STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

DAVID P. LITTELL
COMMISSIONER

December 8, 2006

Mr. Matt Palmer
Town of Washburn
1287 Main Street
Washburn, Maine 04786

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0101028
Maine Waste Discharge License (WDL) Application #W007610-5L-D-R
Final MEPDES Permit/WDL

Dear Mr. Palmer:

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

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

If you have any questions regarding the matter, please feel free to call me at 287-7659.

Sincerely,

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

Enc.

cc: Sean Bernard, DEP
Lori Mitchell, DEP
Sandy Lao, USEPA
File #7610

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

DEPARTMENT ORDER

IN THE MATTER OF

TOWN OF WASHBURN	)	MAINE POLLUTANT DISCHARGE
WASHBURN, AROOSTOOK COUNTY	)	ELIMINATION SYSTEM PERMIT
PUBLICLY OWNED TREATMENT WORKS	)	AND
#ME0101028	)	WASTE DISCHARGE LICENSE
#W007610-5L-D-R **APPROVAL**	)	**RENEWAL**

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

APPLICATION SUMMARY

The Town has applied to the Department for a renewal of Waste Discharge License (WDL) #W007610-5L-C-R / Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0101028, which was issued on December 21, 2001, and is scheduled to expire on December 21, 2006. The 12/21/01 MEPDES permit authorized the monthly average discharge of up to 0.283 million gallons per day (MGD) of secondary treated sanitary wastewater from a publicly owned treatment works (POTW) to the Aroostook River, Class B, in Washburn, Maine.

PERMIT SUMMARY

This permitting action is similar to the 12/21/01 permitting action in that it is:

1. Carrying forward the monthly average discharge flow limit of 0.283 MGD and the daily maximum discharge flow reporting requirement;

2. Carrying forward the technology-based, monthly average, weekly average and daily maximum concentration and mass limitations and the technology-based 30-day minimum percent removal rate of 85% for biochemical oxygen demand (BOD_5) and total suspended solids (TSS);

3. Carrying forward the daily maximum, technology-based concentration limitation of 0.3 ml/L for settleable solids;

4. Carrying forward the seasonal monthly average and daily maximum concentration limits for *Escherichia coli* bacteria;

5. Carrying forward the technology-based, daily maximum concentration limit of 1.0 mg/L for total residual chlorine (TRC);

6. Carrying forward the pH range limit of 6.0 to 9.0 standard units (SU);

7. Carrying forward the Lagoon Under-Drain and Ground Water Monitoring Well monitoring and reporting requirements (Special Conditions A 3 and A .4 of this permit respectively), with the exception of dissolved oxygen and ammonia-nitrogen associated with ground water monitoring, which are being eliminated, imposition of a daily maximum concentration limit of 10 mg/L (primary drinking water standard) for nitrate nitrogen, and revising the bacteria parameter from fecal coliform to *E. coli* for lagoon under-drain monitoring;

8. Carrying forward waived surveillance level whole effluent toxicity (WET), priority pollutant and analytical chemistry testing, except for the acute water flea test which must be tested once per year during the surveillance level period; and

9. Carrying forward the minimum monitoring frequency requirements for all monitored parameters.

This permitting action is different from the 12/21/01 permitting action in that it is:

1. Establishing an acute limit of 0.71% for the water flea based on results of facility testing; and

2. Establishing Special Condition I, *Chapter 530(2)(D)(4) Statement for Reduced Toxics Testing*, an annual notification requirement for waived surveillance level toxics testing.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated December 7, 2006, 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, 38 M.R.S.A. §464(4)(F), will be met, in that:

   (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;

   (b) Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;

   (c) 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 Maine law, 38 M.R.S.A., §414-A(1)(D).

ACTION

THEREFORE, the Department APPROVES the above noted application of the TOWN OF WASHBURN to discharge a monthly average flow of up to 0.283 million gallons per day of secondary treated municipal (sanitary and commercial waste waters) to the Aroostook River, Class B, in Washburn, 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. The expiration date of this permit is five (5) years from the date of signature below.

DONE AND DATED AT AUGUSTA, MAINE, THIS 7TH DAY OF December, 2006.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAVID P. LITTELL, Commissioner

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: August 28, 2006
Date of application acceptance: September 17, 2006

FILED
DEC 8 2006
BOARD OF ENVIRONMENTAL PROT.
STATE OF MAINE

Date filed with Board of Environmental Protection: _____.

This Order prepared by William F. Hinkel, BUREAU OF LAND & WATER QUALITY
#ME0101028 / #W007610-5L-D-R December 7, 2006

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge **secondary treated municipal (sanitary and commercial) waste waters from Outfall #001A** to the Aroostook River at Washburn. Such discharges shall be limited and monitored by the permittee as specified below[(1)]:

	Monthly Average as specified	Weekly Average as specified	Daily Maximum as specified	Monthly Average as specified	Weekly Average as specified	Daily Maximum as specified	Measurement Frequency as specified	Sample Type as specified
Flow *[50050]*	0.283 MGD *[03]*	---	Report MGD *[03]*	---	---	---	Continuous *[99/99]*	Recorder *[RC]*
BOD_5 *[00310]*	76 lbs./day *[26]*	106 lbs./day *[26]*	118 lbs./day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	1/Week *[01/07]*	24-Hour Composite *[24]*
BOD_5 Percent Removal[(2)] *[81010]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
TSS *[00530]*	76 lbs./day *[26]*	106 lbs./day *[26]*	118 lbs./day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	1/Week *[01/07]*	24-Hour Composite *[24]*
TSS Percent Removal[(2)] *[81011]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
Settleable Solids *[00545]*	---	---	---	---	---	0.3 ml/L *[25]*	5/Week[(3)] *[05/07]*	Grab *[GR]*
***E. coli* Bacteria[(4)] (May 15 – Sept. 30)** *[31633]*	---	---	---	64/100 ml[(5)] *[13]*	---	427/100 ml *[13]*	1/Week *[01/07]*	Grab *[GR]*
Total Residual Chlorine *[50060]*	---	---	---	---	---	1.0 mg/L *[19]*	5/Week[(3)] *[05/07]*	Grab *[GR]*
pH *[00400]*	---	---	---	---	---	6.0 – 9.0 SU *[12]*	5/Week[(3)] *[05/07]*	Grab *[GR]*

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

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

SPECIAL CONDITIONS

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

2. **SURVEILLANCE LEVEL TESTING.** During the period **beginning upon issuance of this permit and lasting until twelve months prior to permit expiration, for Outfall #001A**, the permittee shall perform WHOLE EFFLUENT TOXICITY (WET) as follows:

WHOLE EFFLUENT TOXICITY (WET) [6]	Daily Maximum	Minimum Frequency	Sample Type
Acute No Observed Effect Level (A-NOEL) **Water Flea** (*Ceriodaphnia dubia) [TDA3B]*	0.71 % *[23]*	1/Year *[01/YR]*	24-Hour Composite *[24]*

3. **SCREENING LEVEL TESTING.** During the period **beginning 12 months prior to permit expiration and lasting through permit expiration and every five years thereafter, for Outfall #001A**, the permittee shall perform WHOLE EFFLUENT TOXICITY (WET), PRIORITY POLLUTANT, AND ANALYTICAL CHEMISTRY TESTING as follows:

WHOLE EFFLUENT TOXICITY (WET) [6]	Daily Maximum	Minimum Frequency	Sample Type
Acute No Observed Effect Level (A-NOEL)			
Water Flea (*Ceriodaphnia dubia) [TDA3B]*	0.71 % *[23]*	1/Year *[01/YR]*	24-Hour Composite *[24]*
Brook Trout (*Salvelinus fontinalis) [TDA6F]*	Report % *[23]*	1/Year *[01/YR]*	24-Hour Composite *[24]*
Chronic No Observed Effect Level (C-NOEL)			
Water Flea (*Ceriodaphnia dubia) [TBP3B]*	Report % *[23]*	1/Year *[01/YR]*	24-Hour Composite *[24]*
Brook Trout (*Salvelinus fontinalis) [TBQ6F]*	Report % *[23]*	1/Year *[01/YR]*	24-Hour Composite *[24]*
ANALYTICAL CHEMISTRY [7] [8] *[51168]*	Report µg/L *[28]*	1/Quarter *[01/90]*	24-Hour Composite/Grab *[24/GR]*
PRIORITY POLLUTANT [7] [8] *[50008]*	Report µg/L *[28]*	1/Year *[01/YR]*	24-Hour Composite/Grab *[24/GR]*

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

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

SPECIAL CONDITIONS

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

3. **UNDER-DRAIN POINTS 002A**: The permittee is required to conduct sampling on lagoon under-drain #002A as specified below:

Effluent Characteristic	Minimum Monitoring Requirements		
Parameter	Daily Maximum (units specified)	Measurement Frequency	Sample Type
Flow Rate *[00058]*	Report GPM *[78]*	3/Year[9] *[03/YR]*	Measure *[MS]*
Conductivity *[00094]*	Report (umhos/cm) *[11]*	3/Year[9] *[03/YR]*	Grab *[GR]*
Temperature, °C *[00010]*	Report (°C) *[04]*	3/Year[9] *[03/YR]*	Grab *[GR]*
E. coli Bacteria *[31633]*	Report # / 100 ml *[13]*	3/Year[9] *[03/YR]*	Grab *[GR]*

4. **GROUND WATER MONITORING WELL MW 104**: The permittee is required to conduct sampling on the ground water monitoring well MW 104 as specified below:

Effluent Characteristic	Minimum Monitoring Requirements		
Parameter	Daily Maximum (units specified)	Measurement Frequency	Sample Type
Conductivity *[00094]*	Report (umhos/cm) *[11]*	1/Year[10] *[01/YR]*	Grab *[GR]*
Temperature, °C *[00010]*	Report (°C) *[04]*	1/Year[10] *[01/YR]*	Grab *[GR]*
pH (Std. Unit) *[00400]*	Report (SU) *[12]*	1/Year[10] *[01/YR]*	Grab *[GR]*
Chlorides *[00940]*	Report mg/L *[19]*	1/Year[10] *[01/YR]*	Grab *[GR]*
Total Sodium *[00929]*	Report mg/L *[19]*	1/Year[10] *[01/YR]*	Grab *[GR]*
Total Nitrate Nitrogen (as N) *[00620]*	10 mg/L *[19]*	1/Year[10] *[01/YR]*	Grab *[GR]*

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

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** – Sampling and analysis must be conducted in accordance with; a) methods approved by 40 Code of Federal Regulations (CFR) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis shall be analyzed by a laboratory certified by the State of Maine's Department of Human Services.

   All detectable 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. If a non-detect analytical test result is below the respective RL, the concentration result shall be reported as <Y where Y is the detection limit achieved by the laboratory for each respective parameter. Reporting a value of <Y that is greater than an established RL is not acceptable and will be rejected by the Department. For mass, if the analytical result is reported as <Y or if a detectable result is less than a RL, report a <X lbs/day, where X is the parameter specific limitation established in the permit.

2. **BOD_5 and TSS Percent Removal** – For secondary treated waste waters, the facility shall maintain a minimum of 85 percent removal of both BOD_5 and TSS. Compliance with the limitation is based on a twelve-month rolling average. Calendar monthly average percent removal values shall be calculated based on influent and effluent concentrations. The twelve-month rolling average calculation is based on the most recent twelve-month period when the influent concentrations are greater than or equal to 200 mg/L. The percent removal shall be waived when the twelve-month rolling average influent concentration is less than 200 mg/L.

3. **Settleable solids, TRC and pH Monitoring** – Monitoring for these parameters is not required on legally recognized state or federal holidays.

4. **Bacteria Limits** – *E. coli* bacteria limits and monitoring requirements are seasonal and apply between May 15 and September 30 of each year. The Department reserves the right to require year-round bacteria limits to protect the health, safety and welfare of the public.

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

SPECIAL CONDITIONS

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

FOOTNOTES:

6. **Whole effluent toxicity (WET) testing** – Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions bracketing the critical acute and chronic thresholds of 0.71% and 0.30% 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 140:1 and 335:1, respectively.

   Beginning upon issuance of this permit and lasting until twelve months prior to permit expiration, the permittee shall initiate surveillance level WET testing at a minimum frequency of once per year on the water flea (*Ceriodaphnia dubia*). Tests shall be conducted in different calendar quarters for the first four years of the permit.

   Surveillance level testing is not required for the chronic water flea or the acute or chronic brook trout tests pursuant to Department rule Chapter 530 Section 2.D.(3)(b).

   Beginning twelve months prior to the expiration date of the permit and every five years thereafter, the permittee shall initiate screening level WET testing at a minimum frequency of once per year. Acute and chronic testing shall be conducted on the water flea and the brook trout. Screening level acute water flea testing shall be conducted a minimum of 90 days following the last surveillance level test. Screening level WET testing on the brook trout may be conducted in any calendar quarter provided the sample is representative of the discharge and any seasonal or other variations in effluent quality.

   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 0.71% and 0.30%, 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. U.S. Environmental Protection Agency. 2002. *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, 5th ed. EPA 821-R-02-012. U.S. Environmental Protection Agency, Office of Water, Washington, D.C., October 2002 (the acute method manual).

SPECIAL CONDITIONS

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

FOOTNOTES:

b. U.S. Environmental Protection Agency. 2002. *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, 4th ed. EPA 821-R-02-013. U.S. Environmental Protection Agency, Office of Water, Washington, D.C., October 2002 (the freshwater chronic method manual).

Results of WET tests shall be reported on the "WET Results Report – Fresh Waters" form included as Attachment A of this permit each time a WET test is performed. The permittee is required to analyze the effluent for the parameters specified on the "WET and Analytical Chemistry Results – Fresh Waters" form included as Attachment B of this permit each time a WET test is performed.

6. **Analytical Chemistry** – Pursuant to Department rule 06-096 CMR Chapter 530 Section 2.C.4, analytical chemistry refers to a suite of chemical tests that include ammonia nitrogen (as N), total aluminum, total arsenic, total cadmium, total chromium, total copper, total cyanide, total hardness, total lead, total nickel, total silver, total zinc and total residual chlorine.

   Analytical chemistry and/or priority pollutant 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 on the form entitled, "Maine Department of Environmental Protection WET and Chemical-Specific Data Report Form" included as Attachment C of this permit.

   Surveillance level analytical chemistry testing is waived for this facility pursuant to Department rule Chapter 530 Section 2.D.(3)(b).

   Beginning twelve months prior to the expiration date of this permit and every five years thereafter, the permittee shall conduct screening level analytical chemistry testing at a minimum frequency of four times per year (4/Year) in successive calendar quarters.

   Analytical chemistry and/or priority pollutant 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 ambient water quality criteria (AWQC) as established in Department rule 06-096 CMR Chapter 584.

   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

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

FOOTNOTES:

7. **Priority Pollutant Testing** – Priority pollutant testing refers to analysis for levels of priority pollutants listed in Department rule 06-096 CMR Chapter 525 Section 4.VI.

   Surveillance level priority pollutant testing is not required for this facility pursuant to Department rule Chapter 530 Section 2.D.(3)(b).

   Beginning twelve months prior to the expiration date of this 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) in any calendar quarter provided the sample is representative of the discharge and any seasonal or other variations in effluent quality.

   All mercury sampling 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.

8. **Lagoon Under-Drain Monitoring** – Monitoring shall be conducted during the months of May, July and October of each year.

9. **Ground Water Well Monitoring** – Monitoring shall be conducted during the month of May of each year. Ground water monitoring results that exceed 250 mg/L for chlorides, 120 mg/L for sodium, or 10 mg/L for total nitrate nitrogen shall be reported to the Department with five (5) working days of obtaining sample results.

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 by the classification of the receiving waters.

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

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

If chlorination is used as the means of disinfection, an approved chlorine contact tank providing the proper detention time consistent with good engineering practice must be utilized followed by a dechlorination system if the imposed total residual chlorine (TRC) limit cannot be achieved by dissipation in the detention tank. The total residual chlorine in the effluent shall at no time cause any demonstrable harm to aquatic life in the receiving waters. The dose of chlorine applied shall provide a TRC concentration that will effectively reduce *E. coli* bacteria levels to or below those specified in Special Condition A, *Effluent Limitation and Monitoring Requirements,* above.

D. TREATMENT PLANT OPERATOR

The treatment facility must be operated by a person holding a minimum of a **Grade II** certificate (or Registered Maine Professional Engineer) pursuant to Title 32 M.R.S.A. §4171 *et seq*. All proposed contracts for facility operation by any person must be approved by the Department before the permittee may engage the services of the contract operator.

E. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from Outfall #001A. Discharges of wastewater from any other point source are not authorized under this permit, and shall be reported in accordance with Standard Condition B(5), *Bypasses*, of this permit.

F. LIMITATIONS FOR INDUSTRIAL USERS

Pollutants introduced into the waste water collection and treatment system by a non-domestic source (user) shall not pass through or interfere with the operation of the treatment system.

SPECIAL CONDITIONS

G. 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 (13th) day of the month or hand-delivered to the Department's Regional Office such that the DMR's are received by the Department on or before the fifteenth (15th) day of the month** following the completed reporting period. A signed copy of the DMR and all other reports required herein shall be submitted to the Department assigned inspector (unless otherwise specified by the Department) at the following address:

Department of Environmental Protection
Northern Maine Regional Office
Bureau of Land and Water Quality
Division of Water Quality Management
1235 Central Park Drive - Skyway Park
Presque Isle, Maine 04769

H. NOTIFICATION REQUIREMENTS

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

1. Any introduction of pollutants into the waste water collection and treatment system from an indirect discharger in a primary industrial category discharging process waste water; and

2. 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.

3. For the purposes of this section, adequate notice shall include information on:

   a. The quality and quantity of waste water introduced to the waste water collection and treatment system; and

   b. Any anticipated impact of the change in the quantity or quality of the waste water to be discharged from the treatment system.

SPECIAL CONDITIONS

I. CHAPTER 530(2)(D)(4) STATEMENT FOR REDUCED TOXICS TESTING

On or before December 31st of each year of the effective term of this permit ***[PCS Code 95799]***, the permittee shall provide the Department with statements 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.

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

J. 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 (excepting the current yet to be completed substantial upgrade), the permittee shall submit the updated O&M Plan to their Department inspector for review and comment.

SPECIAL CONDITIONS

K. WET WEATHER MANAGEMENT PLAN

The treatment facility staff shall maintain a Wet Weather Management Plan to direct the staff on how to operate the facility effectively during periods of high flow. The Department acknowledges that the existing collection system may deliver flows in excess of the monthly average design capacity of the treatment plant during periods of high infiltration and rainfall. A specific objective of the plan shall be to maximize the volume of wastewater receiving secondary treatment under all operating conditions. The revised plan shall include operating procedures for a range of intensities, address solids handling procedures (including septic waste and other high strength wastes if applicable) and provide written operating and maintenance procedures during the events.

Once the Wet Weather Management Plan has been approved, the permittee shall review their plan at least annually and record any necessary changes to keep the plan up to date. The Department may require review and update of the plan as it is determined to be necessary.

L. 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.

M. SEVERABILITY

In the event that any provision, or part thereof, of this permit is declared to be unlawful by a reviewing court, the remainder of the permit 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
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 "WET and Analytical Chemistry Results - Fresh Waters, December 2005."

ATTACHMENT B

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
WET AND ANALYTICAL CHEMISTRY RESULTS
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.

Date Collected _____ mm/dd/yy Date Analyzed _____ mm/dd/yy

Lab ID No. _____ Actual Daily Flow _____ MGD Actual Monthly Average Flow _____ MGD

	Analyte	Report Units	Receiving Water Results	Effluent Results	Reporting Level	Method
Analytes Required for Analytical Chemistry	Ammonia nitrogen	µg/L	*		µg/L	
	Total aluminum	µg/L	*		µg/L	
	Total arsenic	µg/L	*		µg/L	
	Total cadmium	µg/L	*		µg/L	
	Total chromium	µg/L	*		µg/L	
	Total copper	µg/L	*		µg/L	
	Total cyanide	µg/L	*		µg/L	
	Total lead	µg/L	*		µg/L	
	Total nickel	µg/L	*		µg/L	
	Total silver	µg/L	*		µg/L	
	Total zinc	µg/L	*		µg/L	
	Total hardness	mg/L	*		mg/L	
	Total residual chlorine **	mg/L			mg/L	
Additional Analytes Required For WET Chemistry	Alkalinity	mg/L	*		mg/L	
	Total magnesium	mg/L	*		mg/L	
	Total Calcium	mg/L	*		mg/L	
	Total organic carbon	mg/L	*		mg/L	
	Total solids	mg/L			mg/L	
	Total suspended solids	mg/L			mg/L	
	Specific conductivity	µmhos			µmhos	
	pH **	S.U.	*		S.U.	

* Except for Total Suspended Solids, Total Solids and Conductivity, the receiving water chemistry tests are optional. However, 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.
** WET laboratories may conduct these tests on composite samples as part of their procedures.

Comments _____

Laboratory conducting test

Company Name _____ Company Rep. Name (Printed) _____

Mailing Address _____ Company Rep. Signature _____

City, State, ZIP _____ Company Telephone # _____

ATTACHMENT C

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)	
Acute dilution factor	
Chronic dilution factor	
Human health dilution factor	
Criteria type: M(arine) or F(resh)	

Flow for Day (MGD)[1] _____ Flow Avg. for Month (MGD)[2] _____

Date Sample Collected _____ Date Sample Analyzed _____

Laboratory _____ Telephone _____

Address _____

Lab Contact _____ Lab ID # _____

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

	WHOLE EFFLUENT TOXICITY		Effluent Limits, %			Receiving Water or Ambient	Effluent Concentration (ug/L or as noted)		Possible Exceedence [7]		
			Acute	Chronic			WET Result, % Do not enter % sign	Reporting Limit Check	Acute	Chronic	
	Trout - Acute										
	Trout - Chronic										
	Water Flea - Acute										
	Water Flea - Chronic										
	WET CHEMISTRY										
	pH (S.U.)										
	Specific Conductance (umhos)										
	Total Organic Carbon (mg/L)										
	Total Solids (mg/L)										
	Total Suspended Solids (mg/L)										
	Alkalinity (mg/L)										
	Total Hardness (mg/L)										
	Total Magnesium (mg/L)										
	Total Calcium (mg/L)										
	ANALYTICAL CHEMISTRY [3]										
		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)	0.05									
	AMMONIA	NA									
M	ALUMINUM	NA									
M	ARSENIC	5									
M	CADMIUM	1									
M	CHROMIUM	10									
M	COPPER	3									
M	CYANIDE	5									
M	LEAD	3									
M	NICKEL	5									
M	SILVER	1									
M	ZINC	5									

Maine Department of Environmental Protection
WET and Chemical Specific Data Report Form
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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[4]	0.2									
M	SELENIUM	5									
M	THALLIUM	4									
A	2,4,6-TRICHLOROPHENOL	3									
A	2,4-DICHLOROPHENOL	5									
A	2,4-DIMETHYLPHENOL	5									
A	2,4-DINITROPHENOL	45									
A	2-CHLOROPHENOL	5									
A	2-NITROPHENOL	5									
A	4,6 DINITRO-O-CRESOL (2-Methyl-4,6-dinitrophenol)	25									
A	4-NITROPHENOL	20									
A	P-CHLORO-M-CRESOL (3-methyl-4-chlorophenol)+B80	5									
A	PENTACHLOROPHENOL	20									
A	PHENOL	5									
BN	1,2,4-TRICHLOROBENZENE	5									
BN	1,2-(O)DICHLOROBENZENE	5									
BN	1,2-DIPHENYLHYDRAZINE	10									
BN	1,3-(M)DICHLOROBENZENE	5									
BN	1,4-(P)DICHLOROBENZENE	5									
BN	2,4-DINITROTOLUENE	6									
BN	2,6-DINITROTOLUENE	5									
BN	2-CHLORONAPHTHALENE	5									
BN	3,3'-DICHLOROBENZIDINE	16.5									
BN	3,4-BENZO(B)FLUORANTHENE	5									
BN	4-BROMOPHENYLPHENYL ETHER	2									
BN	4-CHLOROPHENYL PHENYL ETHER	5									
BN	ACENAPHTHENE	5									
BN	ACENAPHTHYLENE	5									
BN	ANTHRACENE	5									
BN	BENZIDINE	45									
BN	BENZO(A)ANTHRACENE	8									
BN	BENZO(A)PYRENE	3									
BN	BENZO(G,H,I)PERYLENE	5									
BN	BENZO(K)FLUORANTHENE	3									
BN	BIS(2-CHLOROETHOXY)METHANE	5									
BN	BIS(2-CHLOROETHYL)ETHER	6									
BN	BIS(2-CHLOROISOPROPYL)ETHER	6									
BN	BIS(2-ETHYLHEXYL)PHTHALATE	3									
BN	BUTYLBENZYL PHTHALATE	5									
BN	CHRYSENE	3									
BN	DI-N-BUTYL PHTHALATE	5									
BN	DI-N-OCTYL PHTHALATE	5									
BN	DIBENZO(A,H)ANTHRACENE	5									
BN	DIETHYL PHTHALATE	5									
BN	DIMETHYL PHTHALATE	5									

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

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

Notes:

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

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

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

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

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

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

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
MAINE WASTE DISCHARGE LICENSE

FACT SHEET

DATE: **DECEMBER 7, 2006**

PERMIT NUMBER: **#ME0101028**
WASTE DISCHARGE LICENSE: **#W007610-5L-D-R**

NAME AND ADDRESS OF APPLICANT:

TOWN OF WASHBURN
1287 MAIN STREET
WASHBURN, MAINE 04786

COUNTY: **AROOSTOOK**

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

TOWN OF WASHBURN
2136 PARSONS ROAD
WASHBURN, MAINE 04786

RECEIVING WATER/CLASSIFICATION: **AROOSTOOK RIVER/CLASS B**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **MR. MATT PALMER**
(207) 455-4915

1. APPLICATION SUMMARY

Application: The Town of Washburn (Town) has applied to the Department of Environmental Protection (Department) for a renewal of Waste Discharge License (WDL) #W007610-5L-C-R / Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0101028, which was issued on December 21, 2001, and is scheduled to expire on December 21, 2006. The 12/21/01 MEPDES permit authorized the monthly average discharge of up to 0.283 million gallons per day (MGD) of secondary treated sanitary wastewater from a publicly owned treatment works (POTW) to the Aroostook River, Class B, in Washburn, Maine.

2. PERMIT SUMMARY

a. Terms and Conditions: **This permitting action is similar to the 12/21/01 permitting action in that it is:**

1. Carrying forward the monthly average discharge flow limit of 0.283 MGD and the daily maximum discharge flow reporting requirement;

2. Carrying forward the technology-based, monthly average, weekly average and daily maximum concentration and mass limitations and the technology-based 30-day minimum percent removal rate of 85% for biochemical oxygen demand (BOD_5) and total suspended solids (TSS);

3. Carrying forward the daily maximum, technology-based concentration limitation of 0.3 ml/L for settleable solids;

4. Carrying forward the seasonal monthly average and daily maximum concentration limits for *Escherichia coli* bacteria;

5. Carrying forward the technology-based, daily maximum concentration limit of 1.0 mg/L for total residual chlorine (TRC);

6. Carrying forward the pH range limit of 6.0 to 9.0 standard units (SU);

7. Carrying forward the Lagoon Under-Drain and Ground Water Monitoring Well monitoring and reporting requirements (Special Conditions A 3 and A .4 of this permit respectively), with the exception of dissolved oxygen and ammonia-nitrogen associated with ground water monitoring, which are being eliminated, imposition of a daily maximum concentration limit of 10 mg/L (primary drinking water standard) for nitrate nitrogen, and revising the bacteria parameter from fecal coliform to *E. coli* for lagoon under-drain monitoring;

8. Carrying forward waived surveillance level whole effluent toxicity (WET), priority pollutant and analytical chemistry testing, except for the acute water flea test which must be tested once per year during the surveillance level period; and

9. Carrying forward the minimum monitoring frequency requirements for all monitored parameters.

This permitting action is different from the 12/21/01 permitting action in that it is:

1. Establishing an acute limit of 0.71% for the water flea based on results of facility testing; and

2. Establishing Special Condition I, *Chapter 530(2)(D)(4) Statement for Reduced Toxics Testing*, an annual notification requirement for waived surveillance level toxics testing.

2. PERMIT SUMMARY (cont'd)

b. History: This section provides a summary of significant licensing/permitting actions and milestones that have been completed for the Washburn Wastewater Treatment Facility.

March 15, 1995 – The USEPA issued National Pollutant Discharge Elimination System (NPDES) permit #ME0101028 to the Town for a five-year term, which superseded the previous NPDES permit issued to the Town for this facility by the USEPA on March 28, 1986.

June 27, 2000 – Pursuant to Maine law, 38 M.R.S.A. §420 and §413 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 thereby administratively modifying WDL #W007610-59-B-R by establishing interim monthly average and daily maximum effluent concentration limits of 5.2 parts per trillion (ppt) and 7.8 ppt, respectively, and a minimum monitoring frequency requirement of four (4) tests per year for mercury. It is noted the limitations have not been incorporated into Special Condition A, *Effluent Limitations And Monitoring Requirements*, of this permit as limitations and monitoring frequencies are regulated separately through Maine law, 38 M.R.S.A. §413 and Department rule Chapter 519. However, the interim limitations remain in effect and enforceable and any modifications to the limits and or monitoring requirements will be formalized outside of this permitting document.

January 12, 2001 – The Department received authorization from the U.S. Environmental Protection Agency (USEPA) to administer the National Pollutant Discharge Elimination System (NPDES) permit program in Maine, excluding areas of special interest to Maine Indian Tribes. From this point forward, the program has been referred to as the Maine Pollutant Discharge Elimination System (MEPDES) program, and MEPDES permit #ME0101028 has been utilized for this facility.

December 21, 2001 – The Department issued WDL #W007610-5L-C-R / MEPDES permit #ME0101028 to the Town for a five-year term. The 12/21/01 permit superseded WDL #W007610-59-B-R issued on August 24, 1996, and WDL #W007610-58-A-N issued on January 29, 1990 (earliest Order on file with the Department), as well as the 3/15/95 NPDES permit issued by the USEPA.

August 28, 2006 – The Town submitted a timely and complete General Application to the Department for renewal of the 12/21/01 MEPDES permit. The application was accepted for processing on September 17, 2006 and was assigned WDL #W007610-5L-D-R / MEPDES #ME0101028.

2. PERMIT SUMMARY (cont'd)

c. Source Description: The Town of Washburn Wastewater Treatment Facility receives residential sanitary and commercial waste waters from customers within the town of Washburn. A map created by the Department showing the location of the treatment facility and receiving water is included as Fact Sheet Attachment A. Based on information contained in the previous MEPDES permit, the facility was designed for and services a population equivalent of 1,200 people. There are no significant industrial users connected to and no combined sewer overflow (CSO) points associated with the collection system.

Based on information contained in the previous MEPDES permit and on information provided by the Town in its 8/28/06 application, the collection system is approximately 4.5 miles in length and contains four main pump stations (lift stations): Station No. 1 on McManus Street, Station No. 2 on Bridge Street, and Station No. 3 (the Main Pump Station). Each pump station is equipped with an emergency generator and radio telemetry. The fourth pump station is located on Trafton Street and services a small trailer park, elderly housing complex and three houses. Three thousand (3,000) linear feet of 8-inch diameter sewer main was added to the collection system in calendar years 2004-2005 to replace failing private septic systems. This addition required the installation of a fifth lift station.

The Town has not applied to the Department for authorization to receive or introduce into the treatment process septage wastes.

d. Wastewater Treatment: The Town provides a secondary level of wastewater treatment at the Washburn Wastewater Treatment Facility via two aerated lagoons (total capacity of approximately 6 million gallons) equipped with diffused aeration. During calendar year 2004-2005 projects, the Town upgraded Lagoon No.1 to three treatment cells including an anoxic zone. Screened influent is conveyed to the first (anoxic) cell for settling of solids to the lagoon floor. Sludge is mechanically removed from the anoxic zone once per month by a sludge dredge and pumped to two reed beds for treatment and disposal. The facility provides primary wastewater treatment via a bar screen and an aerated grit removal chamber. Treated effluent is seasonally disinfected with chlorine for compliance with the *E. coli* bacteria limits established for Class B waters and is conveyed to the Aroostook River at Washburn via a 12-inch diameter outfall pipe designated Outfall #001A in this permitting action. The pipe is fitted with a series of 2-inch diameter steel diffuser ports at 8-feet on center to enhance mixing of the effluent with the receiving waters. The Department's Division of Environmental Assessment has determined that this outfall structure provides complete and rapid mixing of the effluent with the receiving waters. A schematic entitled, "Figure 1 Washburn's Wastewater Treatment Process Upgrade" provided by the Town is included as Fact Sheet Attachment B.

3. CONDITIONS OF PERMIT

Maine law, 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 Department rule 06-096 CMR Chapter 530, *Surface Water Toxics Control Program,* require the regulation of toxic substances not to exceed levels set forth in Department rule 06-096 CMR Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants*, 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

Maine law, 38 M.R.S.A., § 467(15)(C)(c) classifies the Aroostook River "[f]rom the Sheridan Dam to its confluence with Presque Isle Stream, including all impoundments" which includes the river at the point of discharge, as Class B waters. Maine law, 38 M.R.S.A., Section 465(3) describes the standards for Class B waters. It is noted that the previous permitting action erroneously cited Maine law, 38 M.R.S.A § 467(15)(C)(1)*(b)* as the applicable river segment (emphasis added).

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2004 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 24.2-mile reach of the Aroostook River above Caribou (Hydrologic Unit Code #ME0101000412 / Waterbody ID #148R) 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: Waters Impaired by Atmospheric Deposition of Mercury. Regional or National TMDL may be Required." Impairment in this context refers to a statewide fish consumption advisory due to elevated levels of mercury in some fish tissues. The Report states, "the impairment is presumed to be from atmospheric contamination and deposition. The advisory is based on probability data that a stream, river, or lake may contain some fish that exceed the advisory action level. Any freshwater may contain both contaminated and uncontaminated fish depending on size, age and species occurrence in that water." 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 monthly average and daily maximum mercury concentration limits for this facility.

The Department has no information at this time that the discharge from the Washburn Wastewater Treatment Facility will cause or contribute to the failure of the receiving water to meet the designated uses of its ascribed classification.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

a. Flow: The previous permitting action established, and this permitting action is carrying forward, a monthly average discharge flow limitation of 0.283 MGD based on the monthly average dry weather design capacity of the facility, and a daily maximum discharge flow reporting requirement to assist in compliance evaluations.

A review of the monthly average flow data as reported on the Discharge Monitoring Reports submitted to the Department for the period December 2002 – June 2006 indicates the monthly average flow has ranged from 0.0321 MGD to 0.268 MGD with an arithmetic mean of 0.121 MGD (n=40).

b. Dilution Factors: Dilution factors associated with the permitted discharge flow of 0.283 MGD from the facility were derived in accordance with Department rule, 06-096 CMR, Chapter 530 Section 4.A *Surface Water Toxics Control Program* and were calculated as follows:

Acute: 1Q10 = 61 cfs $\Rightarrow \frac{(61 \text{ cfs})(0.6464) + 0.283 \text{ MGD}}{0.283 \text{ MGD}} = 140{:}1$

Chronic: 7Q10 = 146 cfs $\Rightarrow \frac{(146 \text{ cfs})(0.6464) + 0.283 \text{ MGD}}{0.283 \text{ MGD}} = 335{:}1$

Harmonic Mean[1] = 438 cfs $\Rightarrow \frac{(438 \text{ cfs})(0.6464) + 0.283 \text{ MGD}}{0.283 \text{ MGD}} = 1{,}001{:}1$

It is noted that the dilution factors calculated above are different from those calculated in the previous permitting action and are the result of updates to the river flow data made by the Department's Division of Environmental Assessment (DEA) on November 9, 2005. The DEA has determined that mixing of the effluent with the receiving water is complete and rapid. The DEA has recommended that the 1Q10 low river flow value utilized in the acute dilution calculation above should be based on a value that is equivalent to one-half the prorated river gage flow value due to the presence of an island in the river at the point of discharge (see attached map). DEA further recommends that acute evaluations be based on this 1Q10 value rather than the default stream design flow of ¼ of the 1Q10 in

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

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

accordance with Department rule Chapter 530 Section 4.B.1, which 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.*

c. Biochemical Oxygen Demand (BOD_5) and Total Suspended Solids (TSS): The previous permitting action established, and this permitting action is carrying forward, technology-based monthly and weekly average BOD_5 and TSS concentration limits of 30 mg/L and 45 mg/L, respectively, based on secondary treatment requirements of Department rule, 06-096 CMR, Chapter 525(3)(III). The previous permitting action established, and this permitting action is carrying forward, technology-based daily maximum BOD_5 and TSS concentration limits of 50 mg/L based on a Department best professional judgment (BPJ) of best practicable treatment (BPT).

The BOD_5 data as reported on the Discharge Monitoring Reports submitted to the Department for the period December 2002 – June 2006 indicates the monthly average effluent BOD_5 concentration has ranged from 5.8 mg/L to 41.3 mg/L with an arithmetic mean of 17 mg/L (n=40) and the daily maximum effluent BOD_5 concentration has ranged from 7 mg/L to 45 mg/L with an arithmetic mean of 24 mg/L (n=40).

The TSS data as reported on the Discharge Monitoring Reports submitted to the Department for the period December 2002 – June 2006 indicates the monthly average effluent TSS concentration has ranged from 6 mg/L to 53.5 mg/L with an arithmetic mean of 21 mg/L (n=41) and the daily maximum effluent TSS concentration has ranged from 6 mg/L to 65 mg/L with an arithmetic mean of 29 mg/L (n=41).

Department rule 06-096 CMR Chapter 523(6)(f) states that all pollutants limited in permits shall have limitations, standards or prohibitions expressed in terms of mass. The previous permitting action established, and this permitting action is carrying forward, monthly average, weekly average, and daily maximum mass limits based on calculations using the average design flow for the facility of 0.283 MGD and the appropriate concentration limits as follows:

Monthly Average Mass Limit: (30 mg/L)(8.34 lbs./gallon)(0.283 MGD) = 71 lbs./day
Weekly Average Mass Limit: (45 mg/L)(8.34 lbs./day)(0.283 MGD) = 106 lbs./day
Daily Maximum Mass Limit: (50 mg/L)(8.34 lbs./day)(0.283 MGD) = 118 lbs./day

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

The BOD_5 data as reported on the Discharge Monitoring Reports submitted to the Department for the period December 2002 – June 2006 indicates the monthly average effluent BOD_5 mass has ranged from 2.3 lbs./day to 59 lbs./day with an arithmetic mean of 18 lbs./day (n=40) the daily maximum effluent BOD_5 mass has ranged from 3 lbs./day to 110 lbs./day with an arithmetic mean of 31 lbs./day (n=40).

The TSS data as reported on the Discharge Monitoring Reports submitted to the Department for the period December 2002 – June 2006 indicates the monthly average effluent TSS mass has ranged from 1.8 lbs./day to 68.3 lbs./day with an arithmetic mean of 22 lbs./day (n=41) and the daily maximum effluent TSS mass has ranged from 2.5 lbs./day to 150 lbs./day with an arithmetic mean of 43 lbs./day (n=41).

The previous permitting action established, and this permitting action is carrying forward, a requirement to achieve a minimum 30-day average removal of 85 percent for BOD_5 and TSS pursuant to Department rule, 06-096 CMR Chapter 525(3)(III)(a&b)(3).

A review of the BOD_5 percent removal data as reported on the Discharge Monitoring Reports submitted to the Department for the period December 2002 – June 2006 indicates the BOD_5 percent removal has ranged from 86% to 96% with an arithmetic mean of 91% (n=8). A review of the TSS percent removal data as reported on the Discharge Monitoring Reports submitted to the Department for the period December 2002 – June 2006 indicates the TSS percent removal has ranged from 84% to 96% with an arithmetic mean of 91% (n=8).

The previous permitting action established, and this permitting action is carrying forward, a minimum monitoring frequency requirement of once per week for BOD_5 and TSS consistent with Department guidance for POTWs permitted to discharge between 0.1 and 0.5 MGD.

d. Settleable Solids: The previous permitting action established, and this permitting action is carrying forward, a technology-based daily maximum concentration limit of 0.3 ml/L for settleable solids, which is considered a best practicable treatment limitation (BPT) for secondary treated wastewater, and a minimum monitoring frequency requirement of five times per week, which is based on a review of the compliance data for this parameter and to provide the facility with personnel flexibility.

A review of the daily maximum settleable solids data as reported on the Discharge Monitoring Reports submitted to the Department for the period December 2002 – June 2006 indicates the daily maximum settleable solids concentration discharge has been 0.1 ml/L or below 100% of the time during said reporting period (n=41).

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

e. *Escherichia coli* Bacteria: The pervious permitting action established seasonal (May 15–September 30) monthly average and daily maximum concentration limits for *E. coli* bacteria of 64 colonies/100 ml (geometric mean) and 427 colonies/100 ml (instantaneous level), respectively, which were based on the State of Maine Water Classification Program criteria for Class B waters found at 38 M.R.S.A. §465(3)(B), and a minimum monitoring frequency requirements of twice per week. This permitting action is carrying forward both concentration limitations based on the Water Classification Program criteria and is revising the minimum monitoring frequency requirement to once per week consistent with Department guidance for POTWs permitted to discharge between 0.1 and 0.5 MGD. Although *E. coli* bacteria limits are seasonal and apply between May 15 and September 30 of each year, the Department reserves the right to impose year-round bacteria limits if deemed necessary to protect the health, safety and welfare of the public.

A review of the monthly average and daily maximum data as reported on the Discharge Monitoring Reports submitted to the Department for the period December 2002 – June 2006 (months of May through September only) indicates the monthly (geometric mean) *E. coli* bacteria discharged has ranged from 1.4 colonies/100 ml to 50 colonies/100 ml with an arithmetic mean of 12 colonies/100 ml (n=17). The maximum *E. coli* bacteria discharged has ranged from 4 colonies/100 ml to 258 colonies/100 ml with an arithmetic mean of 74 colonies/100 ml (n=17).

f. Total Residual Chlorine: The previous permitting action established a daily maximum technology-based concentration limit of 1.0 mg/L for TRC and a minimum monitoring frequency requirement of five times per week. Limitations on TRC are specified to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. Department licensing/permitting actions impose the more stringent of either a water quality-based or BPT based limit. End-of-pipe acute and chronic water quality based concentration thresholds may be calculated as follows:

Acute (A) Criterion	Chronic (C) Criterion	Modified A & C Dilution Factors	Calculated Acute Threshold	Calculated Chronic Threshold
0.019 mg/L	0.011 mg/L	140:1 (Mod. A)[1] 335:1 (C)	2.7 mg/L	3.7 mg/L

The Department has established a daily maximum BPT limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. The technology-based limit of 1.0 mg/L is more stringent than either calculated water quality-based threshold above and is therefore being carried forward in this permitting action.

This permitting action is carrying forward the minimum monitoring frequency of five times per week, which is based on a review of the compliance data for this parameter and to provide the facility with personnel flexibility.

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[1] It is noted that the acute dilution factor utilized in the acute TRC threshold calculation is based on one half of the prorated river gage flow value as explained in Section 6(b) of this fact sheet.

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

A review of the daily maximum data as reported on the Discharge Monitoring Reports submitted to the Department for the period December 2002 – June 2006 (months of May through September only corresponding to seasonal bacteria limits) indicates the maximum TRC discharged has ranged from 0.27 mg/L to 0.99 mg/L with an arithmetic mean of 0.76 mg/L (n=17). The DMR data indicate the facility has been in compliance with the daily maximum limitation 100% of the time during said reporting period.

g. pH: The previous permitting action established, and this permitting action is carrying forward, a technology-based pH limit of 6.0 – 9.0 standard units, which is based on Department rule, 06-096 CMR Chapter 525(3)(III), and a minimum monitoring frequency of five times per week, which is based on a review of the compliance data for this parameter and to provide the facility with personnel flexibility.

The DMR data indicate the facility has been in compliance with the pH range limitation 100% of the time during the period of December 2002 – June 2006 (n=40).

h. Whole Effluent Toxicity (WET), Priority Pollutant, and Analytical Chemistry Testing: Maine law, 38 M.R.S.A., §414-A and §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. Department rule, 06-096 CMR Chapter 530, *Surface Water Toxics Control Program* 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. Department rule 06-096 CMR Chapter 584, Surface *Water Quality Criteria for Toxic Pollutants*, sets forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

WET, priority pollutant and analytical chemistry testing, as required by Chapter 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 testing refers to the analysis for levels of priority pollutants listed in Department rule 06-096 CMR Chapter 525 Section 4.VI. Analytical chemistry refers to a suite of chemical tests for ammonia-nitrogen, total aluminum, total cadmium, total chromium, total copper, total hardness (fresh water only), total lead, total nickel, total silver, total zinc, total arsenic, total cyanide and total residual chlorine.

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

Chapter 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 Aroostook River. Therefore, a default background concentration of 10% of applicable water quality criteria is being used in the calculations of this permitting action.

Chapter 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.*" Therefore, the Department is reserving 15% of applicable water quality criteria used in the calculations of this permitting action.

One complexity of the new Chapter 530 rule found in Section 4(F) is evaluating toxic pollutant impacts on a watershed basis. Section 4(F) 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.*" The Department is currently working to construct a computer program model to conduct this analysis. Until such time the model is complete and a multi-discharger statistical evaluation can be conducted, the Department is evaluating the impact of Washburn's discharge assuming it is the only discharger to the river. Should the multi-discharger evaluation indicate there are parameters that exceed or have a reasonable potential to exceed applicable AWQC, this permit may be reopened pursuant to Special Condition L, *Reopening of Permit For Modifications*, to incorporate additional limitations and or revise monitoring requirements.

The previous permitting action established reduced WET and priority pollutant (*i.e.*, chemical specific) testing based on a Department best professional judgment that the facility qualified for reduced testing pursuant to the toxics rule in effect at that time, Chapter 530.5. The previous permit required screening level WET and priority pollutant testing in the final year of the permit (12-month period prior to permit expiration) at a frequency of once per year.

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

On October 9, 2005, a new Department rule, Chapter 530, became effective and replaced the previous toxics rule, Chapter 530.5. On June 27, 2006, the Department administratively modified WDL#W007610-5L-C-R by issuing a Surface Waters Toxics Control Program fact sheet for this facility. The fact sheet specified that screening level WET and priority pollutant testing was required at a frequency of once per year, and analytical chemistry testing at a frequency of once per calendar quarter during the twelve-month period prior to permit expiration. The fact sheet also required total arsenic testing at a frequency of once per year until further notice from the Department based on "a determination of reasonable potential in a review of the most recent 60 months of test results on record." The basis for these determinations is discussed in greater detail below.

Department rule Chapter 530 Section 2.A. specifies dischargers subject to the requirements of this rule are as follows, "All licensed dischargers of industrial process wastewater or domestic wastes discharging to surface waters of the State...." Chapter 530 Section 2.B. categorizes dischargers subject to the toxics rule into one of four levels (Levels I through IV). Level III dischargers are "Those dischargers having a chronic dilution factor of at least 100 but less than 500 to 1, or dischargers having a chronic dilution factor of more than 500 to 1 and a permitted flow of 1 million gallons per day or greater." The chronic dilution factor associated with the discharge from the Washburn Wastewater Treatment Facility is 335 to 1 and the facility is authorized to discharge less than 1.0 MGD. Therefore, this facility is considered a Level III facility for purposes of toxics testing.

Chapter 530 Section 2.D. specifies WET, priority pollutant, and analytical chemistry test schedules for Level III dischargers as follows:

Level III Dischargers	WET	Priority Pollutant	Analytical
Surveillance Level (first 4 years)	1 per year	None Required	1 per year
Screening Level (last year)	1 per year	1 per year	4 per year

A review of the data on file with the Department for the Town indicates that, to date, they have fulfilled the WET, priority pollutant, and analytical chemistry testing requirements imposed by the previous permitting action and 4/10/06 toxics fact sheet. See Attachment C of this Fact Sheet for a summary of the WET test results, and Attachment D of this Fact Sheet for a summary of chemical-specific test dates and arsenic test results.

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

WET Evaluation

Chapter 530 Section 3.E. states:

> *For effluent monitoring data and the variability of the pollutant in the effluent, the Department shall apply the statistical approach in Section 3.3.2 and Table 3-2 of USEPA's "Technical Support Document for Water Quality-Based Toxics Control" (USEPA Publication 505/2-90-001, March, 1991, EPA, Office of Water, Washington, D.C.) to data to determine whether water-quality based effluent limits must be included in a waste discharge license. Where it is determined through this approach 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.*

On November 1, 2006, the Department conducted a statistical evaluation on the most recent 60 months of WET test results on file with the Department for the Town in accordance with the statistical approach outlined above. **The 11/1/06 statistical evaluation indicates an A-NOEL test result of 2.3% on 2/26/06 for the water flea demonstrates a reasonable potential to exceed the critical chronic water quality threshold of 0.71%.** The evaluation indicates that the discharge does not exceed or have a reasonable potential to exceed the chronic ambient water quality threshold for the water flea or the acute or chronic thresholds for the brook trout.

Department rule Chapter 530 Section 3. states, in part, –

> *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 licensee must also control whole effluent toxicity (WET) when discharges cause, have a reasonable potential to cause, or contribute to an ambient excursion above the narrative water quality criteria.*

Therefore, this permitting action is establishing an acute limit of 0.71% for the water flea. Department rule Chapter 530 Section 2.D.(3)(b) states, in part, *"Dischargers in Levels III and IV may be waived from conducting surveillance testing for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedence."* Based on the provisions of Department rule Chapter 530 and Department best professional judgment, this permitting action is granting the Town a waiver from surveillance level WET testing on the brook trout and

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

chronic testing on the water flea, but is establishing full surveillance and screening level acute WET testing on the water flea at a frequency of once per year based on the RP determination made above. Surveillance level acute water flea testing shall be conducted in different calendar quarters for the first four years of the permit and the screening level test shall be conducted a minimum of 90 days following the last surveillance level test. Screening level WET testing on the brook trout may be conducted in any calendar quarter provided the sample is representative of the discharge and any seasonal or other variations in effluent quality. See Special Condition A.2 of this permit.

Department rule Chapter 530 Section 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."

The 4/10/06 fact sheet discussed above specified that the facility must comply with this annual notification statement to continue waived surveillance level testing. This permitting action is formally establishing the notification requirement in this permitting action as Special Condition I, *Chapter 530 Certification*, pursuant to Chapter 530 Section 2.D.4. This permit provides for reconsideration of testing requirements, including the imposition of certain testing, in consideration of the nature of the wastewater discharged, existing wastewater treatment, receiving water characteristics, and results of testing.

Priority Pollutant Evaluation

On November 1, 2006, the Department conducted a statistical evaluation on the most recent 60 months of chemical-specific tests results on file with the Department for the Washburn facility in accordance with the statistical approach outlined above. **The 11/1/06 statistical evaluation indicates the discharge from the Washburn Wastewater Treatment Facility does not demonstrate a reasonable potential to exceed the ambient water quality criteria (AWQC) thresholds for any parameters tested.** It is noted that the facility reported a total arsenic value of 6.0 parts per billion (µg/L) on October 30, 2001, and that this value does demonstrate a reasonable potential (RP) to exceed the human health-based ambient water quality criterion for organisms only. However, Department rule Chapter 530 Section 3 states, in part, "In determining if effluent limits are required, the Department shall consider all information on file and

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

effluent testing conducted during the preceding 60 months." The 10/30/01 value falls outside the 60-month window of data to be used in RP calculations and is the only value out of a total of four total arsenic results on record that exceeds the Department's minimum detection level for total arsenic of 5 µg/L established pursuant to Department rule Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants*. Department rule Chapter 530 Section 3.F.(3) states, in part, "When all results are reported as below a detection level specified by the Department, the compound must be considered to have no reasonable potential to exceed water quality criteria." Therefore, the Department concludes that the three other total arsenic results on record (2 µg/L, 2 µg/L, and 1 µg/L, respectively) do not exhibit RP based on the provisions of Chapter 530 and best professional judgment.

Based on the provisions of Department rule Chapter 530 Section 2.D.(3)(b) (quoted in the WET discussion section above) and Department best professional judgment, this permitting action is granting the Town a waiver from surveillance level analytical chemistry testing and is establishing screening level priority pollutant testing at a frequency of once per year in any calendar quarter and analytical chemistry testing at a frequency of four times per year in consecutive quarters. See Special Condition A.2 of this permit. Surveillance level priority pollutant testing is not required pursuant to Chapter 530 Section 2.D.(3)(b). As stated above for waived surveillance level WET testing (excepting the water flea), this permitting action is formally establishing a notification requirement (Special Condition I of this permit) pursuant to Chapter 530 Section 2.D.4. for waived surveillance level priority pollutant and analytical chemistry testing.

i. Lagoon Under-Drain and Ground Water Well Monitoring: The previous permitting action established lagoon under-drain (as Permit Compliance System (PCS) tracking number of 002A) and ground water monitoring well (as PCS tracking number MW 104) monitoring and reporting requirements. The basis for these monitoring requirements as stated in the previous permit was that "Site permit L-015831-29-A-N issued by the Department on June 28, 1989 required certain ground water monitoring in order to monitor the effects of lagoon leakage on the ground water quality. These requirements have been coded in this permit so that the results will be reported on the monthly Discharge Monitoring Reports and data stored in the EPA Permit Compliance System (PCS)." Parameters required to be monitored were selected as indicator parameters to detect possible leakage of the lagoon system. The parameters and monitoring frequencies are being carried forward in this permitting action with the exception of dissolved oxygen and ammonia-nitrogen associated with ground water monitoring, which are being eliminated, the imposition of a daily maximum concentration limit of 10 mg/L for ground water monitoring, which is based on the primary drinking water standard, and changing the bacteria parameter from fecal coliform to *Escherichia coli* for lagoon under-drain monitoring. This permitting action is revising the lagoon under-drain monitoring period from the months of April, July and October to May, July and October of each year.

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

A review of the lagoon under-drain data on record with the Department for the period April 2003 – April 2006 (applicable monitoring months only) demonstrates no upward or downward trends indicating the lagoons remain secure. Monitoring results as summarized in Table 1 below.

Table 1. Lagoon Under-Drain Monitoring Results: April 2003 – April 2006.

Parameter	Minimum Value	Maximum Value	Arithmetic Mean	Sample Size (n)
Flow, gallons/minute	10	18	11	10
Conductivity, umhos/cm	240	600	389	10
Temperature, °C	3	30	8	10
Fecal Coliform Bacteria, #colonies/100ml	0	253	32	10

A review of the ground water monitoring well data on record with the Department for the period April 2003 – April 2006 (applicable monitoring months only) demonstrates no upward or downward trends indicating ground water quality is not impacted by any lagoon leakage. Monitoring results as summarized in Table 2 below.

Table 2. Ground Water Monitoring Well Results: April 2003 – April 2006.

Parameter	Minimum Value	Maximum Value	Arithmetic Mean	Sample Size (n)	EPA's MCL/SDWS[1]
Conductivity, umhos/cm	250	340	291	4	none
Temperature, °C	5	8	6.4	4	none
Dissolved Oxygen, ppm	0.6	1.5	1.1	4	none
pH, standard units	5.6	7.2	n/a	4	none
Ammonia (as N), mg/L	0.28	7.9	2.4	4	none
Nitrate (as N), mg/L	0.059	1.0	0.57	4	10 mg/L
Total Sodium (as Na), mg/L	4.3	17	9.2	4	none
Chloride (as Cl), mg/L	7	90	30	4	250 mg/L

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.

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[1] The USEPA has established a primary maximum contaminant level (MCL) for nitrate which is the highest level of a contaminant allowed in drinking water and is an enforceable standard. The USEPA has established secondary drinking water standards (SDWS) for certain pollutants, which are non-enforceable guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. The SDWS for chloride is 250 mg/L.

8. PUBLIC COMMENTS

Public notice of this application was made in the *Star Herald* newspaper on or about August 23, 2006. 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 Chapter 522 of the Department's rules.

9. DEPARTMENT CONTACTS

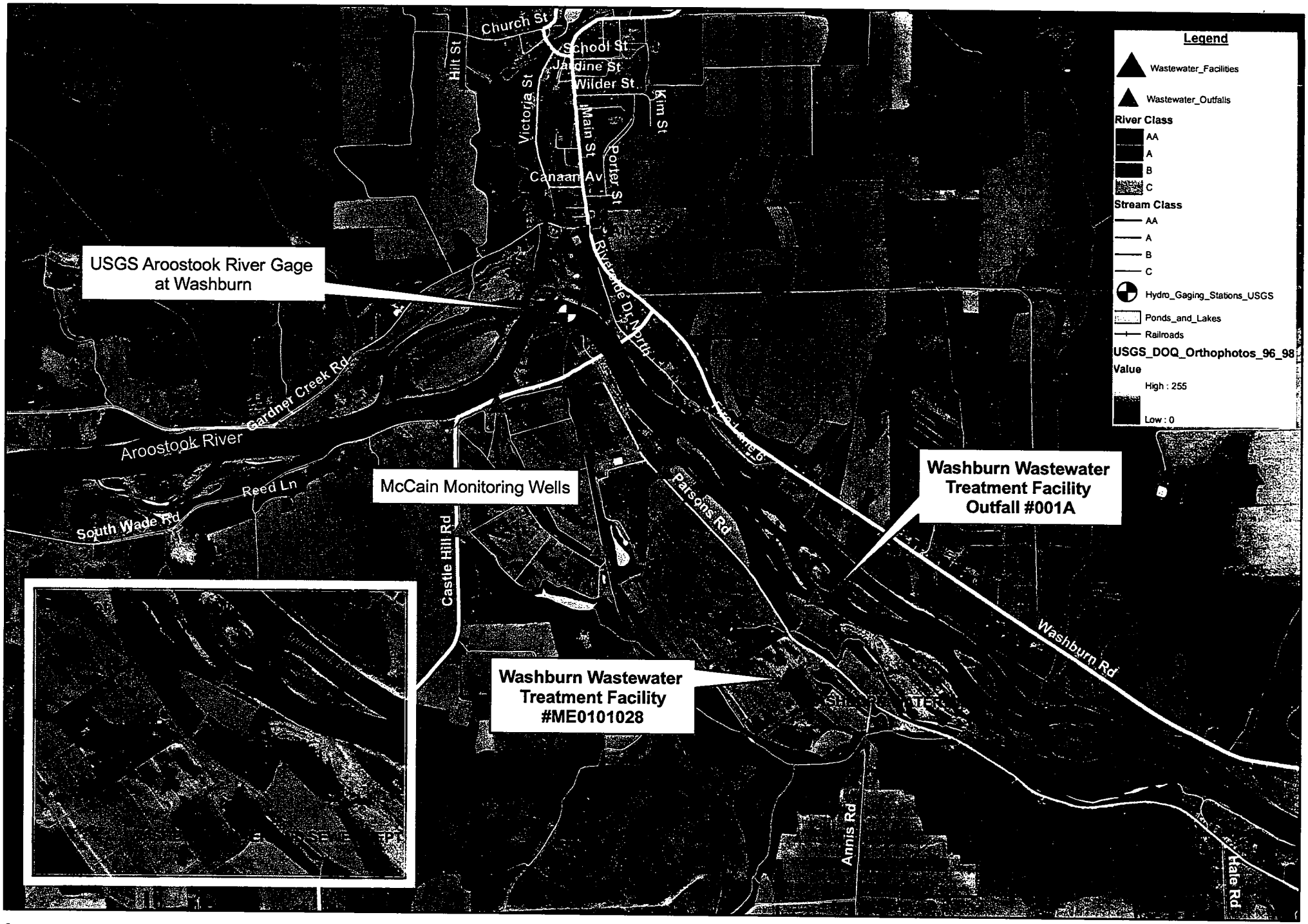
Additional information concerning this permitting action may be obtained from, and written comments sent to:

William F. Hinkel
Division of Water Quality Management
Bureau of Land & Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 287-7659 Fax: (207) 287-3435
e-mail: bill.hinkel@maine.gov

10. RESPONSE TO COMMENTS

During the period of November 2, 2006 through December 1, 2006, the Department solicited comments on the proposed draft Maine Pollutant Discharge Elimination System Permit to be issued to the Town of Washburn for the proposed discharge. The Department received no significant comments on the proposed draft permit, therefore, a response to comments was not prepared.

ATTACHMENT A

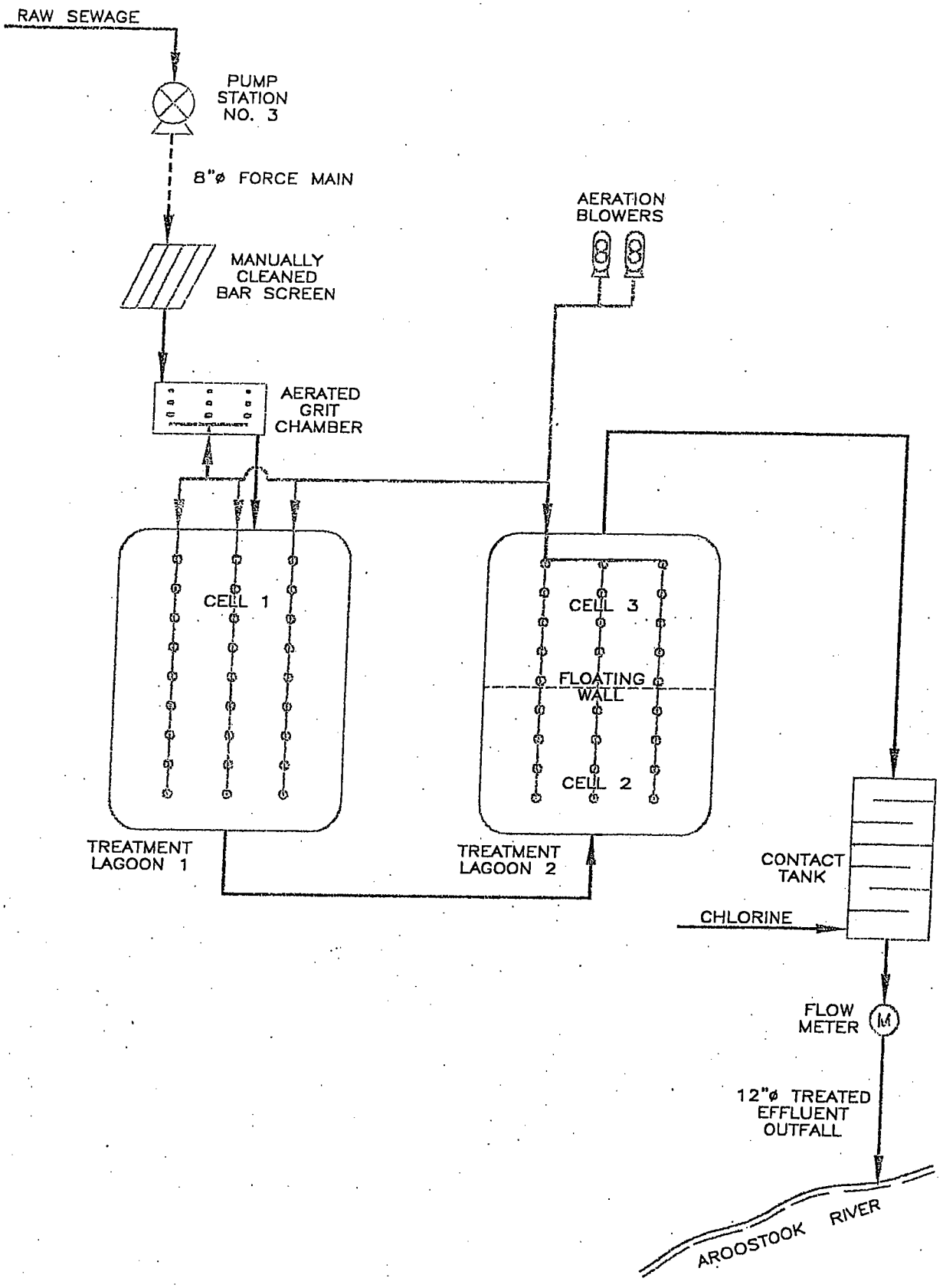


Washburn Wastewater Treatment Facility on Aroostook River, Maine

Map created by Maine DEP
November 2, 2006

ATTACHMENT B

FIGURE 1
WASHBURN'S WASTEWATER TREATMENT PROCESS UPGRADE



OLVER ASSOCIATES INC.
ENVIRONMENTAL ENGINEERS

ATTACHMENT C

Species	Test	Test Result %	Sample Date
TROUT	C_NOEL	25.0	10/28/2001
TROUT	LC50	73.5	10/28/2001
WATER FLEA	A_NOEL	100	10/28/2001
WATER FLEA	C_NOEL	100	10/28/2001
WATER FLEA	LC50	>100	10/28/2001
TROUT	A_NOEL	30.17	02/26/2006
TROUT	C_NOEL	25.0	02/26/2006
WATER FLEA	A_NOEL	2.3	02/26/2006
WATER FLEA	C_NOEL	5.0	02/26/2006

ATTACHMENT D

Sample Date: 04/09/2001
Plant flows provided

otal Tests:	124	mon.(MGD)= 0.023
issing Compounds:	0	day(MGD)= 0.041
ests With High DL:	0	

M = 0 V = 0 A = 0
BN = 0 P = 0 other = 0

Sample Date: 07/30/2001
Plant flows not provided

otal Tests:	124
issing Compounds:	0
ests With High DL:	0

M = 0 V = 0 A = 0
BN = 0 P = 0 other = 0

Sample Date: 10/30/2001
Plant flows provided

otal Tests:	124	mon.(MGD)= 0.047
issing Compounds:	0	day(MGD)= 0.063
ests With High DL:	0	

M = 0 V = 0 A = 0
BN = 0 P = 0 other = 0

Sample Date: 02/26/2006
Plant flows provided

otal Tests:	136	mon.(MGD)= 0.050
ssing Compounds:	0	day(MGD)= 0.062
sts With High DL:	0	

M = 0 V = 0 A = 0
BN = 0 P = 0 other = 0

PP Data for "Hits" Only

WASHBURN
ARROOSTOOK RIVER

ARSENIC
MDL = 5 ug/l

	Conc, ug/l	MDL	Sample Date	Date Entered
	2.000000	OK	02/26/2006	05/17/2006
	2.000000	OK	04/09/2001	06/26/2001
	6.000000	OK	10/30/2001	12/18/2001
<	1.000000	OK	07/30/2001	10/16/2001

DEP INFORMATION SHEET

Appealing a Commissioner's Licensing Decision

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

SUMMARY

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

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

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

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

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

HOW TO SUBMIT AN APPEAL TO THE BOARD

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

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

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

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

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

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

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

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

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

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

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

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

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

II. APPEALS TO MAINE SUPERIOR COURT

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

ADDITIONAL INFORMATION

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

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