STATE OF MAINE

Department of Environmental Protection

JOHN ELIAS BALDACCI
GOVERNOR

David P. Littell
COMMISSIONER

December 23, 2009

Mr. Robert Tyler
Planner
Passamaquoddy Tribal Government
P.O. Box 310
Princeton, ME. 04668

RE: Maine Waste Discharge License (WDL)Application #W000872-6B-E-R
Permit Compliance System #MEU500872
Final License

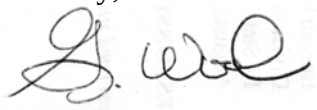
Dear Mr. Tyler:

Enclosed, please find a copy of your **final** Maine WDL, which was approved by the Department of Environmental Protection. Please read the 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 287-7693 or send me an e-mail at gregg.wood@maine.gov.

Sincerely,



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

Enc.

cc: Clarissa Trasko, DEP/EMRO
Sandy Mojica, USEPA

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

DEPARTMENT ORDER

IN THE MATTER OF

PASSAMAQUODDY TRIBAL GOVERNMENT	)	PROTECTION AND IMPROVEMENT
INDIAN TOWNSHIP WASHINGTON COUNTY	)	OF WATERS
SURFACE WASTE WATER DISPOSAL SYSTEM	)	
MEU500872	)	WASTE DISCHARGE LICENSE
W000872-6B-E-R **APPROVAL**	)	**RENEWAL**

Pursuant to the provisions of *Conditions of licenses*, 38 M.R.S.A. § 414-A, and applicable regulations, the Department of Environmental Protection (Department hereinfter) has considered the application of the PASSAMAQUODDY TRIBAL GOVERNMENT (PTG/licensee hereinafter) with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

The PTG has submitted a complete application to the Department for the renewal of Maine Waste Discharge License (WDL) #W000872-5L-D-R, which was issued on August 2, 1994 and expired on August 2, 1999. The application is for the continuing operation of a surface waste water disposal (spray-irrigation) system for the disposal of up to 42 million gallons per year of treated sanitary waste water and precipitation onto 29.3 acres of land in Indian Township, Maine. The treatment system was designed for a sanitary waste water influent flow of 95,000 gallons per day (0.095 MGD). The facility has been assigned number MEU500872 for tracking compliance in the Department's permit compliance system (PCS).

LICENSE SUMMARY

This licensing action is <u>similar to</u> the 8/2/94 licensing action in that it is:

<u>Wastewater treatment lagoons:</u>

1. Carrying forward the daily maximum concentration limitations of 100 mg/L for both biochemical oxygen demand (BOD), total suspended solids (TSS);

2. Carrying forward a daily maximum reporting requirement for nitrate-nitrogen;

3. Carrying forward a daily maximum concentration reporting requirement for total arsenic, total cadmium, total chromium, total copper, total lead, mercury, total nickel, and total zinc but reducing the monitoring frequency from 1/Year to once per five years;

4. Carrying forward a requirement to maintain a minimum freeboard in the lagoon.

LICENSE SUMMARY (cont'd)

Spray irrigation:

5. Carrying forward the restriction of prohibiting spray irrigation when there is less than ten (10) inches of separation between the ground surface and ground water table during the time of application;

6. Carrying forward the spray irrigation season of April 15 – November 15, of each year depending on weather and site conditions;

Ground water monitoring wells:

7. Carrying forward the monitoring and reporting requirements for depth to water level below land surface;

8. Carrying forward a monitoring requirement for nitrate-nitrogen; and

9. Carrying forward the daily maximum concentration reporting requirements for total arsenic, total cadmium, total chromium, total copper, total lead, mercury, total nickel, and total zinc on a once per five-year basis; and

This license is different from the 8/2/94 licensing action in that it is:

Wastewater treatment lagoons:

10. Eliminating the monitoring and reporting requirements for specific conductivity, chlorides, total kjeldahl nitrogen, and fecal coliform bacteria;

Spray Irrigation

11. Increasing the application rate from 1.5 inches/week to 2.5 inches/week.

12. Establishing a number of additional operational constraints.

Ground water monitoring wells:

13. Increasing the number of monitoring wells to be sampled from two wells to seven wells.

14. Eliminating the monitoring and reporting requirements for chlorides, total kjeldahl nitrogen, fecal coliform bacteria, chemical oxygen demand, iron, manganese and hardness.

15. Establishing monitoring and reporting requirements for specific conductance and temperature.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated November 23, 2009, and subject to the conditions listed below, the Department makes the following conclusions:

1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.

2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.

3. The provisions of the State's antidegradation policy, *Classification of Maine waters,* 38 M.R.S.A. § 464(4)(F), will be met, in that:

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

   (b) Where high quality waters of the State constitute an outstanding 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 of 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, which require application of best practicable treatment as defined in 38 M.R.S.A. § 414-A(1)(D).

ACTION

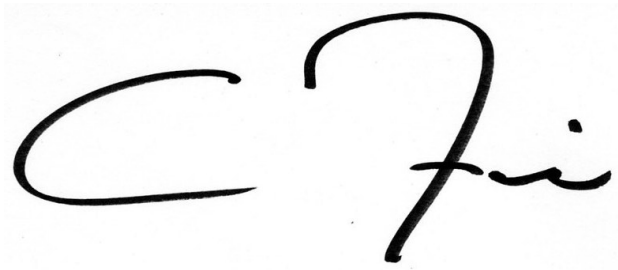
THEREFORE, the Department APPROVES the above noted application of the PASSAMAQUODDY TRIBAL GOVERNMENT to operate a surface wastewater disposal (spray irrigation) system with an average influent design flow rate of 95,000 gallons per day. Said WDL authorizes the licensee to utilize spray irrigation system to dispose of up to 67,890 gallons per acre per day of treated sanitary wastewater onto 29.3 acres during the period of April 15 – November 15 of each year, depending on weather and site conditions, to the soil above ground water resources of the state, Class GW-A, SUBJECT TO THE FOLLOWING CONDITIONS, and all applicable standards and regulations including:

1. *Standard Conditions of Approval for POTW Waste Discharge Licenses*, revised July 16, 1996, copy attached.

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

3. This license expires five (5) years from the date of signature below.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES



This permit has been digitally signed by Andrew C. Fisk on behalf of Commissioner David P. Littell. It is digitally signed pursuant to authority under 10 M.R.S.A. § 9418. It has been filed with the Board of Environmental Protection as of the signature date 2009.12.23 13:35:42 -05'00'

Date of initial receipt of application: July 10, 2009 .
Date of application acceptance: July 13, 2009 .

This Order prepared by Gregg Wood, BUREAU OF LAND & WATER QUALITY
MEU500872 2009 12/23/09

SPECIAL CONDITIONS

A. LIMITATIONS AND MONITORING REQUIREMENTS

1. The licensee is authorized to operate a surface wastewater treatment and disposal system. The **STORAGE LAGOON EFFLUENT (OUTFALL #001)** shall be limited and monitored as specified below[(1)].

	Monthly Average	**Daily Maximum**	**Minimum Measurement Frequency**	**Sample Type**
Biochemical Oxygen Demand *[00310]*	---	100 mg/L *[19]*	1/Month[(2)] *[01/30]*	Grab *[GR]*
Total Suspended Solids *[00530]*	---	100 mg/L *[19]*	1/Month[(2)] *[01/30]*	Grab *[GR]*
Nitrate-Nitrogen *[00620]*	---	Report mg/L *[19]*	1/Month[(2)] *[01/30]*	Grab *[GR]*
Freeboard *[82564}*		≥ 3.0 feet *[19]*	1/Month[(2)] *[01/30]*	Measure *[MS]*
pH (Standard Units) *[00400]*	---	6.0 – 9.0 SU *[12]*	---	---
Metals (Total): Arsenic, Cadmium, Chromium, Copper, Lead, Nickel and Zinc *[01002, 01027, 01034, 01042, 01051, 01067, 01092]*		Report ug/L *[28]*	1/5 Years[(3)] *[01/5Y]*	Grab *[GR]*

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

FOOTNOTES: Refer to pages 9-10 of this license for applicable footnotes.

SPECIAL CONDITIONS

A. LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

2. The **SPRAY IRRIGATION AREAS** shall be limited and monitored each year as specified below

April 15th - November 15th

SF#1 – 6.65 acres
SF#2 – 6.57 acres
SF#3 – 7.9 acres
SF#4 – 8.2 acres

	Monthly Total	Weekly Average	Daily Maximum	Minimum Measurement	Sample Type
Application Rate *[51125]*	---	67,890 gallons/acre/week[(4)] *[8B]*	---	1/Week *[01/07]*	Calculate *[CA]*
Flow – Total Gallons *[82220]*	Report (Gallons) *[80]*	---	---	1/Month *[01/30]*	Calculate *[CA]*

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

FOOTNOTES: Refer to pages 9-10 of this license for applicable footnotes.

SPECIAL CONDITIONS

A. LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

3. **GROUND WATER MONITORING WELLS MW1, MW2, MW4, MW5, MW6 & MW7[(1)]**:

	Daily Maximum as specified	**Minimum Measurement Frequency**	**Sample Type**
Depth to Water Level Below Land Surface [(5)] *[72019]*	Report (feet) *[27]*	2/Year[(6)] *[02/YR]*	Measure *[MS]*
Nitrate-Nitrogen *[00620]*	10 mg/L *[19]*	2/Year[(6)] *[02/YR]*	Grab *[GR]*
Specific Conductance[(7)] *[00095}*	Report (umhos/cm) *[11]*	2/Year[(6)] *[02/YR]*	Grab *[GR]*
Temperature (°C)[(7)] *[00010]*	Report (°C) *[04]*	2/Year[(6)] *[02/YR]*	Grab *[GR]*
pH (Standard Units)[(7)] *[00400]*	Report SU *[12]*	2/Year[(6)] *[02/YR]*	Grab *[GR]*
Total Suspended Solids *[00530]*	Report (mg/L) *[19]*	2/Year[(6)] *[02/YR]*	Grab *[GR]*
Metals (Total): Arsenic, Cadmium, Chromium, Copper, Lead, Nickel and Zinc *[01002, 01027, 01034, 01042, 01051, 01067, 01092]*	Report ug/L *[28]*	1/5 Years[(3)] *[01/5Y]*	Grab *[GR]*

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

FOOTNOTES: Refer to pages 9-10 of this license for applicable footnotes.

SPECIAL CONDITIONS

A. LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

4. Sampling of **LAGOON UNDERDRAIN SYSTEM** shall be conducted as specified below[(1)]:

Outfall #001B –Underdrain beneath the storage lagoons.

	Daily Maximum as specified	**Minimum Measurement Frequency** as specified	**Sample Type** as specified
Flow Rate *[00058]*	Report GPM *[78]*	3/Year[(8)] *[03/YR]*	Estimated *[ES]*
Specific Conductance *[00095]*	Report (umhos/cm) *[11]*	3/Year[(8)] *[03/YR]*	Measure *[MS]*
Temperature (°C) *[00010]*	Report (°C) *[04]*	3/Year[(8)] *[03/YR]*	Measure *[MS]*

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

FOOTNOTES: Refer to pages 9-10 of this license for applicable footnotes.

SPECIAL CONDITIONS

A. 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 Health and Human Services. Samples that are sent to a POTW licensed pursuant to *Waste discharge licenses*, 38 M.R.S.A. § 413 are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (last amended February 13, 2000).

   All 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. If a non-detect analytical test result is below the respective RL, the concentration result shall be reported as <Y where Y is the actual 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. Compliance with this permit will be evaluated based on whether or not a compound is detected at or above the Department's RL.

2. **Lagoon Effluent Sampling** – Lagoon effluent sampling shall be conducted at a minimum frequency of once per month during the months of **April, May, August, and October** of each year, unless otherwise specified by the Department. In the event that no wastewater is disposed of via the spray irrigation system for an entire month, the licensee is not required to conduct effluent monitoring as otherwise required in Special Condition A(1) of this license.

3. **Screening level metals testing –** The licensee shall conduct one round of testing for the specified metals **during the fourth calendar quarter of the fourth year of the license**, unless otherwise specified by the Department.

SPECIAL CONDITIONS

A. LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

FOOTNOTES:

4. **Weekly Maximum for Spray Irrigation** – "Weekly" is defined as Sunday through Saturday. A field's daily or weekly application rate is the total gallons sprayed over the applicable period of time divided by the size of the area of the field(s) utilized. Note: 27,152 gallons is equivalent to one acre-inch. The licensee shall measure the flow of waste water to the irrigation area by the use of a flow measuring device that is checked for calibration at least once per calendar year. For Discharge Monitoring Report (DMR) reporting purposes, the licensee shall report the highest daily and weekly application rate for the month in the applicable box on the form. Compliance with weekly reporting requirements must be reported for the month in which the calendar week ends.

5. **Depth to Water Level** – Depth to water level shall be measured to the nearest one-tenth ($1/10^{th}$) of a foot as referenced from the surface of the ground at the base of the monitoring well.

6. **Ground Water Monitoring Period –** Monitoring wells shall be sampled during the months of **May and October** of each year, unless otherwise specified by the Department.

7. **Field Measurements** – Specific conductance (calibrated to 25.0° C), temperature, and pH are considered to be "field" parameters, and are to be measured in the field via instrumentation. The licensee is required to test for these parameters whether waste water was disposed of via the spray-irrigation system or not.

8. **Lagoon Underdrain Monitoring** – Lagoon underdrain sampling shall be conducted in the months of **July, August and September** of each year.

B. NARRATIVE EFFLUENT LIMITATIONS

1. The effluent shall not contain materials in concentrations or combinations which would impair the uses designated by the classification of the ground water.
2. The effluent must not lower the quality of any classified body of water (ground water is a classified body of water under Title 38, Section 465-C) below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.

C. TREATMENT PLANT OPERATOR

The treatment facility must be operated by a person holding a minimum of a **Grade SITS-II** certificate (or Registered Maine Professional Engineer) pursuant to Title 32 M.R.S.A. §4171 *et seq*. and *Regulations for Wastewater Operator Certification*, 06-096 CMR 531 (effective May 8, 2006). All proposed contracts for facility operation by any person must be approved by the Department before the permittee may engage the services of the contract operator.

SPECIAL CONDITIONS

D. AUTHORIZED DISCHARGES

The licensee is authorized to discharge treated sanitary waste water only in accordance with the terms and conditions of this WDL and only to the spray irrigation disposal fields identified in the 7/13/09 Waste Discharge License application. Discharge of waste water to any other location or from sources other than those indicated on said application requires written authorization from the Department. The collection, treatment or discharge of waste water which has constituents unlike that or significantly higher in strength than that of domestic waste water is prohibited without written authorization from the Department.

E. NOTIFICATION REQUIREMENT

In accordance with Standard Condition #6, the licensee shall notify the Department of:

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 into the system at the time of permit issuance. For the purposes of this section, notice regarding substantial change 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 caused by the change in the quantity or quality of the waste water to be discharged from the treatment system.

F. GENERAL OPERATIONAL CONSTRAINTS

1. All waste waters shall receive biological treatment through a properly designed, operated and maintained lagoon system prior to disposal via spray irrigation.

2. The spray irrigation facilities shall be effectively maintained and operated at all times so that there is neither discharge to surface waters nor any contamination of ground water which will render it unsatisfactory for usage as a public drinking water supply. Spray nozzles must be calibrated annually in order to assure proper spray irrigation rates.

3. The surface waste water disposal system shall not cause the lowering of the quality of the ground water, as measured in the ground water monitoring wells specified by this license, below the State Primary and Secondary Drinking Water Standards specified in the Maine State Drinking Water Regulations pursuant to Maine law 22 M.R.S.A. § 2601.

   In the event the ground water monitoring results indicate adverse effects, the licensee may be required to take immediate remedial action(s), which may include but are not limited to, adjustment of the irrigation schedule or application rates, a reduction of the pollutant loading, or ceasing operation of the system until the ground water attains applicable standards.

SPECIAL CONDITIONS

F. GENERAL OPERATIONAL CONSTRAINTS

4. The Department shall be notified as soon as the licensee becomes aware of any threat to public health, unlicensed discharge of waste water, sanitary system overflows (SSOs) or any malfunction that threatens the proper operation of the system. Notification shall be made in accordance with the attached Standard Condition #4 of this license. A *sanitary sewer overflow* (SSO) is the release of raw sewage from a sanitary collection system prior to reaching the treatment plant or facility. Spills out of manholes, into basements, onto municipal or private property, etc., and into the waters of the State are all considered to be SSOs.

5. The licensee shall maintain a file on the location of all system components and relevant features. Each component shall be mapped and field-located sufficiently to allow adequate inspections and monitoring by both the licensee and the Department.

6. System components including collection pipes, tanks, manholes, pumps, pumping stations, spray disposal fields, and monitoring wells shall be identified and referenced by a unique system identifier in all logs and reports.

7. The licensee shall at all times maintain in good working order and operate at maximum efficiency all waste water collection, treatment and/or control facilities. The licensee shall inspect the spray-irrigation site or have other means to check the system for leakage in the piping system and determine if individual sprayheads and pump(s) are functioning as designed, and verify that application rates are appropriate for the existing site conditions. The procedures used to determine the system is functioning as designed shall be described in the facility's O&M manual. Should significant malfunctions or leaks be detected, the licensee must shut down the malfunctioning/leaking sections of the spray system and make necessary repairs before resuming operation. The licensee shall cease irrigation if runoff is observed outside the designated boundaries of the spray field(s).

SPECIAL CONDITIONS

F. GENERAL OPERATIONAL CONSTRAINTS (cont'd)

8. **The licensee shall maintain a daily log** of all spray irrigation which records the date, weather, rainfall, areas irrigated, volume sprayed (gallons), application rates (daily and weekly), and other relevant observations/comments from daily inspections. The log shall be in accordance with the general format of the *"Monthly Operations Log"* provided as **Attachment A** of this license, or other format approved by the Department. Weekly application rates shall be reported in accordance with the general format of the *"Spray Application Report by Week"* provided as **Attachment B** of this license or other format as approved by the Department. The *Monthly Operations Log*, and *Spray Application Report by Week* for each month shall be submitted to the Department as an attachment to the monthly Discharge Monitoring Reports (DMRs) in a format approved by the Department. Copies will also be maintained on site for Department review and for license operation maintenance purposes.

G. SPRAY IRRIGATION OPERATIONAL CONSTRAINTS, LOGS AND REPORTS

1. Suitable vegetative cover shall be maintained. Waste water (as liquid spray irrigation) shall not be applied to areas without sufficient vegetation or ground cover as to prevent erosion or surface water runoff outside the designated boundaries of the spray fields. The licensee shall have an updated facilities management plan that includes provisions for maintaining the spray irrigation area in optimum condition for the uptake of nutrients and moisture holding capacity.

2. At least 10 inches of separation from the ground surface to the ground water table shall be present prior to spray irrigation.

3. No waste water shall be spray irrigated as liquid following a rainfall accumulation exceeding 1.0 inch within the previous 24-hour period. **A rain gauge shall be located on site to monitor daily precipitation.** The licensee shall also manage application rates by taking into consideration the forecast for rain events in the 48-hour period in the future.

4. No waste water shall be applied as spray irrigation (liquid) where there is snow present on the surface of the ground or when there is any evidence of frost or frozen ground within the upper 10 inches of the soil profile.

5. No traffic or equipment shall be allowed in the spray-irrigation field area except where installation occurs or where normal operations and maintenance are performed (this shall include forest management operations).

6. The licensee shall utilize and maintain the nine soil moisture sensors to collect data on soil saturation in the spray fields. Data collected shall be reported in column "F" of **Attachment A** of this license.

SPECIAL CONDITIONS

H. VEGETATION MANAGEMENT

1. The licensee shall remove grasses and other vegetation such as shrubs and trees if necessary so as not to impair the operation of the spray-irrigation system, to ensure uniform distribution of waste water over the desired application area and to optimize nutrient uptake and removal.

2. The vegetative buffer zones along the perimeter of the site shall be maintained to maximize vegetation and forest canopy density in order to minimize off-site drift of spray.

I. LAGOON MAINTENANCE

1. The banks of the lagoons shall be inspected periodically during the operating season (at least two times per year) and properly maintained at all times. There shall be no overflow through or over the banks. Any signs of leaks, destructive animal activity or soil erosion of the banks shall be repaired immediately.

2. The banks of the lagoons shall be maintained to keep them free of woody vegetation and other vegetation that may be detrimental to the integrity of the bank and/or lagoon liner. The lagoons shall be kept free of all vegetation (*i.e.,* grasses, reeds, cattails, etc.) that hinders the operation of the lagoon.

3 The licensee shall maintain the freeboard at a level no higher than design levels.

4. The treatment and storage lagoon shall be dredged as necessary to maintain the proper operating depths in the lagoons that will provide best practicable treatment of the waste water. All material removed from the lagoon(s) shall be properly disposed of in accordance with all applicable State and Federal rules and regulations.

J. INSPECTIONS AND MAINTENANCE

The licensee shall periodically inspect all system components to ensure the facility is being operated and maintained in accordance with the design of the system. Maintenance logs shall be maintained for each major system component including pumps, pump stations, septic tanks, lagoons, spray apparatus, and pipes. At a minimum, the logs shall include the unique identifier, the date of maintenance, type of maintenance performed, names or person performing the maintenance, and other relevant system observations.

SPECIAL CONDITIONS

K. GROUND WATER MONITORING WELLS AND WATER QUALITY MONITORING PLAN DETAILS

1. The licensee shall maintain an approved ground water quality monitoring plan prepared by a professional qualified in water chemistry. The plan shall include historical and current monitoring data for each monitoring point, represented in tabular and graphical form.

2. All monitoring wells shall be equipped with a cap and lock to limit access and shall be maintained in a secured state at all times. The integrity of the monitoring wells shall also be verified annually in order to insure representative samples of ground water quality.

3. The Department reserves the right to require increasing the depth of and/or relocating any of the ground water monitoring wells if the well is frequently dry or is determined not to be representative of ground water conditions.

L. OPERATIONS AND MAINTENANCE (O&M) PLAN AND SITE PLAN(S)

This facility shall have a current written comprehensive Operation & Maintenance (O&M) Plan. The plan shall provide a systematic approach by which the licensee shall at all times, properly operate and maintain all facilities and the systems of treatment and control (and related appurtenances) which are installed or used by the licensee to achieve compliance with the conditions of this license. Of particular importance is the management of the spray application sites such that the spray sites are given ample periods of rest to prevent over application.

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

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

M. PUBLIC ACCESS TO LAND APPLICATION SITES AND SIGNAGE

Access to the land application sites shall be limited during the season of active site use. The licensee shall install signs measuring at least 8 ½" x 11", in areas of concern around the perimeter of the lagoon and spray irrigation sites that inform the general public that the area is being used to dispose of sanitary waste waters. The signs must be constructed of materials that are weather resistant. The licensee must annually inspect and make any necessary repairs to the signage to comply with this condition.

SPECIAL CONDITIONS

N. 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 a Department 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 following address:

Department of Environmental Protection
Eastern Maine Regional Office
Bureau of Land and Water Quality
Division of Water Quality Management
106 Hogan Road
Bangor, Maine 04401

Alternatively, if you are submitting an electronic DMR (eDMR), the completed eDMR must be electronically submitted to the Department by a facility authorized DMR Signatory **not later than close of business on the 15th day of the month** following the completed reporting period. **Hard Copy documentation** submitted in support of the eDMR must be **postmarked on or before the thirteenth (13th) day of the month or hand-delivered to the Department's Regional Office such that it is received by the Department on or before the fifteenth (15th) day of the month** following the completed reporting period. **Electronic documentation** in support of the eDMR must be submitted **not later than close of business on the 15th day of the month** following the completed reporting period.

O. REOPENING OF LICENSE

Upon evaluation of any required test results, results of inspections and/or reporting required by the Special Conditions of this licensing action, additional site-specific or any other pertinent information or test results obtained during the term of this license, the Department may, at anytime and with notice to the licensee, modify this license to require additional monitoring, inspections, and/or reporting based on the new information.

P. SEVERABILITY

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

Monthly Operations Log **Attachment A** **(Month/Year) _____)**

WDL #W000872-6B-E-R; Fields #_____Weekly Application Rate: 67,980 gallons/acre (2.5 inches)

	A	B	C	D	E	F	G	H	I	J	K
Day	DATE	PRECIP Inches	TEMP	WEATHER	WIND-Direction Speed	Soil Moisture	Quanity-Total Gallons Pumped	Name of Field(s) Used	Acres Sprayed (Sum of Col H x Area of Each Field)	Gallons/Acre (inches) (Col G divided by I)	Total Inches
	1										
	2										
	3										
	4										
	5										
	6										
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	26										
	27										
	28										
	29										
	30										
	31										
Monthly Total =											

Spray Application Report by Week **Attachment B** **Facility Name** Passamaquoddy Tribal Gov't;

WDL # W-000872-6B-E-R; (Month _____, Year _____) Weekly Application Rate _____ gallons/acre _____ inches)

Field Name/#	**Effective** Spray Area **(Acres)**	**Weekly Limit (Gallons/Acre)**	**Actual Spray Application Rates (Gallons per Acre)**					**Number of Exceptions to Weekly Limit**	**Monthly Average**
			Week 1	**Week 2**	**Week 3**	**Week 4**	**Week 5**		

Note: 1 acre-inch is equivalent to 27,150 gallons of liquid 27,150 gallons per acre is equivalent to 1.0 inch		Total number of exceptions	

A spray-field's weekly application rate if the total gallons sprayed (Sunday through Saturday) divided by the size of the spray-field in acres or the size in acres of that portion of the spray field utilized.

Signature of Responsible Official: _____, Date _____

MAINE WASTE DISCHARGE LICENSE

FACT SHEET

DATE: **November 23, 2009**

PERMIT COMPLIANCE TRACKING SYSTEM NUMBER*:* **MEU500872**
WASTE DISCHARGE LICENSE NUMBER*:* **W000872-6B-E-R**

NAME AND MAILING ADDRESS OF APPLICANT:

PASSAMAQUODDY TRIBAL GOVERNMENT
Attn: George Stevens
P.O. Box 301
Indian Township, ME. 04930

COUNTY: **Washington County**

NAME AND ADDRESS OF FACILITY:

Grand Lake Stream Road
Indian Township, ME. 04930

RECEIVING WATER/ CLASSIFICATION: **Groundwater /Class GW-A**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER:

Mr. Robert Tyler, Planer
(207) 796 – 2301 (x203)
bobtyler@passamaquoddy.com

Mr. George Stevens, Public Works Director
(207)796 - 5263

1. APPLICATION SUMMARY

a. Application: The Passamaquoddy Tribal Government (PTG) has applied to the Department for a renewal of Maine Waste Discharge License (WDL) #W000872-5L-D-R, which was issued on August 2, 1994 and expired on August 2, 1999 The application is for the continuing operation of a surface waste water disposal (spray-irrigation) system for the disposal of up to 42 million gallons per year of treated sanitary waste water and precipitation onto 29.3 acres of land in Indian Township, Maine. The treatment system was designed for a sanitary waste water influent flow of 95,000 gallons per day . The facility has been assigned number MEU500872 for tracking compliance in the Department's permit compliance system (PCS). See **Attachment A** of this Fact Sheet for a location map.

1. APPLICATION SUMMARY (cont'd)

Much the text in section 1(b) and 1(c) below was provided by the licensee in their 7/10/09 license application submitted to the Department.

b. Source Description: The Passmaquoddy Tribal Government's waste water treatment facility became operational in April 1992 for the collection and treatment of sanitary waste waters generated by residential and commercial entities in two distinct areas of Indian Township – The Strip in Princeton and Peter Dana Point. The Strip is located along Route #1 next to Lewy Lake and serves 132 residential users and 7 institutional users while the and Peter Dana Point located along Peter Dana Point and Long Lake and Big Lake serves 53 residential users and 4 institutional users for a total of 196 users connected to the system. Institutional users include schools, offices, and other light commercial facilities. The design for the wastewater treatment facility was based upon the current user composition, plus some future growth, at expected average and peak sewer flowrates. The system has historically been prone to some inflow and infiltration which has been factored into the basis of design. See **Attachment B** of this Fact Sheet for location map depicting the waste water collection system.

Sewers in the Strip Area area are connected to septic tanks maintained by the Tribe. Following these septic tanks, waste water is collected by gravity sewers, small pump stations and force mains and conveyed to a pretreatment facility at the site of the previous wastewater treatment plant. Pretreatment includes a manually cleaned bar rack and an aerated grit chamber with diffused air. Flow then enters the Main Pump Station, a submersible style station, with two pumps. Flow is pumped through a 6" Ø HDPE force main for 10,000 LF to the Route 1 pump station. This is also a submersible style pump station with two pumps. There is a small development near the intersection of Route 1 and Grand Lake Stream Road that bypasses the pretreatment facility and flows directly to this pump station. The Route 1 pump station conveys wastewater over a distance of 7,000 LF, along Grand Lake Stream Road, to the wastewater treatment facility.

Raw waste water for the Peter Dana Point area flows through septic tanks similar to The Strip area. Following these septic tanks are a series of gravity sewers, small pump stations and force mains that convey all of the wastewater from this area to one central pump station on Pit Road. This is a wetwell mounted style pump station, inside a building, with two series-connected pumps. Flow is pumped through an 8" Ø PVC force main for 12,000 LF along Peter Dana Point Road and Grand Lake Stream Road to the wastewater treatment facility.

1. APPLICATION SUMMARY (cont'd)

c. Wastewater Treatment: The Indian Township's wastewater treatment facility was designed to remove excess levels of the BOD and TSS pollutant parameters within a neutral pH range in order to produce good effluent and meet groundwater quality standards.

The acceptable design loadings to a treatment plant are based upon the sizes of the unit processes installed to treat influent wastewater. Indian Township's design capacity is controlled primarily by the available volume and process sizing of the plant's treatment lagoons, aeration system, effluent storage lagoons, and spray irrigation system. The plant's BOD and TSS design loadings are based on an analysis of historical loading trends with consideration for future growth. Plant's design loadings are as follows:

Average daily flow	95,000 gpd
Typical pumped flow	400 gpm to 550 gpm
Organic loading (BOD)	220 lbs/day
Suspended solids (TSS)	255 lbs/day

This facility has the capacity to handle average and peak flows, to provide treatment to reduce the BOD level to 100 mg/l under worst case conditions, and to allow effluent land application.

A pretreatment facility is located at The Strip where the existing treatment plant used to exist. Wastewater from The Strip area collects at the pretreatment facility and flows through its channels by gravity. It consists of a manually raked bar screen and an aerated grit chamber. The bar screen collects rags, sticks, and other large debris that need to be periodically raked off and disposed of. The aerated grit chamber consists of an 8' Ø chamber, diffusers, and one blower. Grit must be removed periodically by hand or with a pumper truck. To remove grit, flow must be diverted from the chamber. From here, waste water flows to the main pump station.

The pumped sewage enters a headworks building which contains an in-line grinder, an influent magnetic flowmeter, and automatic bypass piping. The influent then flows to an aerated treatment lagoon system. The wastewater receives secondary biological treatment in three aerated lagoons in series. The first lagoon has a working volume of 1.3 million gallons (MG) followed by two lagoons with 0.66 MG of working volume each. The aerated lagoons are designed to achieve an effluent biological oxygen demand (BOD) of 100 mg/l, under worst case conditions and when operated in series. Three aeration blowers supply air to a fine bubble tube diffuser system in the lagoons.

Treated effluent is discharged to, and stored in, two storage lagoons. Here, treated effluent is held without air during periods when site conditions do not allow for land application. Each lagoon can store up to 13.4 MG each, for a total of 26.8 MG of working storage volume. Under normal conditions, effluent will be stored from November to mid May The purpose of the storage lagoons is to store treated effluent until it can be discharged to the wooded spray fields. The spray irrigation system draws wastewater effluent from the

1. APPLICATION SUMMARY (cont'd)

storage lagoons and discharges to four spray irrigation fields. The spray season is generally from May through October of each year, although this is dependent on the weather and soil conditions. The design of the facility requires that by the latter part of the spray season (Fall), the storage lagoons should be emptied. This provides storage over the late fall, winter and early spring seasons of each year, then will be land applied by spray irrigation over at least a five month period between May and October. The design flow storage distribution is shown in the table below.

TABLE 3: TYPICAL FIVE MONTH SPRAY IRRIGATION SEASON

MONTH	STARTING LAGOON VOLUME (MG)	WASTEWATER INFLUENT (MG)	NET PRECIPITATION*[1] (MG)	LESS SPRAY VOLUME[*2] (MG)	ENDING LAGOON VOLUME (MG)
November	0.00	2.85	1.11	0.00	3.96
December	3.96	2.85	1.23	0.00	8.04
January	8.04	2.85	0.98	0.00	11.87
February	11.87	2.85	0.85	0.00	15.57
March	15.57	2.85	0.78	0.00	19.20
April	19.20	2.85	0.76	0.00	22.81
May	22.81	2.85	0.47	(4.2)	21.93
June	21.93	2.85	(0.08)	(8.4)	16.30
July	16.30	2.85	(0.15)	(8.4)	10.60
August	10.60	2.85	0.08	(8.4)	5.13
September	5.13	2.85	0.45	(8.4)	0.03
October	0.03	2.85	0.73	(4.2)	0.00
Total		34.20	7.21	42.0	0.00

*1 Net precipitation accounts for the precipitation minus evaporation.
*2 Spray at 2.5 inches/acre/week.

The loading distribution shown in the table above can be combined with the precipitation and evaporation data from the Indian Township area to yield the required storage volume for the lagoons. The storage lagoons have a combined maximum capacity of 26.8 MG. The lagoons each have a working depth of 13.5 feet and a freeboard of three feet. The maximum required storage volume as shown on is 22.81 MG, compared to the 26.8 MG available.

1. APPLICATION SUMMARY (cont'd)

Spray pumps deliver effluent to four spray irrigation fields, covering just under 30 acres with 120 sprinkler heads. See **Attachment C** of this Fact Sheet for the layout of the spray fields The effluent percolates into the ground, providing water and nutrients to the soil. The table below provides a summary of the averages and maximum spray application rates on each individual field.

SPRAY FIELD SUMMARY

FIELD DESCRIPTION	ACREAGE	MAXIMUM SPRAY APPLICATION RATE inches/acre/week
Spray Field 1	6.65	2.5
Spray Field 2	6.57	2.5
Spray Field 3	7.90	2.5
Spray Field 4	8.20	2.5
TOTAL ACRES:	29.3 Acres	

2. LICENSE SUMMARY

This licensing action is <u>similar to</u> the 8/2/94 licensing action in that it is:

<u>Wastewater treatment lagoons:</u>

a. Carrying forward the daily maximum concentration limitations of 100 mg/L for both biochemical oxygen demand (BOD), total suspended solids (TSS);

b. Carrying forward a daily maximum reporting requirement for nitrate-nitrogen;

c. Carrying forward a daily maximum concentration reporting requirement for total arsenic, total cadmium, total chromium, total copper, total lead, mercury, total nickel, and total zinc but reducing the monitoring frequency from 1/Year to once per five years;

d. Carrying forward a requirement to maintain a minimum freeboard in the lagoon.

<u>Spray irrigation</u>:

e. Carrying forward the restriction of prohibiting spray irrigation when there is less than ten (10) inches of separation between the ground surface and ground water table during the time of application;,

f. Carrying forward the spray irrigation season of April 15 – November 15, of each year depending on weather and site conditions;

2. LICENSE SUMMARY (cont'd)

Ground water monitoring wells:

g. Carrying forward the monitoring and reporting requirements for depth to water level below land surface;

h. Carrying forward a monitoring requirement for nitrate-nitrogen; and

i. Carrying forward the daily maximum concentration reporting requirements for total arsenic, total cadmium, total chromium, total copper, total lead, mercury, total nickel, and total zinc on a twice per years basis; and

This license is different from the 8/2/94 licensing action in that it is:

Wastewater treatment lagoons:

j. Eliminating the monitoring and reporting requirements for specific conductivity, chlorides, total kjeldahl nitrogen, and fecal coliform bacteria;

Spray Irrigation

k. Establishing a number of additional operational constraints.

l. Increasing the application rate from 1.5 inches/week to 2.5 inches/week.

m. Establishing a number of additional operational constraints.

Ground water monitoring wells:

n. Increasing the number of monitoring wells to be sampled from two wells to seven wells.

o. Eliminating the monitoring and reporting requirements for chlorides, total kjeldahl nitrogen, fecal coliform bacteria, chemical oxygen demand, iron, manganese and hardness.

p. Establishing monitoring and reporting requirements for specific conductance and temperature.

History: This section provides a summary of significant licensing actions and milestones that have been completed for the PTG.

August 2, 1994 – The Department issued WDL #W000872-58-D-R for a five-year term.

July 10, 2009 – The PTG submitted a complete application to the Department to renew the 8/2/94 WDL.

3. CONDITIONS OF LICENSE

Maine law, 38 M.R.S.A. Section 414-A, requires that the effluent limitations prescribed for discharges require application of best practicable treatment and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System.

4. RECEIVING WATER QUALITY STANDARDS

Maine law, 38 M.R.S.A § 470 indicates the ground water at the point of discharge is classified as Class GW-A receiving waters. Maine law, 38 M.R.S.A., §465-C describes the standards for Class GW-A waters as the highest classification of ground water and shall be of such quality that it can be used for public water supplies. These waters shall be free of radioactive matter or any matter that imparts color, turbidity, taste or odor which would impair the usage of these waters, other than occurring from natural phenomena.

5. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

a. Monitoring Parameters – Lagoon effluent monitoring parameters established in this licensing action are biochemical oxygen demand (BOD_5), total suspended solids (TSS), nitrate-nitrogen, pH, and certain metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel, and zinc). Monitoring for these parameters yields an indication of the effectiveness of the lagoon treatment process and the condition of the waste water being applied. Lagoon effluent monitoring for all parameters except the metals shall be conducted during the months of April, May, August, and October of each year. Lagoon effluent monitoring for the specified metals is only required to be performed during the fourth calendar quarter of the fourth year of the license. Well monitoring is required at the frequency specified in this licensing action, whether or not spray irrigation occurs.

Biochemical Oxygen Demand (BOD) - Monitoring for BOD yields an indication the condition of the waste water being applied from the lagoon, of the degree of loading of organic material and the effectiveness of the spray-irrigation treatment process. The limit of 100 mg/L established in the previous license as a best practicable treatment (BPT) standard is being carried forward in this licensing action.

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

Total Suspended Solids (TSS) - TSS in the groundwater yields an indication of the integrity of the monitoring wells and of the treatment efficiency. The limit of 100 mg/L established in the previous license as a BPT standard is being carried forward in this licensing action.

b. Ground Water Monitoring Wells: The following ground water monitoring wells for compliance with this WDL are located as described below and depicted on a site map in **Attachment C** of this Fact Sheet.

Monitoring Wells	Location
MW1	South of Sprayfield #3, down gradient
MW2	South of Sprayfield #4, down gradient
MW4	North of Sprayfield #1, upgradient
MW5	South of Storage lagoon #3, down gradient
MW6	East of Storage lagoon #2, down gradient
MW7	East of Storage lagoon #1, down gradient

Nitrate-nitrogen - For nitrate-nitrogen, the previous licensing action established a daily maximum concentration reporting requirement for lagoon effluent and a daily maximum concentration limit of 10 mg/L for ground water monitoring wells. Nitrogen compounds are by-products of the biological breakdown of ammonia and are inherent in domestic like sanitary wastewater. Because nitrate-nitrogen is weakly absorbed by soil, it functions as a reliable indicator of contamination from waste-disposal sites. Elevated levels of nitrate-nitrogen in the drinking water supply are a human health concern. The limit of 10 mg/L is a National Primary Drinking Water standard and is being carried forward in this licensing action.

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

Specific Conductance, Temperature and pH - are considered to be "field" parameters meaning that they are measured directly in the field via instrumentation and do not require laboratory analysis. These parameters are considered as surveillance level monitoring parameters and are used as an early-warning indicators of potential groundwater contamination when there exists a trend in the data (or in the case of specific conductance, values over 275 umhos/cm, consistent trends approaching 275 umhos/cm or sudden spikes from previous levels). Temperature data are important in calibrating the conductance measurements.

pH – The previous licensing action established monitoring and reporting requirements for pH for the lagoon effluent and the ground water monitoring wells. This licensing action is establishing a pH range limitation of 6.0 – 9.0 standard units for lagoon effluent and carrying forward pH reporting requirements for ground water monitoring wells based on a Department best professional judgment of best practicable treatment.

Metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel, and zinc) – The previous licensing action established metals monitoring and reporting requirement for lagoon effluent and ground water monitoring wells. The lagoon effluent was to be sampled in November of each year and the ground water monitoring wells were to be sampled in November of 1995 and 1997. Metals data are not currently available. To address this issue, this licensing action is revising the metals testing requirements to be conducted in the fourth calendar quarter of the fourth year of the license. The Department reserves the right to reopen this license in accordance with Special Condition O to require sampling for additional parameters or more frequent sampling based on new information provided by the licensee.

Chloride (Total) – The previous licensing action established a daily maximum concentration reporting requirement for total chloride for the lagoon effluent and the ground water monitoring wells. The monitoring requirement was established as an early-warning indicator of potential ground water contamination by wastewater. The National Secondary Drinking Water standard for chloride is 250 mg/L. The Department has since reconsidered this monitoring and reporting requirement and has determined that total chloride monitoring is not necessary to evaluate potential impacts to ground waters as a result of spray irrigation operations. Therefore, this licensing action is eliminating the total chloride monitoring and reporting requirement for the ground water monitoring wells.

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

c. Spray Irrigation Application Rates – The previous licensing action established a spray application rate of 1.5 inches/week or 40,725 gallons/week. Based on a more current in-situ soils analysis, this licensing action is increasing the application rate to 2.5 inches per week or 67,875 gallons per week.

Application rates and uniformity of application change over time as equipment gets older and components wear, or if the system is operated differently from the assumed design. Operating below design pressure greatly reduces the coverage diameter and application uniformity resulting in increased ponding. For these reasons, the licensee shall field calibrate their equipment on a regular basis to ensure proper application and uniformity, and when operating conditions are changed from the assumed design. Calibration involves collecting and measuring flow at several locations in the application area (typically a grid pattern of containers with uniform diameters).

d. Surface Water Monitoring – The previous licensing action established two surface water monitoring sites that were to be sampled in June and November of each year. The sampling locations were to be determined during the first operational season. The Department has no record of data collected for surface water sampling.

The Department has reconsidered it position on the need for surface water sampling and determined it is not necessary. Therefore, surface water sampling is not required in this licensing action.

6. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

As licensed, 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 GW-A classification.

7. PUBLIC COMMENTS

Public notice of this application was made in *Calais Advertiser* newspaper on or about July 6, 2009. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses*, 06-096 CMR 522 (effective January 12, 2001).

8. DEPARTMENT CONTACTS

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

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

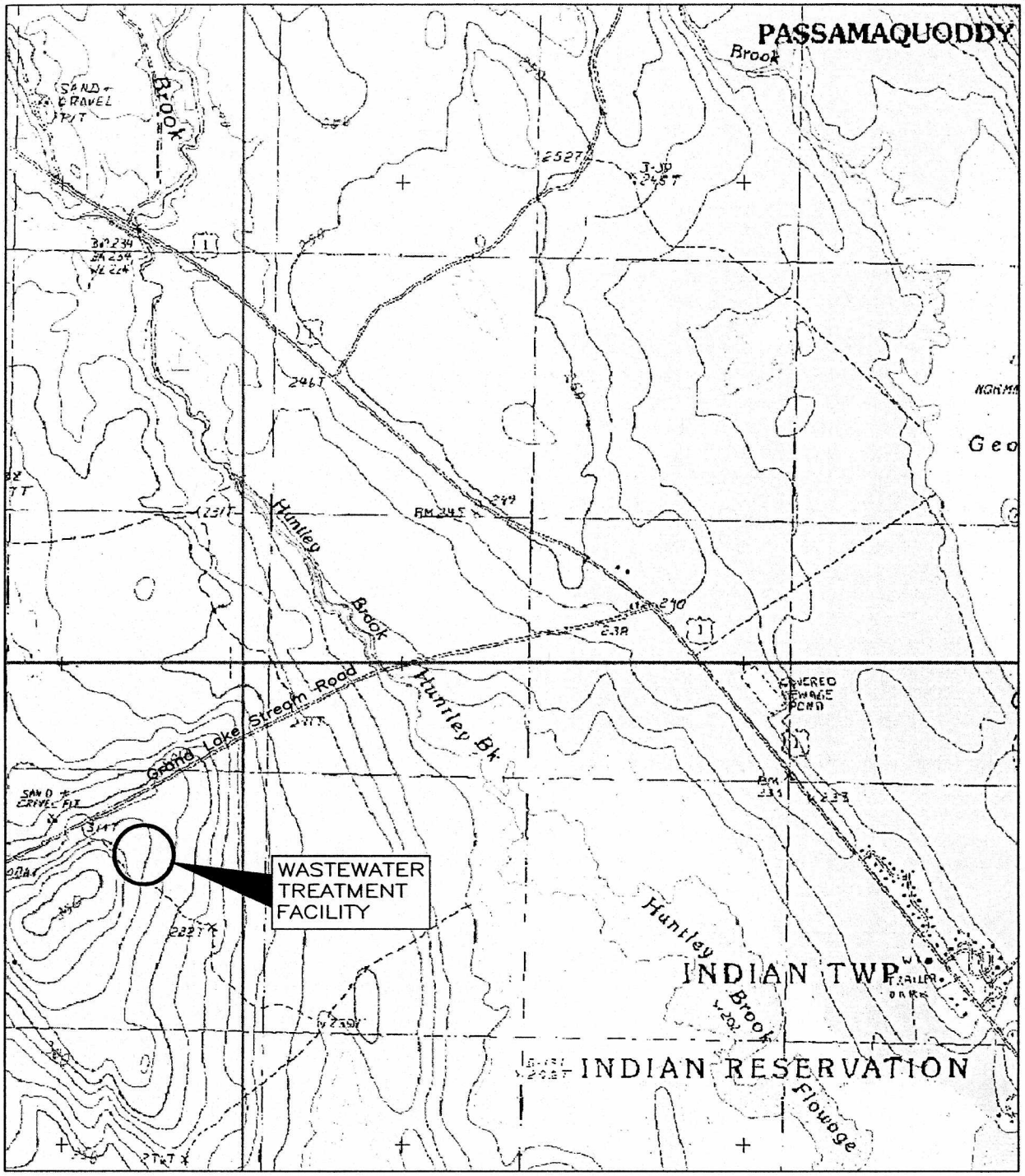
9. RESPONSE TO COMMENTS

During the period of November 23, 2009, through the issuance date of this license, the Department solicited comments on the proposed draft license to be issued for the licensee's facility. The Department received one letter dated December 21, 2009 from Olver Associate Inc., a consultant for the PTG. All but one on the comments was related to language clarification. The response to the one comment not related to language clarification is as follows:

Comment #1: The licensee "… *is requesting a one-year delay in the implementation of the Groundwater Monitoring Plan so that they can obtain the necessary funds to pay for the sampling equipment and testing costs.*"

Response #1: The Department is denying the request for a one-year delay. Special Condition B(2) *Effluent Limitations and Monitoring Requirements* in the August 2, 1994 license issued by the Department required the PTG to monitor MW-1 and MW-3 for chlorides, total kjeldhal nitrogen, fecal coliform bacteria, chemical oxygen demand, iron, manganese, ph and hardness during the month of November of each year and nitrate nitrogen in said wells in April, June, September and November of each year. The PTG should already have monitoring equipment and budgeted for annual sampling dating back to 1994.

ATTACHMENT A



PASSAMAQUODDY TRIBAL GOVERNMENT
AT INDIAN TOWNSHIP

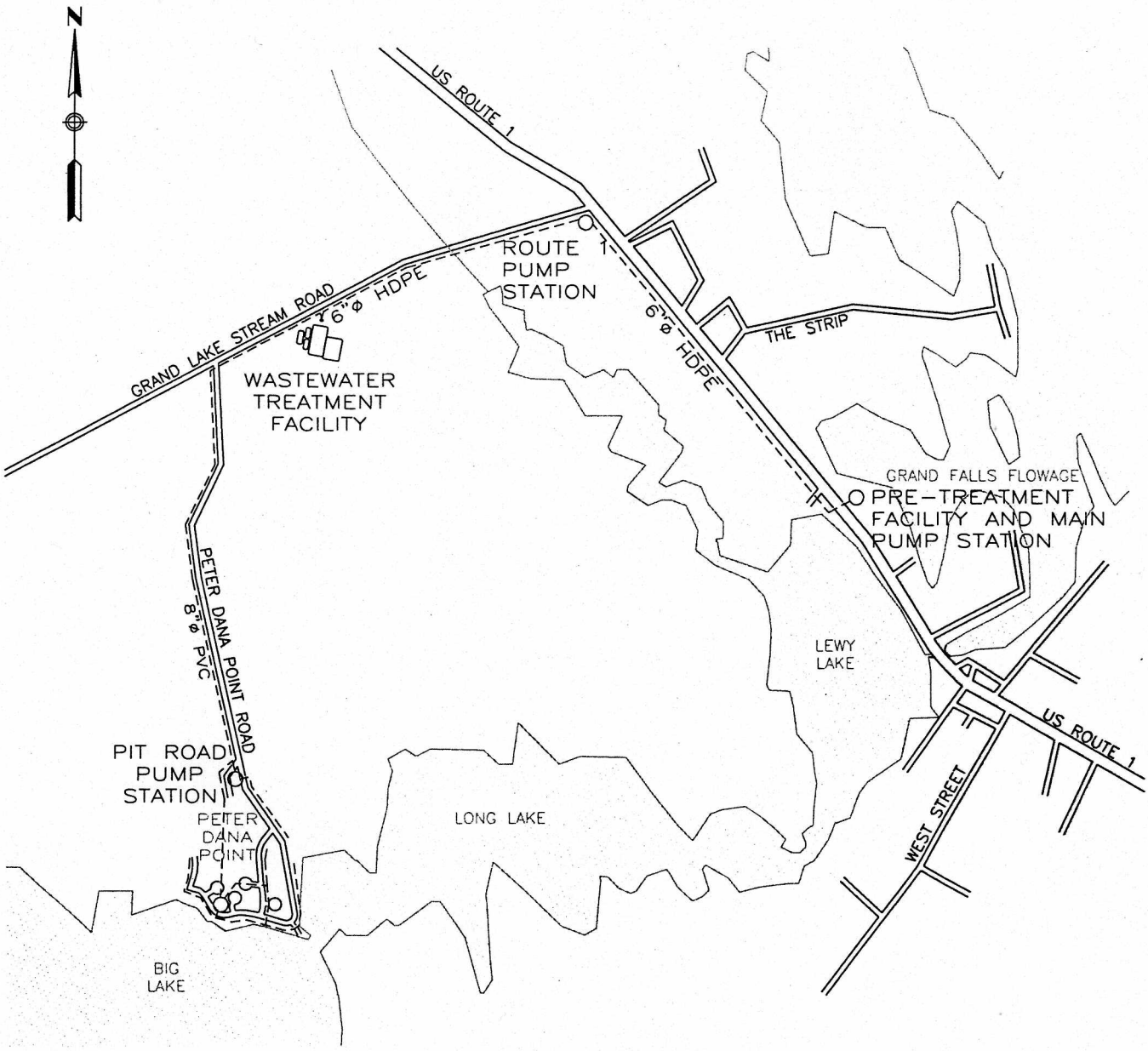
WASTEWATER TREATMENT FACILITY
LOCATION MAP

FIGURE 1

SOURCE:
DELORME 3-D TOPOQUADS
MAINE REGION 1, 1999
Scale: 1:24,000

OLVER ASSOCIATES INC.
ENVIRONMENTAL ENGINEERS
290 MAIN STREET WINTERPORT, MAINE

ATTACHMENT B



PASSAMAQUODDY TRIBAL GOVERNMENT
AT INDIAN TOWNSHIP

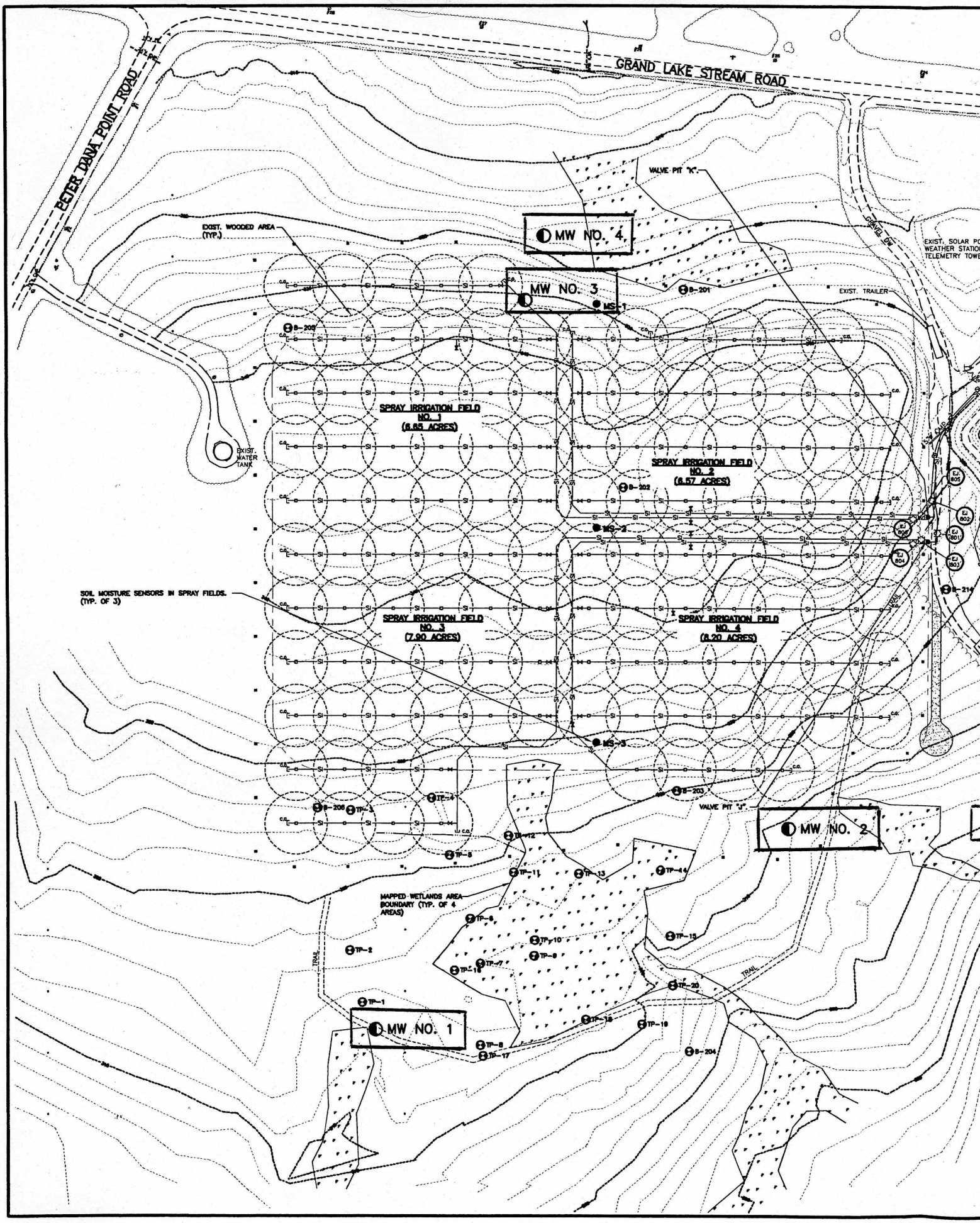
EXISTING WASTEWATER
COLLECTION SYSTEM

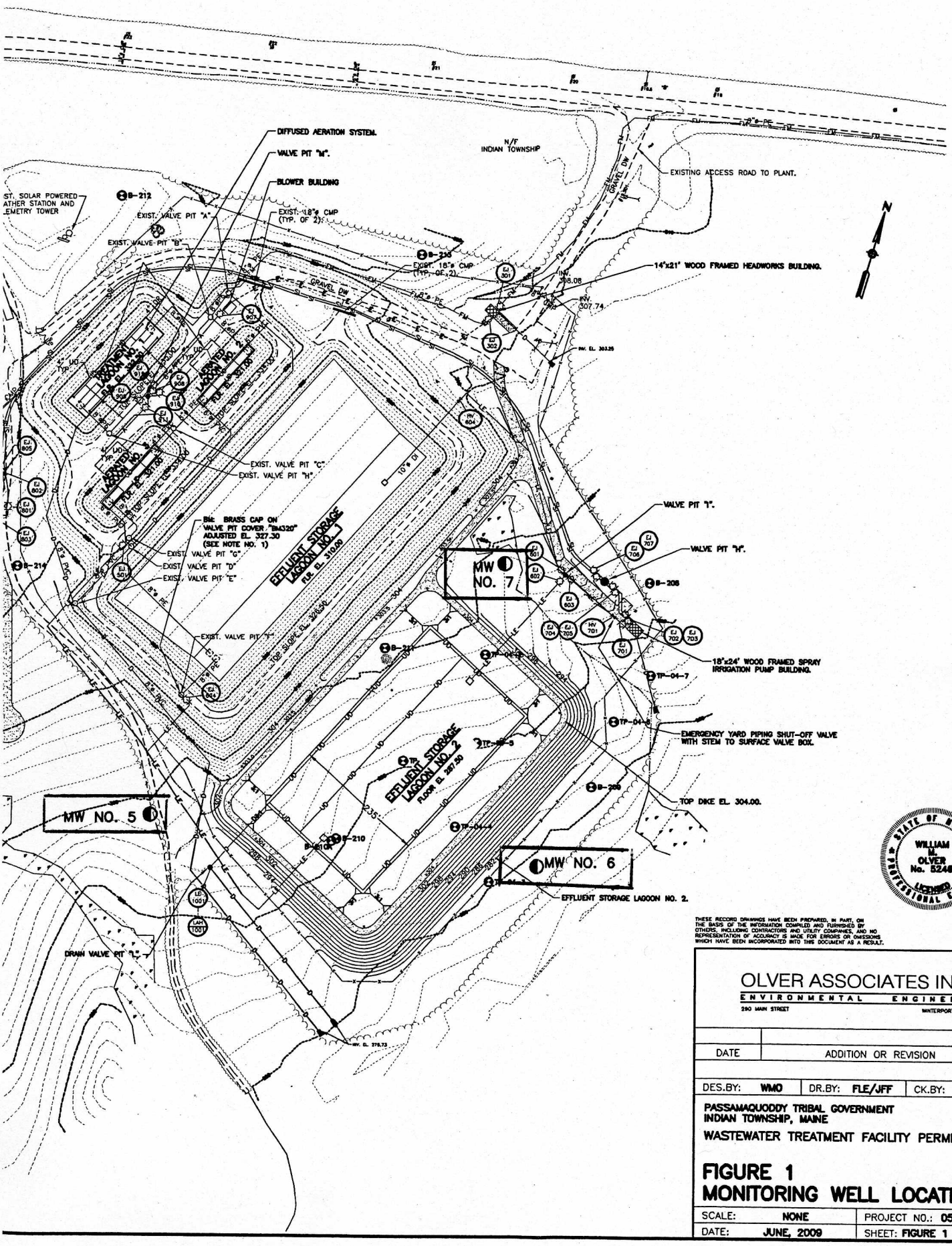
FIGURE 3

0 MILES 1 MILE

OLVER ASSOCIATES INC.
ENVIRONMENTAL ENGINEERS
290 MAIN STREET WINTERPORT, MAINE

ATTACHMENT C


PETER DANA POINT ROAD
GRAND LAKE STREAM ROAD
VALVE PIT "K"
EXIST. WOODED AREA (TYP.)
MW NO. 4
MW NO. 3
MS-1
B-201
EXIST. TRAILER
B-205
SPRAY IRRIGATION FIELD NO. 1 (6.65 ACRES)
EXIST. WATER TANK
SPRAY IRRIGATION FIELD NO. 2 (6.57 ACRES)
B-202
MS-2
SOIL MOISTURE SENSORS IN SPRAY FIELDS. (TYP. OF 3)
SPRAY IRRIGATION FIELD NO. 3 (7.90 ACRES)
SPRAY IRRIGATION FIELD NO. 4 (8.20 ACRES)
B-214
MS-3
B-203
TP-4
B-206
TP-3
VALVE PIT "J"
MW NO. 2
TP-12
TP-5
TP-11
TP-13
TP-14
MAPPED WETLANDS AREA BOUNDARY (TYP. OF 4 AREAS)
TP-6
TP-10
TP-15
TP-2
TP-9
TP-7
TP-16
TP-20
TRAIL
TP-1
MW NO. 1
TP-18
TP-8
TP-17
B-204



STATE OF MAINE
WILLIAM M. OLVER No. 5246
PROFESSIONAL ENGINEER
LICENSED

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF THE INFORMATION COMPILED AND FURNISHED BY OTHERS, INCLUDING CONTRACTORS AND UTILITY COMPANIES, AND NO REPRESENTATION OF ACCURACY IS MADE FOR ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THIS DOCUMENT AS A RESULT.

OLVER ASSOCIATES INC.
ENVIRONMENTAL ENGINEERS
290 MAIN STREET WINTERPORT, MAINE

DATE	ADDITION OR REVISION

DES.BY: WMO	DR.BY: FLE/JFF	CK.BY: WMO

PASSAMAQUODDY TRIBAL GOVERNMENT
INDIAN TOWNSHIP, MAINE

WASTEWATER TREATMENT FACILITY PERMITTING

FIGURE 1
MONITORING WELL LOCATIONS

SCALE: NONE	PROJECT NO.: 054
DATE: JUNE, 2009	SHEET: FIGURE 1

CONTENTS

A. GENERAL PROVISIONS

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

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

(a) They are not

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

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

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

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

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

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

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

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

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

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

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

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

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

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

B. OPERATION AND MAINTENACE OF FACILITIES

1. General facility requirements.

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

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

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

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

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

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

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

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

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

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

5. Bypasses.

(a) Definitions.

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

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

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

(c) Notice.

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

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

(d) Prohibition of bypass.

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

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

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

6. Upsets.

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

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

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

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

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

C. MONITORING AND RECORDS

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

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

3. Monitoring and records.

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

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

(c) Records of monitoring information shall include:

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

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

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

D. REPORTING REQUIREMENTS

1. Reporting requirements.

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

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

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

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

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

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

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

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

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

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

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

(f) Twenty-four hour reporting.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

5. Publicly owned treatment works.

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

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

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

E. OTHER REQUIREMENTS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Maximum daily discharge limitation means the highest allowable daily discharge.

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

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

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

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

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

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

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

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

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

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

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

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

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

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