river segment. This calculation includes set-aside amounts for background and reserve quantities and assumed values for receiving water pH, temperature and hardness. The resulting amount of assimilative capacity is available for allocation among facilities on the river.

Each facility is evaluated to characterize its past discharge quantities. The historical discharge, in pounds per day, is figured using the average reported concentration and the facility's permitted flow. As has been past practice, a reasonable potential (RP) factor is used as a tool to estimate the largest discharge that may occur with a certain degree of statistical certainty. The RP factor is multiplied by the historical average to determine an allocation based on past discharges. The RP factor is also multiplied by the single highest test to obtain a maximum day estimate. Finally, the direct average without RP adjustment is used to determine the facility's percent contribution to the river segment in comparison to the sum of all discharges of the pollutant. This percent multiplied by the total assimilative capacity becomes the facility's discharge allocation used in evaluations of the segment loadings.

Additionally, individual facility discharges are evaluated as single sources, as they have been in the past to determine if local conditions are more limiting than a segment evaluation.

With all of this information, facilities are evaluated in three ways. The methods are:

1. The facility's past history. This is the average quantity discharged during the past five years multiplied by the applicable RP factor. This method is often the basis for an allocation when the discharge quantity is relatively small in comparison to the water quality based allocation.
2. An individual evaluation. This assumes no other discharge sources are present and the allowable quantity is the total available assimilative capacity. This method may be used when a local condition such as river flow at the point of discharge is the limiting factor.
3. A segment wide evaluation. This involves allocating the available assimilative capacity within a river segment based on a facility's percent of total past discharges. This method would be used when multiple discharges of the same pollutant to the same segment and the available assimilative capacity is relatively limited.

The value that is most protective of water quality becomes the facility's allocation that is held in the system for the specific facility and pollutant. It is important to note that the method used for allocation is facility and pollutant specific and different facilities on the same segment for the same pollutant can have different methods used depending on their individual situations.

Discharge amounts are always allocated to all facilities having a history of discharging a particular pollutant. This does not mean that effluent limits will be established in a permit. Limits are only needed when past discharge amounts suggest a reasonable potential to exceed a water quality based allocation, either on an individual or segment basis. Similar to past practices for single discharge evaluations, the single highest test value is multiplied by a RP factor and if product is greater than the water quality allowance, an effluent limit is established. It is important to remember an allocation is "banking" some assimilative capacity for a facility even if effluent limits are not needed.

Evaluations are also done for each tributary segment with the sum of discharge quantities in tributaries becoming a "point source" to the next most significant segment. In cases where a facility does not use all of its assimilative capacity, usually due to a more limiting individual water quality criterion, the unused quantity is rolled downstream and made available to other facilities.

The system is not static and uses a five-year rolling data window. Over time, old tests drop off and newer ones are added on. These changes cause the allocations and the need for effluent limits to shift over time to remain current with present conditions. The intent is to update a facility's data and relative contribution to a river's total assimilative capacity prior to each permit renewal. Many facilities are required to do only minimal testing to characterize their effluents. This creates a greater degree of statistical uncertainty about the true long-term quantities. Accordingly, with fewer tests the RP factor will be larger and result in a greater possibility of effluent limits being necessary. To avoid this situation, most facilities, especially those with relatively low dilution factors, are encouraged to conduct more that a minimum number of tests. It is generally to a facility's long-term benefit to have more tests on file since their RP factor will be reduced.

Maine Department of Environmental Protection

Working Definitions of Terms Used in the DeTox System.

*Allocation.* The amount of pollutant loading set aside for a facility. Separate amounts are set for each *water quality criterion.* Each pollutant having a history of being discharged will receive an allocation, but not all allocations become *effluent limits.* Allocation may be made in three ways: *historical allocation, individual allocation* or *segment allocation.*

*Assimilative capacity.* The amount of a pollutant that river segment can safely accept from point source discharges. It is determined for the most downstream point in a river segment using the *water quality criterion* and river flow. Separate capacities are set for acute, chronic and human health criteria as applicable for each pollutant. Calculation of this capacity includes factors for *reserve* and *background* amounts.

*Background.* A concentration of a pollutant that is assumed to be present in a receiving water but not attributable to discharges. By rule, this is set as a rebuttable presumption at 10% of the applicable *water quality criterion.*

*Effluent limit.* A numeric limit in a discharge permit specifically restricting the amount of a pollutant that may be discharged. An effluent limit is set only when the highest discharge, including an adjustment for *reasonable potential,* is greater than a facility's water quality based *allocation* for a pollutant.

*Historical allocation* (or *RP history*). One of three ways of developing an *allocation.* The facility's average history of discharges, in pounds at design flow, is multiplied by the appropriate *reasonable potential* factor. An allocation using this method does not become an *effluent limit.*

*Historical discharge percentage.* For each pollutant, the average discharge concentration for each facility in a segment is multiplied by the permitted flow (without including a *reasonable potential* factor). The amounts for all facilities are added together and a percent of the total is figured for each facility. When a facility has no detectable concentrations, that pollutant is assumed to be not present and it receives no percentage.

*Individual allocation.* One of three ways of developing an *allocation.* The facility's single highest discharge on record multiplied by the appropriate *reasonable potential* factor is compared to a water quality based quantity with an assumption that the facility is the only point source to that receiving water. If the RP-adjusted amount is larger, the water quality amount may become an *effluent limit.*

*Less than.* A qualification on a laboratory report indicating the concentration of a pollutant was below a certain concentration. Such a result is evaluated as being one half of the Department's reporting limit in most calculations.

*Reasonable potential (RP).* A statistical method to determine the highest amount of a pollutant likely to be present at any time based on the available test results. The method produces a value or RP factor that is multiplied by test results. The method relies on an EPA guidance document, and considers the coefficient of variation and the number of tests. Generally, the fewer number of tests, the higher the RP factor.

*Reserve.* An assumed concentration of a pollutant that set aside to account for non-point source of a pollutant and to allow new discharges of a pollutant. By rule this is set at 15% of the applicable *water quality criterion.*

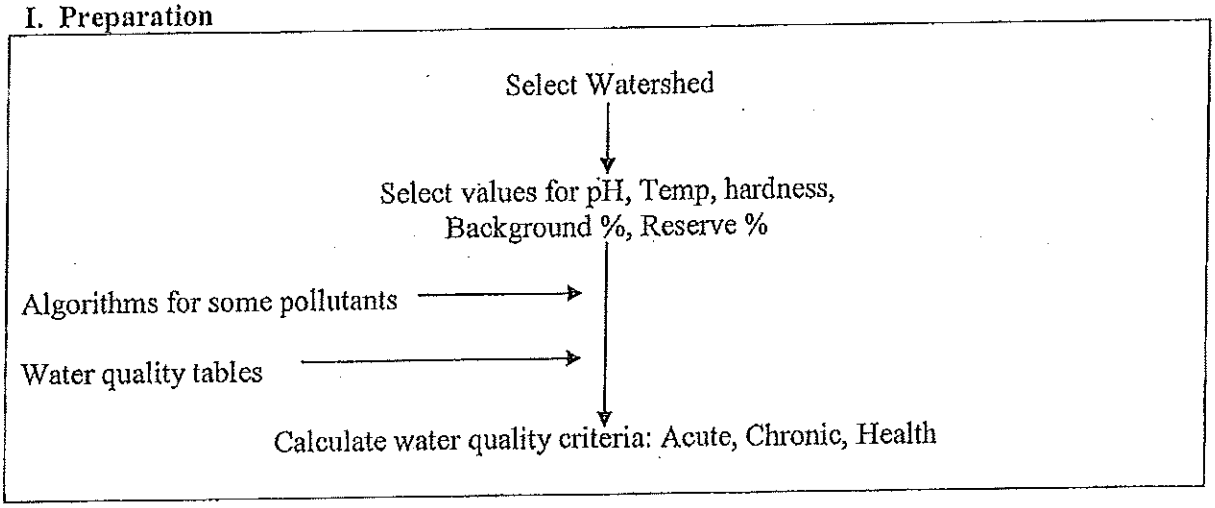
*Segment allocation.* One of three ways of developing an *allocation.* The amount is set by multiplying a facility's *historical discharge percentage* for a specific pollutant by the *assimilative capacity* for that pollutant and criterion. A facility will have different allocation percentages for each pollutant. This amount may become an *effluent limit.*

*Tributary.* A stream flowing into a larger one. A total pollutant load is set by adding the all facilities *allocations* on the tributary and treating this totaled amount as a "point source" to the next larger segment.

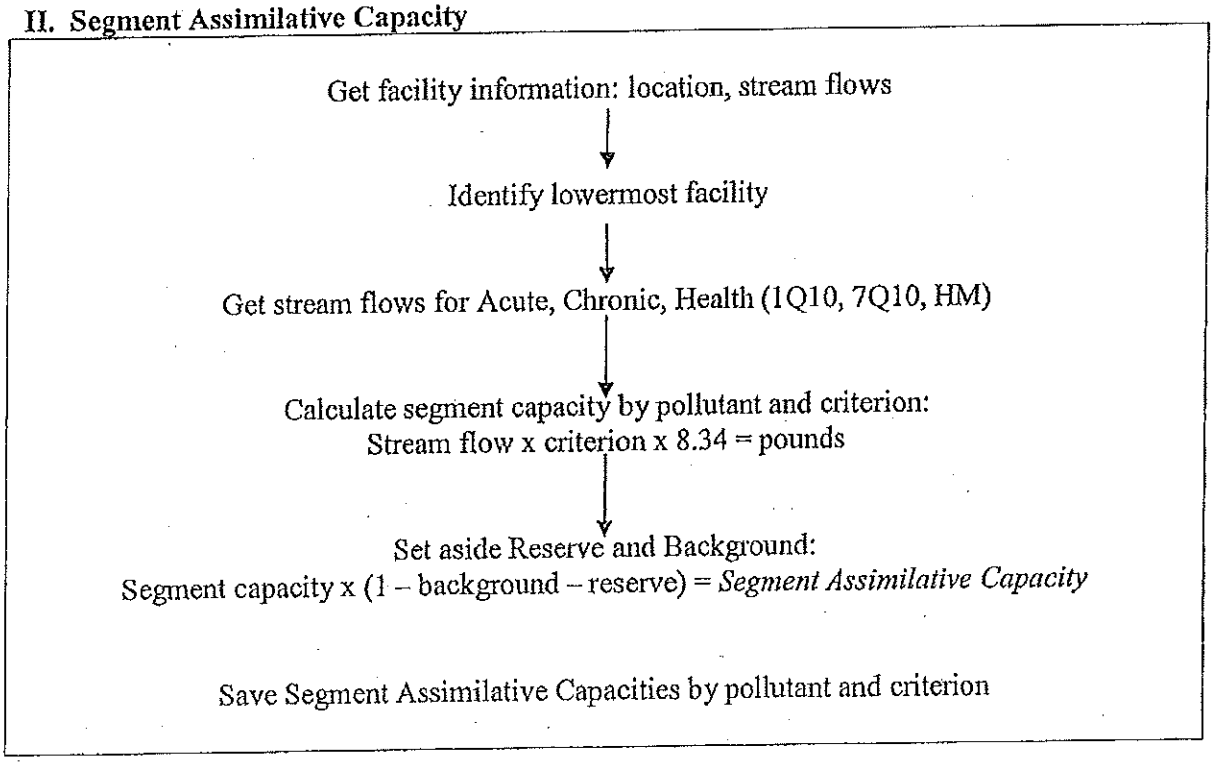
*Water quality criteria.* Standards for acceptable in-stream or ambient levels of pollutants. These are established in the Department's Chapter 584 and are expressed as concentrations in ug/L. There may be separate standards for acute and chronic protection aquatic life and/or human health. Each criterion becomes a separate standard. Different stream flows are used in the calculation of each.

Maine Department of Environmental Protection
General Processing Steps in "DeTox"

**I. Preparation**




**II. Segment Assimilative Capacity**



Maine Department of Environmental Protection
General Processing Steps in "DeTox"

**III. Evaluate History by Pollutant**

Select each facility effluent data for each facility

Data input and edits →

Identify "less than" results and assign at ½ of reporting limit

Bypass pollutants if all results are "less than"

Average concentrations and calculate pounds:
Ave concentration x license flow x 8.34 = *Historical Average*

Determine reasonable potential (RP) using algorithm

Calculate RP adjusted pounds:
Historical Average x RP factor = *RP Historical Allocation*

Save for comparative evaluation

Calculate adjusted maximum pounds:
Highest concentration x RP factor x license flow x 8.34 = *RP Maximum Value*

**IV. Determine Facility History Percentage**

By pollutant, identify facilities with *Historical Average*

Sum all Historical Averages within segment

By facility, calculate percent of total:
Facility pounds / Total pounds = *Facility History %*

Maine Department of Environmental Protection
General Processing Steps in "DeTox"

**V. Segment Allocation**

By pollutant and criterion, select *Segment Assimilative Capacity*

↓

Select individual *Facility History %*

↓

Determine facility allocation:
Assimilative Capacity x Facility History % = *Segment Allocation*

↓

Save for comparative evaluation

**VI. Individual Allocation**

Select individual facility and dilution factor (DF)

↓

Select pollutant and water quality criterion

↓

By pollutant and criterion, calculate individual allocations:
[DF x 0.75 x criterion] + [0.25 x criterion] = Individual Concentration

↓

Determine individual allocation:
Individual Concentration x license flow x 8.34 = *Individual Allocation*

↓

Save for comparative evaluation

**VII. Make Initial Allocation**

By facility, pollutant and criterion, get:
*Individual Allocation, Segment Allocation, RP Historical Allocation*

↓

Compare allocation and select the smallest

↓

Save as *Facility Allocation*

Maine Department of Environmental Protection
General Processing Steps in "DeTox"

**VIII. Evaluate Need for Effluent Limits**

By facility, pollutant and criterion select
*Segment Allocation*, *Individual Allocation* and *RP Maximum value*

↓

If *RP Maximum value* is greater than either *Segment Allocation* or *Individual Allocation*, use lesser value as *Effluent Limit*

↓

Save *Effluent Limit* for comparison

**IX. Reallocation of Assimilative Capacity**

Starting at top of segment, get *Segment Allocation*, *Facility Allocation* and *Effluent Limit*

↓

If *Segment Allocation* equals *Effluent Limit*, move to next facility downstream

↓

If not, subtract *Facility Allocation* from *Segment Allocation*

↓

Save difference

↓

Select next facility downstream

↓

Figure remaining *Segment Assimilative Capacity* at and below facility, less tributaries

↓

Add saved difference to get an adjusted *Segment Assimilative Capacity*

↓

Reallocate *Segment Assimilative Capacity* among downstream facilities per step V

↓

Repeat process for each facility downstream in turn

# ATTACHMENT E

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<br>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? | ☐ | ☐ |
| 2 | Changes in the condition or operations of the facility that may increase the toxicity of the discharge? | ☐ | ☐ |
| 3 | Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge? | ☐ | ☐ |
| 4 | Increases in the type or volume of hauled wastes accepted by the facility? | ☐ | ☐ |

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 | 1st Quarter | 2nd Quarter | 3rd Quarter | 4th Quarter |
|---|---|---|---|---|
| WET Testing | ☐ | ☐ | ☐ | ☐ |
| Priority Pollutant Testing | ☐ | ☐ | ☐ | ☐ |
| Analytical Chemistry | ☐ | ☐ | ☐ | ☐ |
| Other toxic parameters [1] | ☐ | ☐ | ☐ | ☐ |

*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

web site: www.maine.gov/dep

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

CONTENTS

## A. GENERAL PROVISIONS

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

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

(a) They are not

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

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

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

(a) The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act, and 38 MRSA, §420 or Chapter 530.5 for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
(b) Any person who violates any provision of the laws administered by the Department, including without limitation, a violation of the terms of any order, rule license, permit, approval or decision of the Board or Commissioner is subject to the penalties set forth in 38 MRSA, §349.

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

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

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

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

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

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

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

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

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

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

## B. OPERATION AND MAINTENACE OF FACILITIES

### 1. General facility requirements.

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

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

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

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

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

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

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

**2. Proper operation and maintenance.** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

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

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

**5. Bypasses.**

(a) Definitions.

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

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

(b) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (c) and (d) of this section.

(c) Notice.

(i) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

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

(d) Prohibition of bypass.

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

(A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
(B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
(C) The permittee submitted notices as required under paragraph (c) of this section.

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

**6. Upsets.**

(a) Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

(b) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (c) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

(c) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

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

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

## C. MONITORING AND RECORDS

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

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

**3. Monitoring and records.**

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

(b) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

(c) Records of monitoring information shall include:

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

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

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

## D. REPORTING REQUIREMENTS

**1. Reporting requirements.**

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

(i) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or

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

(iii) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;

(b) Anticipated noncompliance. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(c) Transfers. This permit is not transferable to any person except upon application to and approval of the Department pursuant to 38 MRSA, § 344 and Chapters 2 and 522.

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

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

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

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

(e) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

(f) Twenty-four hour reporting.

(i) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance

has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

(ii) The following shall be included as information which must be reported within 24 hours under this paragraph.

(A) Any unanticipated bypass which exceeds any effluent limitation in the permit.
(B) Any upset which exceeds any effluent limitation in the permit.
(C) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit to be reported within 24 hours.

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

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

(h) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

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

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

**4. Existing manufacturing, commercial, mining, and silvicultural dischargers.** In addition to the reporting requirements under this Section, all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Department as soon as they know or have reason to believe:

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

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

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

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

**5. Publicly owned treatment works.**

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

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

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

## E. OTHER REQUIREMENTS

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

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

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

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

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

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

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

**Average** means the arithmetic mean of values taken at the frequency required for each parameter over the specified period. For bacteria, the average shall be the geometric mean.

**Average monthly discharge limitation** means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. Except, however, bacteriological tests may be calculated as a geometric mean.

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

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

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

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

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

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

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

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

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

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

**Maximum daily discharge limitation** means the highest allowable daily discharge.

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

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

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

**Permit** means an authorization, license, or equivalent control document issued by EPA or an approved State to implement the requirements of 40 CFR parts 122, 123 and 124. Permit includes an NPDES general permit (Chapter 529). Permit does not include any permit which has not yet been the subject of final agency action, such as a draft permit or a proposed permit.

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

**Point source** means any discernible, confined and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation or vessel or other floating craft, from which pollutants are or may be discharged.

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

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

**Publicly owned treatment works ("POTW")** means any facility for the treatment of pollutants owned by the State or any political subdivision thereof, any municipality, district, quasi-municipal corporation or other public entity.

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

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

**Toxic pollutant** includes any pollutant listed as toxic under section 307(a)(1) or, in the case of sludge use or disposal practices, any pollutant identified in regulations implementing section 405(d) of the CWA. Toxic pollutant also includes those substances or combination of substances, including disease causing agents, which after discharge or upon exposure, ingestion, inhalation or assimilation into any organism, including humans either directly through the environment or indirectly through ingestion through food chains, will, on the basis of information available to the board either alone or in combination with other substances already in the receiving waters or the discharge, cause death, disease, abnormalities, cancer, genetic mutations, physiological malfunctions, including malfunctions in reproduction, or physical deformations in such organism or their offspring.

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

**Whole effluent toxicity** means the aggregate toxic effect of an effluent measured directly by a toxicity test.

# DEP INFORMATION SHEET
## Appealing a 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.**