

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

AND

MAINE WASTE DISCHARGE LICENSE

FACT SHEET

Date: **March 24, 2003**

Revised: **April 24, 2003**

PERMIT NUMBER: **ME0100625**
LICENSE NUMBER: **W002645-5L-E-R**

NAME AND ADDRESS OF APPLICANT:

**Town of Skowhegan
90 Water Street
Skowhegan, Maine 04976**

COUNTY: **Somerset County**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

**Joyce Street
Skowhegan, Maine 04330**

RECEIVING WATER/CLASSIFICATION: **Kennebec River/Class B**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Mr. Brent Dickey, Superintendent
(207) 474-6909**

1. APPLICATION SUMMARY

- a. Application: The applicant has applied to the Department for renewal of Department Waste Discharge License (WDL) #W002645-47-E-R which was issued on April 6, 1998 and is due to expire on April 6, 2003. The 4/6/98 WDL authorized the discharge of up to a monthly average flow of 1.44 million gallons per day (MGD) of secondary treated sanitary waste waters from a municipal waste water treatment facility to the Kennebec River, Class B, in Skowhegan, Maine. The 4/6/98 WDL also authorized the discharge of untreated combined sanitary and storm water from nine (9) combined sewer overflow (CSO) outfalls to the Kennebec River. It is noted the waste water treatment facility is currently being upgraded to mitigate CSO events. The upgrade will provide the facility with the ability to provide primary treatment and disinfection for flows conveyed to the treatment facility that exceed the capacity of the secondary treatment process.

2. PERMIT SUMMARY

- a. Regulatory: On January 12, 2001, the Department received authorization from the U.S. Environmental Protection Agency (EPA) to administer the National Pollutant Discharge Elimination System (NPDES) permit program in Maine. From this point forward, the program will be referenced as the Maine Pollutant Discharge Elimination System (MEPDES) permit program that will utilize a permit number of #ME0100625 (same as NPDES permit) as the primary reference number for the Town of Skowhegan's MEPDES permit. NPDES permit #ME0100625 last issued by the EPA on September 29, 1998 will be replaced by the final MEPDES permit upon issuance. Once replaced, all terms and conditions of the NPDES become null and void.
- b. Terms and Conditions: **This permitting action is similar to the 4/6/98 WDL action in that it is;**

General

1. Requiring the permittee to periodically update the Operation and Maintenance (O&M) Plan and Wet Weather Management Plan for the waste water treatment facility and pump stations.

Secondary Treated Waste Waters:

2. Carrying forward the monthly average, weekly average and daily maximum technology based mass and concentration limits for biochemical oxygen demand (BOD₅) and total suspended solids (TSS).
3. Carrying forward the reporting requirement for the daily maximum mass loadings for BOD₅ and TSS.
4. Carrying forward the daily maximum technology based concentration limit for settleable solids.
5. Carrying forward the monthly average and daily maximum water quality based concentration limits for *E. coli* bacteria.
6. Carrying forward the daily maximum technology based concentration limit for total residual chlorine.
7. Carrying forward the screening level whole effluent toxicity (WET) and chemical specific (priority pollutant) testing.

This permitting action is different than the 4/6/98 WDL action in that it is;

8. Increasing the monthly average flow limitation from 1.44 MGD to 1.65 MGD based on new information as to the capacity of the secondary treatment process.

2. PERMIT SUMMARY (cont'd)

9. Increasing the monthly average and weekly average technology based mass limits for BOD₅ and TSS based on the increased flow limitation.
10. Deleting the weekly average technology based limit of 0.1 ml/L for settleable solids.
11. Revising the daily maximum technology based pH range limit from 6.0 – 8.5 standard units to 6.0 – 9.0 standard units based on a new Department regulation.
12. Establishing a requirement for achieving a minimum of 85% removal for BOD₅ and TSS.
13. Establishing a seasonal (June 1 – September 30) monitoring requirement for total phosphorus.
14. Increasing the quantity of septage the facility is authorized to receive and treat from 5,000 gpd to 7,500 gpd.

Primary Treated Waste Waters:

15. Establishing monthly average and or daily maximum reporting requirements for flow, surface overflow rates, number of discharge days per month and percent removal for BOD₅ and TSS.
 16. Establishing a daily maximum water quality based limit for *E. coli* bacteria and a daily maximum technology based limit for total residual chlorine.
- c. History: The most current relevant licensing permitting and other actions include the following:

April 6, 1998 – The Department issued WDL renewal #W002645-46-C-R for a five-year term.

Septemeber 30, 1998 – The USEPA issued NPDES permit renewal #ME0100625 with an expiration date of March 31, 2003.

December 1999 – The Department and the USEPA approved the December 1997 document *CSO Master Plan and Waste Water Treatment Plant Upgrade, Proposed Implementation Schedule* (with subsequent revisions).

June 2001 – The Department and the USEPA approved the implementation schedule in a document entitled, *Combined Sewer Overflow Facilities Plan Update* dated March 2001.

January 29, 2003 – The Town of Skowhegan submitted an application to the Department to renew the WDL for the facility.

2. PERMIT SUMMARY (cont'd)

- d. Source Description: The waste water treatment facility receives sanitary waste water flows from approximately 2,500 residential, commercial and industrial users within the Town of Skowhegan's boundaries. The permittee has indicated there are no major commercial or industrial users of the system that contribute more than 10% of the flow or pollutant loading to the waste water treatment facility.

The Town's sewer collection system is approximately 31 miles in length, has eight (8) pump stations and is approximately 65% combined and 35% separated. All eight pump stations are serviced by a portable generator and two of the pump stations are equipped with holding tanks. There are nine (9) remaining permitted CSO's associated with the collection system and are listed in Special Condition L, *Combined Sewer Overflows (CSO)*, of this permitting action. The facility is currently authorized to receive and introduce into the treatment process and or solids handling facilities up 7,500 gallons per day of septage from local septage haulers.

- e. Waste Water Treatment: The waste water treatment facility is in the midst of a facility upgrade. The primary objective is to mitigate CSO events by providing the facility with the ability to provide primary treatment and disinfection for flows that exceed a flow rate of 3,472 gallons per minute (5.0 MGD), the peak hourly capacity of the secondary treatment process. Other major project components included in the upgrade are new influent screening, secondary treatment improvements (including provisions for contact stabilization mode of operation, secondary clarifier density current baffles, and return sludge pumps), solids handling improvements (including new waste sludge pumps, sludge storage tank, sludge feed pumps, dewatering system and post-lime stabilization system), and chlorination/ dechlorination system improvements, as well as sewer separation and sewer replacement to reduce system inflow. Construction commenced in July of calendar 2002 and is expected to be substantially complete around February 1, 2004.

Secondary Treatment

The upgraded waste water treatment facility will be capable of providing a secondary level of treatment of up to 1.65 MGD as a monthly average (previously 1.44 MGD), and 5.0 MGD as a peak hourly flow. Flows are conveyed into the waste water treatment facility via an interceptor pipe measuring 24" in diameter and is capable of delivering up to 7.5 MGD to the treatment facility. During dry weather flows, a secondary level of treatment is provided via a conventional activated sludge treatment process that includes an aerated grit chamber, two primary clarifiers tanks (each 40 feet in diameter), two aeration tanks with mechanical surface aerators, two secondary clarifiers (each 50 feet in diameter) and two chlorine contact chambers where sodium hypochlorite is utilized as a disinfectant. The upgraded facility will be capable of dechlorinating the discharge if necessary. Secondary treated effluent flows will be measured via an ultra-sonic meter located after the chlorine contact chamber. Treated effluent is discharged to the Kennebec River via a reinforced concrete pipe measuring 24" in diameter without a diffuser.

2. PERMIT SUMMARY (cont'd)

The pipe extends approximately 150 feet out into the main channel of the river where there is approximately five feet of water over the crown of the pipe at mean low water. See Attachment A of this Fact Sheet for a schematic of the treatment facility.

Wet Weather Flows (Primary Treatment)

During wet weather events, flows up to 7.5 MGD will pass through the preliminary and primary treatment component of the plant (grit removal and primary clarification). At the flow distribution structure after the primary clarifiers, flow rates up to 3,472 gallons per minute (5.0 MGD) for up to one hour are conveyed to the secondary treatment process and the balance of the flow is conveyed to a dedicated storm flow chlorine contact chamber for disinfection with dechlorination capabilities. After disinfection, the primary treated flow is combined with the secondary treated flow (after the secondary treatment disinfection chamber) prior to discharge to the river via Outfall #001A. Measurement of flows receiving primary treatment will be obtained via an ultra-sonic flow meter located just after the storm flow chlorine contact chamber. See Attachment A of this fact Sheet for a schematic of the facility.

3. CONDITIONS OF PERMITS

Maine law, 38 M.R.S.A. Section 414-A, requires that the effluent limitations prescribed for discharges require application of best practicable treatment, be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System. In addition, Maine law, 38 M.R.S.A., Section 420, and Department Regulation Chapter 530.5, *Surface Water Toxics Control Program* requires the regulation of toxic substances at the levels set forth for Federal Water Quality Criteria as published by the U.S. Environmental Protection Agency pursuant to the Clean Water Act.

4. RECEIVING WATER STANDARDS

Maine law, 38 M.R.S.A., Section 467(4)(A)(7) indicates the Kennebec River at the point of discharge is classified as a Class B waterway. Maine law, 38 M.R.S.A., Section 465(3) describes standards for classification of Class B waters.

5. RECEIVING WATER CONDITIONS

Table 4-B1, *Rivers and Streams Impaired By Pollutants, Pollution Control Requirements Reasonably Expected to Result in Attainment* of a document entitled, The State of Maine, Department of Environmental Protection, 2002 Integrated Water Quality Monitoring and Assessment Report, published by the Department, indicates the Kennebec River in the vicinity of the outfall and downstream to the Fairfield-Skowhegan border is attaining the standards of its assigned classification with the exception of fishing (consumption) due to presence of dioxin in fish tissue.

5. RECEIVING WATER CONDITIONS (cont'd)

During the summers of calendar years 1997 and 1998, the Department conducted an ambient water quality study on the Kennebec River from the Towns of Anson-Madison to Abagadasset Point in the Town of Richmond. A model report entitled Kennebec River Model Report dated April 2000 was published by the Department. The model predicts that Maine water quality standards for dissolved oxygen will be maintained during summer time low river flow conditions at current point source loadings. Nutrient loadings and chlorophyll-a river data were evaluated as part of the model report. It was noted that nutrient loading may become a major water quality issue in the future. At the time of the study, the major source of phosphorous was from point sources with the SDW Somerset mill accounting for about 35% of the total point source load with a number of municipal waste water treatment facilities contributing smaller quantities. Therefore, this permitting action is establishing a seasonal (June 1 – September 30) monitoring requirement for total phosphorus to gather additional information on total phosphorus loadings to the river.

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Secondary Treated Effluent

- a. Flow: The monthly average flow limitation of 1.44 MGD in the previous licensing action is being increased to 1.65 MGD in this permitting action. The new flow value was developed after an engineering evaluation of the capacity of the secondary treatment process when designing the secondary bypass treatment system. The 1.65 MGD value is considered to be representative of the monthly average design flow for the waste water treatment facility.
- b. Dilution Factors - The Department established applicable dilution factors for the discharge in accordance with freshwater protocols established in Department Rule Chapter 530.5, Surface Water Toxics Control Program, October 1994. With a WDL flow limit of 1.65 MGD the dilution factors are as follows:

$$\text{Modified Acute}^{(1)} = 481 \text{ cfs} \Rightarrow \frac{(481 \text{ cfs})(0.6464) + (1.65 \text{ MGD})}{(1.65 \text{ MGD})} = 189:1$$

$$\text{Acute: } 1\text{Q}10^{(2)} = 1,923 \text{ cfs} \Rightarrow \frac{(1,923 \text{ cfs})(0.6464) + (1.65 \text{ MGD})}{(1.65 \text{ MGD})} = 754:1$$

$$\text{Chronic: } 7\text{Q}10^{(2)} = 2,359 \text{ cfs} \Rightarrow \frac{(2,359 \text{ cfs})(0.6464) + (1.65 \text{ MGD})}{(1.65 \text{ MGD})} = 925:1$$

$$\text{Harmonic Mean: } = 3,983 \text{ cfs} \Rightarrow \frac{(3,983 \text{ cfs})(0.6464) + (1.65 \text{ MGD})}{(1.65 \text{ MGD})} = 1,561:1$$

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

Secondary Treated Effluent

Footnotes:

- (1) Chapter 530.5 (D)(4)(a) states that analyses using numeric acute criteria for aquatic life must be based on 1/4 of the 1Q10 stream design flow to prevent substantial acute toxicity within any mixing zone. The 1Q10 is the lowest one day flow over a ten-year recurrence interval. The regulation goes on to say that where it can be demonstrated that a discharge achieves rapid and complete mixing with the receiving water by way of an efficient diffuser or other effective method, analyses may use a greater proportion of the stream design, up to including all of it. The Department has made the determination that the discharge does not receive rapid and complete mixing with the receiving water, therefore the default stream flow of 1/4 of the 1Q10 is applicable in acute statistical evaluations pursuant to Chapter 530.5.
 - (2) It is noted the dilution factors are slightly lower than the dilution factors calculated in the previous licensing action as the 7Q10 and 1Q10 critical low flow values were recalculated (lowered) in calendar year 2000 during the Department's update of the water quality model for the Kennebec River.
- c. Biochemical Oxygen Demand (BOD5) & Total Suspended Solids (TSS): - The previous licensing established monthly and weekly average BOD5 and TSS best practicable (BPT) concentration limits of 30 mg/L and 45 mg/L respectively, that were based on secondary treatment requirements of the Clean Water Act of 1977 §301(b)(1)(B) as defined in 40 CFR 133.102 and Department rule Chapter 525(3)(III). The maximum daily BOD5 and TSS concentration limits of 50 mg/L were based on a Department best professional judgment of BPT. All three concentration limits are being carried forward in this permitting action.

As for mass limitations, this permitting action is establishing monthly average and weekly average limitations based on a monthly average limit of 1.65 MGD. The limitations were calculated as follows:

$$\begin{aligned}\text{Monthly average: } & (1.65 \text{ MGD})(8.34)(30 \text{ mg/L}) = 413 \text{ lbs/day} \\ \text{Weekly average: } & (1.65 \text{ MGD})(8.34)(45 \text{ mg/L}) = 619 \text{ lbs/day}\end{aligned}$$

No daily maximum mass limitations (report only) for BOD5 or TSS were established in the previous licensing or this permitting action as doing so may discourage the town from treating as much waste water as possible through the secondary treatment system during wet weather events.

This permitting action also establishes a new requirement of 85% removal for BOD and TSS pursuant to Department rule Chapter 525(3)(III)(a&b)(3).

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

Secondary Treated Effluent

Monitoring frequencies for BOD and TSS of 2/Week are being carried forward from the previous licensing action and are based on Department policy for facilities with a monthly average flow greater than 1.0 MGD but less than 5.0 MGD.

- d. Settleable Solids - The previous license established weekly average and daily maximum concentration limits of 0.1 ml/L and 0.3 ml/L respectively. The Department has since reconsidered the monitoring requirements for settleable solids and has concluded that the weekly average monitoring is unnecessary and that a daily maximum limit of 0.3 ml/L provides sufficient information necessary to assess whether the treatment facility is providing best practicable treatment. Therefore, this permitting action is removing the weekly average monitoring requirement and carrying forward the daily maximum limit of 0.3 ml/L from the previous licensing action.
- e. Escherichia coliform bacteria: The monthly average and daily maximum *E. coli* bacteria limits of 64 colonies/100 ml and 427 colonies/100 ml in the previous licensing action are being carried forward in this permitting action and are based on the State of Maine Water Classification Program criteria for Class B waters.
- f. Total Residual Chlorine - The previous licensing action established a daily maximum BPT limit of 1.0 mg/L for the discharge. Limits on total residual chlorine (TRC) are specified to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. The Department imposes the more stringent of the water quality or technology based limits in permitting actions. End-of-pipe water quality based concentration thresholds may be calculated as follows:

Parameter	Acute Criteria	Chronic Criteria	Acute Dilution	Chronic Dilution	Acute Limit	Chronic Limit
Chlorine	19 ug/L	11 ug/L	189:1	925:1	3.6 mg/L	10 mg/L

Example calculation: Acute – 0.019 mg/L (189) = 3.6 mg/L

In the case of the Skowhegan facility, the calculated acute water quality based threshold is higher than 1.0 mg/l, thus the BPT limit of 1.0 mg/L is imposed as a daily maximum limit.

- g. Total phosphorus – This permitting action is establishing a 1/Week monitoring and reporting requirement for total phosphorus due to limited assimilative capacity of the Kennebec River for total phosphorus. Gathering such data will enable the Department to continually update the river model to predict potential algal blooms that may lead to depressed ambient dissolved oxygen conditions.

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

Secondary Treated Effluent

- h. pH Range- The previous licensing action established a pH range limitation of 6.0 - 8.5 standard units. The limits were based on Maine Board of Environmental Protection Policy regarding the certification of NPDES permits and were considered best practicable treatment limitations. This permitting action is shifting the range limit from 6.0 – 8.5 to 6.0 –9.0 standard units pursuant to a new Department rule found at Chapter 525(3)(III)(c). The new limits are considered BPT.
- i. Whole Effluent Toxicity (WET) and Chemical Specific Testing Maine Law, 38 M.R.S.A., Sections 414-A and 420, prohibits the discharge of effluents containing substances in amounts which would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the EPA. Department Rules, 06-096 CMR Chapter 530.5, *Surface Water Toxics Control Program*, set forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

WET and chemical specific (priority pollutant) testing, as required by Chapter 530.5, is included in order to fully characterize the effluent. This permit also provides for reconsideration of effluent limits and monitoring schedules after evaluation of toxicity testing results. The monitoring schedule includes consideration of results currently on file, the nature of the waste water, existing treatment and receiving water characteristics.

WET monitoring is required to assess and protect against impacts upon water quality and designated uses caused by the aggregate effect of the discharge on specific aquatic organisms. Acute and chronic WET tests are performed on invertebrate and vertebrate species. Chemical specific, or “priority pollutant (PP),” testing is required to assess the levels of individual toxic pollutants in the discharge, comparing each pollutant to acute, chronic, and human health water quality criteria.

The Chapter 530.5 regulation places the Skowhegan facility in the low frequency category for WET testing as the facility had a chronic dilution factor greater than 100:1 and in the high frequency testing category for chemical specific testing as the facility was licensed to discharge greater than 1.0 MGD.

A recent review of Skowhegan’s data indicates that they have fulfilled the Chapter 530.5 testing requirements to date. See Attachment B of this Fact Sheet for a summary of the WET test results and Attachment C of this Fact Sheet for a summary of the chemical specific test dates. It is noted that in the previous licensing action, Skowhegan was granted a reduction in WET and chemical specific testing to screening level testing only (one year prior to the expiration date of the license) as it meets the criteria to do so pursuant to Department rule Chapter 530.5(B)(7)(c)(iii).

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

Secondary Treated Effluent

Department Rule Chapter 530.5 and Protocol E(1) of a document entitled Maine Department of Environmental Protection, Toxicity Program Implementation Protocols, dated July 1998, states that statistical evaluations shall be periodically performed on the most recent 60 months of WET and chemical specific data for a given facility to determine if water quality based limitations must be included in the permit.

Chapter 530.5 §C(2) states when a discharge "*...contains pollutants at levels that have a reasonable potential to cause or contribute to an ambient excursion in excess of a numeric or narrative water quality criterion, appropriate water quality based limits must be established in the permit upon issuance.*"

Chapter 530.5 §C(3) also states that if data indicates that a discharge is causing an exceedence of applicable AWQC, then: "*(1) the Department must notify the licensee of the exceedence; (2) the licensee must submit a toxicity reduction evaluation (TRE) plan for review and approval within 30 days of receipt of notice and implement the TRE after Department approval; (3) the Department must modify the waste discharge license to specify effluent limits and monitoring requirements necessary to control the level of pollutant and meet receiving water classification standards within 180 days of the Department's approval of the TRE.*"

On March 21, 2003, the Department conducted a statistical evaluation on the aforementioned tests results in accordance with the statistical approach outlined in EPA's March 1991 document entitled Technical Support Document (TSD) for Water Quality Based Toxics Control, Chapter 3.3.2 and Maine Department of Environmental Protection Guidance, July 1998, entitled Toxicity Program Implementation Protocols. The results of the 3/21/03 WET and chemical specific evaluation indicates that the discharge does not exceed or have a reasonable potential to exceed the critical acute or chronic WET thresholds (0.5% and 0.1% respectively – mathematical inverse of the applicable dilution factors) for any of the WET species tested to date or any of the chemical specific elements/compounds tested to date.

The Department establishes the testing frequency for WET or chemical specific parameters that exceed or have a reasonable potential to exceed ambient water quality thresholds/criteria taking into consideration the frequency, timing and severity of the tests results that are at issue. In the absence of exceedences or reasonable potential to exceed critical thresholds or ambient water quality criteria and that Skowhegan continues to meet the criteria in Department rule Chapter 530.5(B)(7)(c)(iii), the Department has made a best professional judgment to maintain a screening level of testing, 1/Year for WET testing and 4/Year (four consecutive calendar quarters) beginning twelve (12) months prior to the expiration date of the permit.

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

Primary Treated Effluent

For those flows received at the treatment facility which are greater than that which can be treated to a secondary level of treatment, the Department has made a best professional judgment that primary treatment and disinfection constitutes appropriate and best practicable treatment. The only limitations that have been established for this waste stream are daily maximum limitations for *E. coli* bacteria and TRC. As with the limitations established for the secondary treatment process, the *E. coli* bacteria limits are based on the State of Maine Water Classification Program criteria for Class B waters and the TRC are based on a Department best professional judgment (BPJ) of BPT.

The reporting requirements for the parameters in Special Condition A(2) of this permit (Flow, Surface Loading Rate, Overflow Occurrences and BOD5 and TSS percent removal rates) are being carried forward in this permitting action. These are parameters the Department has deemed necessary to evaluate the performance of the primary treatment process.

7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

The Department acknowledges that the elimination of the nine (9) remaining CSO's in the collection system and the secondary bypass (primary treated only) of sanitary waste water is a costly long term project. As Skowhegan's waste water treatment facility and sewer collection system is upgraded and maintained in accordance to the CSO Master Plan and Nine Minimum Controls, there should be reductions in the frequency and volume of CSO activities and in the waste water receiving primary treatment only at the treatment plant and over time, improvement in the quality of the waste water discharge to the receiving waters over time.

As for the fish consumption advisory due to presence of dioxin, the Department is not aware of any information that indicates the discharge from the Town of Skowhegan's waste water treatment plant has constituents that are causing or contributing to the fish advisory.

The Department has made a best professional via a current (2000) water quality model that the increase in BOD5 and TSS as a result of the increased flow limit will have an insignificant impact on ambient water quality conditions.

As permitted, the Department of Environmental Protection has determined the existing water uses will be maintained and protected.

8. PUBLIC COMMENTS

Public notice of this application was made in the Morning Sentinel newspaper on or about January 30, 2003. The Department receives public comments on an application until the date a final agency action is taken on that application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to Chapter 522 of the Department's rules.

9. DEPARTMENT CONTACTS

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

Gregg Wood
Division of Water Resource Regulation
Bureau of Land and Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017

Telephone: (207) 287-7685

10. RESPONSE TO COMMENTS

During the period of March 24, 2003 through April 24, 2003, the Department solicited comments on the proposed draft Maine Pollutant Discharge Elimination System Permit modification to be issued to the Town of Skowhegan. The Department received comments from the permittee in a letter dated April 2, 2003. The Department has prepared responses to those comments as follows:

Comment #1: The permittee requested the Department increase the daily maximum total residual chlorine (TRC) limit from 1.0 mg/L to 2.0 mg/L as the facility has had considerable difficulty complying with *E. coli* bacteria limitations with an effluent concentration limit of 1.0 mg/L or less. The permittee has indicated that to ensure effective bacteria kills the facility will either operate as close to 1.0 mg/L as possible (risk violations) or chlorinate to approximately 1.2 to 1.6 mg/L TRC at the end of the chlorine contact chamber and use a temporary dechlorination system to reduce the final effluent to below the limit of 1.0 mg/L. The permittee has stated that establishing a daily maximum TRC concentration limit of 2.0 mg/L would ensure compliance with the bacteria limitations in the permit without the additional time, cost and regulations associated with using sodium bisulfite for dechlorination.

Response #1: The daily maximum TRC concentration limit of 1.0 mg/L was established as a best practicable treatment (BPT) limitation by the Department over 20 years ago. A cursory review of the compliance data for bacteria and TRC for facilities discharging to Class B waters in Maine with similar limits to the Skowhegan facility indicates a majority of the facilities have been able to comply with both bacteria and TRC limitations. The Department is not prepared to modify the daily maximum BPT limit of 1.0 mg/L for TRC at this time. The Department will likely be reevaluating the BPT limitation in the next twelve-month period as part of a report to the State legislature as it relates to the Department's most recent legislative proposal to reduce the daily maximum bacteria standards for Class B and Class C waterways. Should the Department revise the BPT limitation to something less stringent, this permit may be reopened per Special Condition N, *Reopening of Permit For Modifications*, to incorporate the new limitation.

10. RESPONSE TO COMMENTS

Comment #2: The permittee requested the Department modify footnote #8 of Special Condition A, *Effluent Limitations and Monitoring Requirements*, to only require composite sampling for BOD and TSS if a single overflow occurrence exceeds 60 minutes or intermittent discharges exceed a total of 120 minutes, similar to the requirements for grab samples for bacteria and TRC. The permittee suggested alternate language to make the footnote more clear.

Response #2: The permittee is correct in that the Department intended the footnote to only require the permittee to sample and analyze a composite sample for BOD5 and TSS if a single overflow occurrence exceeds 60 minutes or intermittent discharges exceed a total of 120 minutes. The Department has incorporated the language change as suggested by the permittee.