

Status of Mercury Discharged from Wastewater Treatment Facilities In Maine



A Report by the Department of Environmental Protection

Submitted to the Joint Standing Committee on Natural Resources January 15, 2001

DEPLW2001-5

TABLE OF CONTENTS

Section I.	IntroductionPage 1
Section II.	Interim Rule and Data EvaluationPage 2
Section III.	Compliance Related ActivitiesPage 5
Section IV.	Mercury Field SamplingPage 6
Section V.	Pollution Prevention Plan DevelopmentPage 7
Section VI.	Pollution Prevention UpdatePage 8
Section VII.	Next StepsPage 10
	Appendix A. Approved Interim RulesPage 11
	Appendix B. Mercury Interim LimitsPage 18 (Alphabetical)
	Appendix C. Mercury Interim LimitsPage 23 (Concentration)
	Appendix D. Pollution Prevention Progress Survey FormPage 28

I. INTRODUCTION

In 1999, the Department of Environmental Protection (DEP) submitted a report to the Joint Standing Committee on Natural Resources regarding discharges of mercury into waters of the state. The report encompassed a number of mercury issues, including new laboratory analysis and sampling methods; testing results from wastewater treatment plant discharges; mercury levels in receiving waters of the state; and sources of mercury in wastewater treatment facilities. Briefly, the report concluded that new sampling techniques and laboratory methods can reliably detect mercury levels in wastewater effluent and ambient surface waters in nanograms per liter (parts per trillion). Given these new sampling and analysis techniques, many municipal and industrial wastewater treatment plants would not be in compliance with a 1971 provision of Maine Law, 38 MRSA § 420, which prohibits the discharge of mercury in any concentration that would increase the natural concentration of mercury in the receiving water. (See "Mercury in Wastewater: Discharges to Waters of the State 1999", a report by the Department of Environmental Protection, February 1, 1999.)

During the First Regular Session of the 119th Legislature, PL 1999, Chapter 500 was enacted. This legislation required the DEP to implement three new mercury strategies:

- adopt a rule to establish interim mercury discharge limits for all licensed wastewater treatment plants,
- develop model pollution prevention plans that would be implemented by each licensed facility pending development of a new mercury standard, and
- recommend a proposed statewide standard for mercury that is protective of human health, aquatic life, and wildlife by January 15, 2001.

The interim discharge limits and the pollution prevention plans are scheduled to sunset on October 1, 2001. This legislation also required the DEP to submit reports to the Natural Resources Committee in January 2000 and January 2001 on the status of mercury discharges from facilities subject to the interim mercury limits, and the status of their efforts at implementing the mercury pollution prevention plans.

On January 14, 2000, the DEP submitted a year end summary report to the Natural Resources Committee entitled, "Status of Mercury from Wastewater Facilities in Maine". This report summarized the results of mercury sampling at more than 100 municipal and industrial wastewater treatment plants in Maine, and discussed the status of the interim mercury effluent rule and implementation efforts to reduce sources of mercury in wastewater treatment plant effluent.

This 2001 report summarizes the interim limits that have been established, the efforts to implement the model pollution prevention plans, the activities to support compliance with the interim limits, the pollution prevention progress surveys, and the next steps for the DEP in calendar year 2001.

II INTERIM RULE AND DATA EVALUATION

The Department utilized a stakeholder process to assist with developing rules and establishing interim effluent limits for discharges of mercury, A group of 16 people representing various municipal, industrial, environmental, and consulting interests met three times during July and August 1999. The stakeholder group considered several issues necessary to fulfill the intent of Chapter 500, including the following:

- Identifying discharge sources that would require interim effluent limits;
- Determining the amount of testing necessary to establish interim effluent limits;
- Defining the statistical methods to be used to set interim effluent limits;
- Providing for adjustment of interim effluent limits when certain conditions arise;
- Establishing the amount of testing needed to evaluate compliance with interim effluent limits;
- Identifying preliminary steps to be taken in the event of non-compliance with interim effluent limits; and
- Providing for implementation of mercury pollution prevention plans.

The stakeholder group recognized that, as of the date Chapter 500 was enacted, many wastewater treatment facilities had done little or no mercury testing using the so-called "clean" methods. This highlighted two issues that needed to be addressed in order to establish interim effluent limits. First, the rule would need to require that each facility conduct at least a minimum number of clean mercury tests. The group further determined that scheduling the sampling over several months would allow consideration of seasonal variations in mercury discharges. Second, the group recognized that methods of statistical evaluation are most appropriate for situations where a large number of test results are available. Smaller numbers of tests create more statistical uncertainty and the resulting limits are less accurate in estimating all conditions that may arise. The method used in the rule represents a "best fit" for the number of mercury tests that could reasonably be conducted by the individual wastewater treatment facilities.

Chapter 519 of the Department's rules, "Interim Effluent Limitations and Controls for the Discharge of Mercury", was adopted by the Board of Environmental Protection in January 2000, and became effective on February 5, 2000. A copy of the rule is attached as Appendix A. The rule requires the Department to establish interim mercury effluent limits for all municipal and industrial discharge sources. Facility operators are required to conduct compliance testing through October 1, 2001, when the rule sunsets. The rule also incorporates provisions of Chapter 500 requiring the development of pollution prevention plans. Municipal and industrial facilities covered by Chapter 519 are placed in one of three groups; Group I, those facilities subject to effluent toxicity testing required by Chapter 530.5 of DEP's rule and Group II, those which because of smaller potential for adverse toxic effects are not subject to the toxicity rule. A third group is also established to allow the Department to require other types of discharge sources to have mercury limits on a case by case basis.

In accordance with Chapter 519, interim effluent limits were set April 1, 2000 provided a discharge source had completed a minimum number of effluent tests as required by the rule.

Group I facilities were required to complete four tests and Group II facilities were required to complete three tests. The level of cooperation by individual facilities in conducting the necessary testing has been very good, and most completed testing in a timely fashion. Some of the required testing was performed by the DEP. This sampling effort is described in more detail in section IV of this report. Following establishment of the effluent limits for mercury, each facility is required to conduct compliance testing at a rate of 4 or 2 tests per year for Groups I and II, respectively.

At total of 157 municipal and industrial discharge sources have been assigned interim effluent limits for mercury under Chapter 519. Of these, there are 92 in Group I and 65 in Group II. A list of the effluent limits is provided in Appendices B & C, sorted both alphabetically by facility name and by the numeric value of the average effluent limits. As can be seen from these lists, there is a great deal of variability in the range of these limits. Several facilities have a default average limit of 4.5 ng/L (parts per trillion). These facilities have limits derived from test results that are consistently very low. Conversely, a number of facilities experienced a single test value considerably greater than other results for that facility. This situation causes a large degree of statistical variability, resulting in much higher effluent limits.

In addition to the presentation of the effluent limits in Appendices B & C, the Department has examined the limits and raw data from all testing reported through mid-December 2000 to determine if trends exist among groups of facilities, over time or in other ways. The limits were compared using the average and median values for various groups of facilities. (The median is the value in a data set that represents the middle or 50th percentile of that group of data. This measure tends to reduce the undue influence of a few high or low values that may skew an average.) First, the type of treatment and source of wastewater, municipal or industrial, were considered, and the findings are presented in the Table I below.

Table I.

Grouping	Number of facilities	Average of all limits	Median of all limits
		(ng/L)	(ng/L)
All facilities	157	24.4	12.4
Municipal activated sludge treatment	74	18.3	10.3
Municipal lagoon treatment	26	13.3	9.1
Municipal fixed media treatment	10	24.9	17.9
Municipal sand filter treatment	11	13.5	9.1
Municipal primary only treatment	9	114.6	50.1
Industrial biological treatment	17	17.2	12.9
Industrial physical or chemical treatment	10	41.8	32.0

Average Effluent Limits by Facility Type

Two groups, municipal facilities providing only primary treatment and industrial facilities providing physical or chemical treatment, collectively have limits significantly higher than other groups. The municipal primary-only facilities are all relatively small towns discharging to marine waters in high dilution locations. These facilities operate under variances from secondary treatment requirements pursuant to section 301(h) of the Federal Clean Water Act. Due to the lesser level of treatment, it is not unexpected that mercury levels are higher. The industrial facilities represent a diverse group with several different types of products and treatment methods. Correspondingly, the mercury limits exhibit great variability, both between facilities and the individual results obtain by each facility. As an example, one facility in this groups recorded the highest single test at 246 ng/L and also one of the lowest results at no detectable concentration mercury at 0.2 ng/L.

Aside from the two groups described above, no particular trends are obvious in grouping by treatment type. Municipal lagoon systems have somewhat lower averages. One subset, five aerated stabilization ponds have limits that are consistently low.

In addition to type of treatment, the Department also examined municipal treatment facilities, excluding those with only primary treatment, to determine if the design capacity had any relationship to mercury limits. The capacity of the facility is generally an approximate indication of the size of the community the facility serves. A larger community generally will have a greater diversity of industrial and commercial activities. A few facilities serve a single large

industry and in these cases the facility size is not typical of other similarly sized municipal facilities. Table II below presents the limits for all secondary level municipal facilities grouped by design capacity in million gallons per day.

Table II.

Design capacity (in millions of gallons per day [MGD])	Number of facilities	Average of all limits	Median of all limits
		ng/L	ng/L
All secondary facilities	121	17.3	11.7
Up to 0.05 MGD	15	13.4	9.1
0.05 to 0.15	17	13.4	13.5
0.15 to 0.5	28	16.5	9.8
0.5 to 1.5	28	18.5	15.6
1.5 to 5.0	25	23.7	12.7
5.0 and up	8	11.9	8.2

Average Effluent Limits for Municipal Secondary Wastewater Facilities

These data suggest that the highest mercury concentrations occur in two groups of mid-sized municipal treatment facilities. In comparing the underlying information for individual facilities, considerable differences can be seen without apparent reason. Communities similar in size and treatment technology, may have greatly different effluent mercury concentrations. Several communities with consistently higher test results have no identifiable factors that would set them apart from other communities that produce effluents with significantly lower mercury levels. Further, many facilities have reported test results that vary considerably over time, sometimes as a high "spike" or in other situations, alternating high and low results. The different patterns in the performance of various facilities presents some conflicts that are not easily explained, given the current level of understanding of mercury sources and controls and the amount test data available for most facilities. In order to be able to make statistically sound judgements, more test data would be necessary to accurately characterize "normal" variations in mercury discharges as well as those attributable to longer term factors such as seasonal changes or the effectiveness of pollution prevention activities.

III. COMPLIANCE RELATED ACTIVITIES

In addition to requiring interim effluent limits for mercury, Chapter 519 provides for responses to non-compliance in the event that compliance testing show a violation of the limit. In response to a first time violation, the Department expects the discharge source to conduct two additional tests to determine if the high test was an isolated incident. The Department will also review the facility's progress in implementing its mercury pollution prevention plan to determine if reasonable progress is being made on the efforts described in the original plan. The facility will

also be asked to review its operation and possible sources of mercury that could have contributed to the violation. Following these reviews and the additional testing, the facility is expected to provide the Department with a status report. If the violation has not recurred, or the cause of the violation has been addressed, the matter will normally be considered to be closed, with routine compliance monitoring to be continued.

If a facility reports a second or continuing violation, the Department will require a meeting to discuss the situation and develop a specific plan to reduce mercury discharges. Because each situation of repeat violations will require unique responses, this meeting will be used to tailor an action plan to the needs of the individual facility. In general, the Department will expect that the facility's mercury pollution prevention plan be revised and expanded. Additional effluent testing will also be necessary and testing may be needed on the influent or source side of the treatment facility to help determine the sources of mercury.

As of mid December 2000, the Department has identified nine facilities that have exceeded their interim effluent limits. All of these are municipalities. Of these nine, three have experienced continued violations when additional tests were conducted.

The Department has examined some influent test data provided voluntarily by several treatment facilities. While not extensive, this information suggests that influent concentrations range from 100 to several hundred ng/L. Accordingly, treatment facilities typically achieve mercury removals in excess of 90%. This mercury removal occurs passively and is not subject to significant control by the treatment facility operations. To actively remove mercury at a wastewater treatment facility requires very complex and sophisticated treatment technologies at extremely high costs. And in that event, mercury that is removed in a treatment facility ends up in the sludge. The only effective means of reducing mercury discharges to waters of the State is to prevent the introduction of mercury into wastewater streams.

IV. MERCURY FIELD SAMPLING

Members of the staff of the Department's Bureau of Land and Water Quality Division of Water Resource Regulation and Division of Engineering and Technical Assistance have conducted two rounds of effluent mercury sampling at municipal and industrial wastewater treatment facilities in Maine. The first round of testing was conducted during the fall of 1998 with 122 samples taken from 91 different dischargers. The treatment facilities chosen for the first round of testing included all municipal facilities covered by the Surface Waters Toxics Control Program¹ and a selected sample of industrial treatment facilities.

In July of 1999, Department staff conducted six, two-hour training sessions on "Clean Sampling Techniques" at treatment facilities in Ellsworth, Saco, Presque Isle, Newport, Brunswick and Wilton. These free training sessions gave wastewater facility operators an opportunity to observe and practice the sampling techniques required by new State and Federal rules. This

¹ Chapter 530.5 of the Rules of the Maine Department of Environmental Protection.

training helped to ensure that mercury samples collected at wastewater facilities in Maine would not be contaminated by improper sample collection procedures and that the data from those samples could be reliably used for scientific and regulatory purposes.

A second round of sampling was conducted by the Department in the summer and fall of 1999 when 198 samples were collected from 93 wastewater facilities. This testing was done at all municipal and industrial facilities not included in the first round of testing as well as for several facilities considered Overboard Discharges by the Department.

In addition to the sampling done by Department staff members, facilities have been collecting samples to assist in developing their interim limits and verifying compliance with those limits. In all, the Department has data from approximately 900 samples.

V. POLLUTION PREVENTION PLAN DEVELOPMENT

In the late fall of 1999, the Department of Environmental Protection developed two model pollution prevention plans for both industrial and municipal wastewater treatment facility operators to use as a guide in developing their own plan. Copies of these model plans were mailed on December 30, 1999 to all effected facilities.

To facilitate the development of these plans, the Department conducted an in-house training session on February 1, 2000 to ensure that all Department staff had a common understanding of how these plans were to be developed. Then, the Department offered free training on how to develop a pollution prevention plan to the wastewater treatment plant operators. Training sessions were conducted at 5 different locations across the State during the months of February and March, with approximately 100 operators receiving training from Department staff.

Department staff found these training sessions to be invaluable due to the interaction that took place between staff and operators. This communication helped the Department greatly in understanding the challenges that operators would face in developing and implementing their pollution prevention plans.

Since December of 1999, facilities have developed their own pollution prevention plans, which at a minimum, have contained an education component and a self-assessment component. As requested, all of these facilities have notified the Department that their plans have been developed and that they had begun to implement their plans as of this past spring.

Department staff have had the opportunity to review a number of facility's pollution prevention plans. In many instances the facilities have been very creative in developing and implementing their pollution prevention plans. In some cases facilities have developed mercury work groups, which are comprised of business and citizens, to help the facility staff identify opportunities that exist in the community for reducing the discharge of mercury to the sewer system. Some operators have written articles for local newspapers to help educate users on the problem of mercury contamination. Other facilities have developed packages of educational materials to share with municipal and industrial customers. Operators have made visits to certain customers

to discuss the mercury problem and help the customer identify some mercury reduction opportunities. All of these are examples of the commitment that these operators have toward reducing mercury discharges and environmental protection in general.

As calls have come in to the Department for assistance concerning the pollution prevention plans, or as facilities have had failing compliance tests, the Department staff have provided technical assistance in reviewing the existing pollution prevention plans and discussing modifications with the operators.

VI. POLLUTION PREVENTION IMPLEMENTATION UPDATE

In accordance with the requirements of the Public Law of 1999, Chapter 500, the Department has distributed surveys to the municipalities and industries that are subject to this law and requested them to provide the Department with an update of their progress concerning mercury pollution prevention activities. These surveys were distributed in November 1999 and November 2000. The results from the 1999 survey were summarized in the January 14, 2000 report to the legislature.

In November of 2000, 159 surveys were mailed to the municipalities and industries subject to this law. The Department received 139 surveys back from these facilities. The Department continues to monitor the quality of the pollution prevention plans and the progress the facilities have made implementing them as warranted based on the facilities performance. A copy of the survey form has been provided in Appendix D. The following graph and chart are a compilation of the 1999 and 2000 surveys.

	Pos	itive		Pos	itive
Questions	Responses		Questions	Responses	
	1999	2000		1999	2000
Awaiting Model Plan	123	65	Relative Contribution of Each	17	84
Designated Lead Person	54	124	Identified Tools and Options for each Source	13	93
Developed a Mission Statement	16	126	Established Priority Actions for each Source	11	86
Developed Goals & Measurement Strategies	13	126	Established Employee Training & Public Education	14	98
Baseline Information Strategy	18	117	Developed Pollution Prevention Objectives for each Source	8	73
Identified Internal Sources	36	136	Developed Implementation Plan for each Source	9	52
Identified External Sources	30	124			

Mercury Pollution Prevention Survey Results



VII. NEXT STEPS

Throughout calendar year 2001, the Maine DEP will be continuing its efforts to reduce the amount of Mercury discharged by municipalities and industries by conducting the following activities:

- 1) Continued implementation of the new regulations by ensuring compliance with all established interim limits.
- 2) Providing technical assistance to municipalities and industries to assist them in implementing their pollution prevention plan.
- 3) Providing technical assistance to municipalities and industries to assist them in responding to violations of their mercury effluent limits

APPENDIX A

Interim Mercury Rule

Chapter 519: Interim Effluent Limitations and Controls for the Discharge of Mercury

Summary: This rule establishes controls on the discharge of mercury to the surface waters of the State through interim effluent limits and implementation of pollution prevention plans. It sets testing requirements for certain licensees and the procedures the department will use to evaluate test results in order to calculate interim effluent limits. The rule also contains requirements for continued testing necessary to determine compliance with interim effluent limits. This rule expires on October 1, 2001.

- 1. **Purpose and scope.** The purpose of this rule is to control the discharge of mercury to the surface waters of the State through implementation of pollution prevention plans, effluent testing requirements and establishment of interim effluent limits for some licensees.
 - **A. Applicability.** This rule applies to all persons licensed or permitted pursuant to 38 MRSA §413 to discharge pollutants to the surface waters of the State except as described below. For the purposes of this rule, the term licensee also means permittee.
 - (1) Categorical exclusions. This rule does not apply to the following categories of licensees: combined sewer overflows, snow dumps, pesticide applications, and over board discharges licensed pursuant to 38 MRSA §413. Except, however, specific members of these categories may be required by the department to comply with this rule on a case by case basis pursuant to Section 1(C), below. (The categories of licensees used in this rule are the same as those listed in 38 MRSA §353-B.)
 - (2) Individual exclusions. Any licensee that demonstrates to the department's satisfaction that it does not discharge wastewaters that have, or come in contact with, compounds or materials containing mercury may be exempted from the requirements of this rule. If the sole source of mercury in a discharge is due to incoming water taken from a natural body of water, an exemption may be granted by the department.
 - (3) Multiple discharge points. In the event that a discharge license or permit authorizes discharges in more than one category, only the relevant requirements of this rule are applicable to that category. Where a single licensee has multiple discharge points in the same category and with the same characteristics, the department may permit sampling of one point as being representative of all such discharge points.
 - **B.** Pollution prevention requirements. All licensees subject to this rule shall develop and implement pollution prevention plans consistent with model plans developed by the department. Plans are to be developed within 90 days of receiving a model plan from the department. If warranted by the complexity of pollution prevention needs for an individual licensee or category of licensees, the department upon request may extend the time for completion of those pollution prevention plans. The department may require that licensees submit periodic reports of actions taken to implement pollution prevention plans. Upon completing its individual pollution prevention plan, each licensee shall notify the department of the availability of the plan and shall provide a copy of the plan to the department upon request. Unless exempted by the department, each licensee shall provide the department information concerning implementation of pollution prevention plans by December 15, 1999 and December 15, 2000.
 - **C. Interim effluent limits for the discharge of mercury.** The department shall issue interim effluent limits to licensees in the following categories:

- Group I. Licensees required as of the effective date of this rule to conduct toxicity sampling pursuant to the requirements of Chapter 530.5 of the department's rules, the Surface Water Toxics Control Program;
- (2) Group II. All other licensees that are publicly owned treatment works or discharges of industrial process wastes; and
- (3) Group III. Any other individual licensee or category of licensees determined by the department to have the potential to discharge concentrations of mercury that are similar to those found in discharges from licensees in Groups I or II above, based on either information regarding the sources of wastes discharged or the results of sampling.

2. Information requirements

- **A. Background information.** Licensees subject to this rule shall provide information requested by the department regarding their discharges to allow the department to characterize the potential for the control of discharges of mercury. The department shall provide questionnaires, surveys or other forms for this purpose.
- **B.** Sampling information. Licensees required to perform effluent testing for mercury shall provide information on forms provided by the department regarding operating conditions at time of sample collection.
- **C. Departmental sampling.** For those categories of licensees not required by this rule to conduct mercury testing, the department may conduct representative sampling in order to determine the concentrations of mercury discharged, if any, by each category. Based on this and other information, the department may impose interim effluent limits on individual licensees or categories of licensees and or require effluent monitoring for mercury.

3. Testing requirements

- A. Sampling and test methods. All samples for mercury testing must be representative of the final discharge to the receiving water and collected and analyzed for total mercury using EPA Methods 1669 and 1631, respectively, and in accordance with instructions provided by the department. Testing must be done using grab samples unless otherwise approved by the department. The results of all mercury testing must be provided to the department within 10 business days of their availability.
- **B.** Test frequencies. For the purposes of establishing interim effluent limits for the discharge of mercury, the following minimum numbers of tests must be completed for the respective groups referred to in Section 1(C). Tests conducted by the department may be credited toward the total number of tests required for each licensee.
 - 1. Group I: Not less than 4 tests;
 - 2. Group II: Not less than 3 tests; and
 - 3. Group III: Not less than 3 tests.

Unless otherwise approved by the department, test samples must be collected at an interval of at least 30 days between samples. The department may proportionally reduce the required number of tests for licensees that discharge on a seasonal or intermittent basis.

C. Additional testing. For individual licensees, the department may require additional tests to be conducted if necessary to establish interim effluent limits where the minimum number of tests

produces results that are of questionable validity or are not representative. Licensees wishing to conduct more than the required number of tests may do so, and the department shall evaluate all valid results deemed to be representative of the discharge when establishing interim effluent limits. Licensees may submit to the department information documenting why certain past tests are not representative of normal facility operation or were improperly conducted. Based on such information, or on its own initiative, the department may exclude those individual test results in calculating interim effluent limits. In the event exclusion of tests results in less then the minimum number of tests required above, the licensee shall conduct additional tests as soon as possible.

- **D. Prior test results.** The results of tests conducted using EPA Methods 1669 and 1631 prior to the effective date of this rule, including tests conducted by the department, may be used to fulfill the minimum testing requirement above.
- **E.** Completion of testing. Licensees that have not previously done so must complete the minimum number of tests required above prior to April 1, 2000, or for licensees in Group III within 120 days of being notified by the department that testing is required.
- **4.** Establishment of interim limits for the discharge of mercury. Using the procedures in this Section, the department shall establish interim average and maximum effluent limits for the concentration of mercury discharged by each licensee identified pursuant to Section 1(C). These limits must be based upon and no less stringent statistically than past discharge levels as determined through testing required by Section 3.
 - **A. Timing.** The department shall establish interim effluent limits after the minimum number of tests required in Section 3 have been completed.

B. Procedures.

- (1) Average limits. The department shall determine the interim average effluent limit for each licensee, as an average concentration, as follows. Using all valid test results for each licensee, a value equal to the standard error of the mean is added to the mean effluent concentration. The standard error of the mean is determined from the test results for each licensee by computing the standard deviation and dividing that value by the square root of the number of tests done. This value will be adjusted with a multiplier to reflect a 95% level of probability.
- (2) In the event that the interim average effluent limit as calculated above is less that 4.5 ng/L for an individual licensee, that licensee will be assigned an interim average effluent limit of 4.5 ng/L.
- (3) Maximum limits. The department shall determine the interim maximum effluent limit, as a maximum concentration in any sample, as follows. The interim average effluent limit as determined in (1) or (2) above shall be multiplied by a factor of 1.5 to establish the interim maximum effluent limit.
- (4) Additional information. Individual licensees may submit additional information for the department's consideration in setting interim effluent limits. Such information may include reductions in flow due to water conservation plans, seasonal variations and changes in levels of production. The department may adjust interim effluent limits accordingly if it determines

that this information would significantly change the effluent variability as determined pursuant to this section.

C. Notification. Upon determination of interim effluent limits, the commissioner shall notify the licensee in writing.

5. Effect of interim effluent limits for the discharge of mercury

- **A. Modification of license.** Notice of interim effluent limits by the commissioner to a licensee constitutes a modification of the licensee's waste discharge license or permit and is a final agency action.
- **B.** Water quality criteria. Interim effluent limits for the discharge of mercury shall not authorize any discharge of mercury that would cause or contribute to receiving water concentrations of mercury that exceed any water quality criteria published by EPA, in the Federal Register of December 10, 1998, pp. 68354, et. seq.

6. Adjustment of interim effluent limits for the discharge of mercury

- **A. Basis for adjustment.** After interim effluent limits established by the commissioner are effective, a licensee may, with proper documentation, request adjustment of those limits for the reasons listed below. The department may approve an adjustment if it determines that the circumstances presented may result in an interim effluent limit that is significantly different from that calculated pursuant to Section 4(B).
 - 1. Water conservation. A licensee has implemented permanent water conservation practices that result in a lesser volume of discharge. A reduction in discharge volume may not result in a greater total quantity of mercury being discharged.
 - 2. Production changes. A licensee institutes different levels or types of production or accepts new sources of influent wastewater. Such changes must be mitigated or offset to the maximum extent possible with implementation of best management or pollution prevention practices to reduce or prevent the introduction of mercury. A production change may result in an increase in the concentration or quantity of mercury discharged, but not both.
 - 3. Seasonal changes. Seasonal changes may cause a significant and uncontrollable variation in the performance of a treatment facility. A licensee's intake water may experience a higher concentration of mercury during certain seasons of the year. Higher seasonal rainfall may increase the flow through a wastewater treatment facility causing additional mercury loadings to the facility.
- **B. Procedures.** In making adjustments to interim effluent limits, the department shall, to the extent possible, utilize the procedures described in, or similar to, Section 4.
- **C.** Additional testing. In order to support adjustment of interim effluent limits, the department may require a licensee to conduct more testing than otherwise required by this rule.

7. Monitoring to determine compliance with interim effluent limits for the discharge of mercury

A. Monitoring frequencies. In order to determine compliance with interim effluent limits, each licensee shall conduct effluent testing for mercury at the following minimum frequencies for the respective groups referred to in Section 1(C).

- (1) Group I: Not less than 4 tests per year;
- (2) Group II: Not less than 2 tests per year; and
- (3) Group III: Not less than 2 tests per year.

All tests must be conducted, analyzed and reported using the methods specified in Section 3. Unless otherwise approved by the department, test samples must be collected at an interval of at least 60 days between samples. For those licensees in Groups II and III, samples must be collected in alternating calendar quarters such that samples will be obtained in all four calendar quarters over the period of two years. The department may proportionally reduce the required number of tests for licensees that discharge on a seasonal or intermittent basis.

Compliance monitoring tests will not change the interim effluent limits established pursuant to Section 4.

- **B. Evaluation of compliance**. Compliance with interim effluent limits shall be determined as follows.
 - (1) For interim average effluent limits, the department shall for each licensee maintain an average of all valid tests done pursuant to this rule. This will include both tests done to establish effluent limits and subsequent compliance monitoring tests. A licensee shall be in compliance with the interim average effluent limit if the cumulative average is equal to or less than the concentration established by the department pursuant to Section 4.
 - (2) For interim maximum effluent limits, a licensee shall be in compliance if the test result of each valid individual sample is equal to or less than the interim maximum effluent limit established by the department pursuant to section 4.
- **C. Response to non-compliance.** In the event a licensee's average or maximum concentration exceeds a respective interim effluent limit, the department shall notify the licensee in writing. In response to the notification of non-compliance:
 - (1) The licensee shall conduct additional testing at a frequency specified by the department in order to determine if the non-compliance is due to a limited incident or a continuing trend;
 - (2) If requested by the department, the licensee shall, within 30 days of being notified, meet with the department to review its existing pollution prevention plan as required by Section 1(B); and
 - (3) Within 30 days of meeting with the department, the licensee shall, if requested by the department, submit for review and approval, a revised pollution prevention plan designed to identify and control the cause(s) of the non-compliance with the interim effluent limit.

Nothing in this Section limits the ability of the department to take any other actions authorized by law to address non-compliance with an interim effluent limit or any other provision of a law administered by the department or any order, rule, license or permit, approval or decision of the Board or Commissioner or decree of the Court.

D. The department may require those licensees granted exclusions under Section 1(A) to submit periodic reports or certifications demonstrating that conditions supporting the initial exclusion still exist. In the event any licensee contemplates or becomes aware of any change that could increase the quantity or concentration of mercury in its discharge, it shall notify the department immediately.

8. **Repeal.** This rule is repealed on October 1, 2001, and the interim effluent limits established pursuant to this rule will no longer be in effect.

Authority: 38 MRSA §§ 341-D and 420 (1-A); PL 1999, c. 500

Effective date: February 5, 2000

APPENDIX B

Interim Mercury Limits (Alphabetically)

NPDES Number	Facility Name	Average Limit in p.p.t.	Maximum Limit in p.p.t.
ME0002216	A.E.STALEY	11.8	17.6
ME0101389	ANSON-MADISON	7.1	10.6
ME0100013	AUGUSTA	15.7	23.6
ME0023329	AVEC	72.5	108.7
ME0101320	BAILEYVILLE	16.6	24.9
ME0100781	BANGOR	11.3	16.9
ME0101214	BAR HARBOR (MAIN PLANT)	9.9	14.8
ME0100021	BATH	4.9	7.4
ME0101664	BAYVILLE VILLAGE CORP.	46.1	69.2
ME0023710	Beaver Wood (Livermore Falls)	25.0	37.5
ME0101532	BELFAST	27.6	41.5
ME0101397	BERWICK	5.2	7.7
ME0101176	BETHEL	10.2	15.2
ME0100048	BIDDEFORD	14.6	22.0
MEU507581	BIDDEFORD POOL	13.8	20.7
ME0100056	BINGHAM	17.4	26.2
ME0101231	BLUE HILL	13.5	20.3
ME0100064	BOOTHBAY HARBOR	32.6	48.8
ME0100072	BREWER	4.5	6.8
ME0100102	BRUNSWICK	58.9	88.4
ME0102113	BRUNSWICK LANDFILL	4.5	6.8
ME0100111	BUCKSPORT	108.8	163.2
ME0100129	CALAIS	16.7	25.1
ME0100137	CAMDEN	83.4	125.1
ME0102067	CANTON	4.5	6.8
ME0102121	CAPE ELIZABETH	6.5	9.8
ME0100145	CARIBOU	18.3	27.5
ME0101192	CASTINE	13.5	20.2
ME0022055	CHAMPION (COSTIGAN STUD MILL)	9.7	14.6
ME0002160	CHAMPION INTERNATIONAL	4.5	6.8
ME0101699	CLINTON	4.5	6.8
ME0000256	CMP FLP MASON STA 019	16.6	25.0
ME0000272	CMP FLP WYMAN STA 004	36.0	54.0
ME0002399	CONTROL DEVICES	4.5	6.8
ME0100153	CORINNA	5.7	8.6
ME0100161	DANFORTH	14.3	21.4
ME0101281	DEGREEGOIRE (BAR HARBOR)	43.2	64.8
ME0100501	DOVER-FOXCROFT	16.9	25.3
ME0102156 ME0100200	EAST MACHIAS EASTPORT MAIN PLANT	37.3 236.9	55.9 355.4
ME0100889	ELLSWORTH	32.9	49.3

NPDES Number	Facility Name	Average Limit in p.p.t.	Maximum Limit in p.p.t.
ME0100218	FALMOUTH	22.5	33.8
ME0101249	FARMINGTON	27.4	41.0
ME0100226	FORT FAIRFIELD	49.3	74.0
ME0002020	FORT JAMES	18.5	27.8
ME0102369	FORT KENT	19.6	29.4
ME0000159	FRASER PAPER	5.7	8.6
ME0101036	FREEPORT	24.0	36.0
ME0101982	FRENCHVILLE	5.0	7.4
ME0101702	GARDINER	12.7	19.1
ME0001872	GEORGIA PACIFIC CORP	35.6	53.3
ME0102318	GRAND ISLE	4.5	6.8
ME0000175	GREAT NORTHERN PAPER, EAST	4.5	6.8
ME0000167	GREAT NORTHERN PAPER, WEST	4.5	6.8
ME0101516	GREAT SALT BAY SANITARY DISTRICT	20.9	31.3
MEU507044	GSBSD, DAMARISCOTTA MILLS	12.4	18.5
ME0102032	GUILFORD/SANGERVILLE	25.8	38.7
ME0101443	HARTLAND	8.1	12.1
ME0101273	HELLS COVE (BAR HARBOR)	24.4	36.6
ME0101290	HOULTON	5.0	7.4
ME0101788	HOWLAND	12.1	18.1
ME0001937	INTERNATIONAL PAPER	15.8	23.7
ME0100269	ISLESBORO	9.1	13.6
ME0100978	JACKMAN	5.7	8.6
ME0100935	KENNEBUNK	15.1	22.7
ME0101184	KENNEBUNKPORT	7.5	11.2
ME0100285	KITTERY	6.8	10.2
ME0100854	KSTD	11.7	17.6
ME0101478	LEWISTON/AUBURN	4.5	6.8
ME0100871	LIMERICK	18.6	27.8
ME0101095	LIMESTONE	6.2	9.3
ME0101796	LINCOLN	17.3	26.0
ME0002003	LINCOLN PULP & PAPER 001	28.9	43.3
ME0100307	LISBON	58.1	87.1
ME0100315	LIVERMORE FALLS	126.8	190.2
ME0090174	LORING	4.6	6.9
ME0102016	LUBEC	61.1	91.6
ME0100323	MACHIAS	19.3	29.0
ME0101681	MADAWASKA	7.1	10.6
MEU506634	MAINE CENTRAL RAILROAD	39.6	59.5
ME0101079	MARS HILL	6.1	9.1
ME0102245	MATTAWAMKEAG	11.1	16.7

NPDES	Facility Name	Average Limit	Maximum
Number		in p.p.t.	Limit in p.p.t.
ME0002054	MEAD PAPER COMPANY	10.6	15.9
ME0100391	MECHANIC FALLS	5.6	8.5
ME0100404	MILBRIDGE	23.3	35.0
ME0100803	MILLINOCKET	12.4	18.6
ME0100439	MILO	29.1	43.7
ME0101338	MT. DESERT OTTER CREEK	33.3	49.9
ME0101346	N.E. HARBOR (MDI)	9.1	13.7
ME0001856	NATIONAL STARCH	4.5	6.8
ME0100447	NEWPORT	6.8	10.2
ME0102334	NORRIDGEWOCK	4.5	6.8
ME0101885	NORTH BERWICK	7.0	10.5
ME0101907	NORTH HAVEN	50.1	75.2
ME0101061	NORTH JAY	4.5	6.8
ME0100901	NORTHPORT VILLAGE CORP.	33.4	50.1
ME0100455	NORWAY	14.7	22.1
ME0100463	OAKLAND	4.5	6.8
ME0100986	OGUNQUIT	19.3	29.0
ME0101524	OLD ORCHARD BEACH	28.5	42.8
ME0100471	OLD TOWN	18.6	27.8
ME0100498	ORONO	9.4	14.2
ME0002381	OSRAM SYLVANIA	144.5	216.7
ME0100951	PARIS	16.5	24.8
ME0023230	PENOBSCOT ENERGY REC. CO.	39.0	58.5
ME0023043	PENOBSCOT FROZEN FOODS	50.8	76.3
ME0101311	PENOBSCOT NATION	7.2	10.9
ME0100528	PITTSFIELD	4.5	6.8
ME0022861	PRATT & WHITNEY	4.5	6.8
ME0100561	PRESQUE ISLE	16.6	24.9
ME0100242	PWD GORHAM (LITTLE FALLS)	4.5	6.8
ME0102237	PWD PEAKS ISLAND	8.9	13.4
ME0102075	PWD PORTLAND	35.3	53.0
ME0100587	RICHMOND	10.5	15.7
ME0002526	ROBINSON MANUFACTURING	12.9	19.4
ME0100595	ROCKLAND	6.0	9.0
ME0100552	RUMFORD/MEXICO	11.7	17.6
ME0101486	RUMFORD/MEXICO (RUMFORD POINT)	4.5	6.8
ME0101842	SABATTUS	4.5	6.8
ME0101117	SACO	8.1	12.1
ME0100617	SANFORD	4.5	6.8
ME0102059	SCARBOROUGH	82.5	123.8
ME0002321	SD WARREN	4.5	6.8
ME0021521	SD WARREN (K)	28.5	42.7

NPDES Number	Facility Name	Average Limit in p.p.t.	Maximum Limit in p.p.t.
ME0023299	SEA MEADOWS	7.4	11.0
ME0101354	SEAL HARBOR (MDI)	9.4	14.1
MEU501007	SEAL HARBOR SAND FILTER (MDI)	17.8	26.7
ME0101966	SEARSPORT	411.9	617.9
ME0100625	SKOWHEGAN	7.0	10.6
MEU502345	SKOWHEGAN (RIVER ROAD)	13.7	20.6
ME0101362	SOMESVILLE (MDI)	19.7	29.6
ME0100820	SOUTH BERWICK	4.5	6.8
ME0100633	SOUTH PORTLAND	4.8	7.2
ME0100641	SOUTHWEST HARBOR	24.0	36.0
ME0100609	ST. AGATHA	8.8	13.2
ME0101851	STONINGTON	38.0	57.1
ME0100668	THOMASTON	16.8	25.2
ME0000736	TOGUS	22.7	34.0
ME0101150	UNITY	4.5	6.8
ME0100684	VAN BUREN	16.0	24.0
MEU508102	VASSALBORO (CEMETARY RD.)	7.4	11.0
ME0100692	VASSALBORO (E. VASSALBORO)	4.9	7.4
MEU508101	VASSALBORO (N. MAIN ST.)	8.7	13.1
ME0100706	VEAZIE	6.3	9.4
ME0100714	WALDOBORO	85.4	128.2
ME0102253	WARREN	57.7	86.6
ME0101028	WASHBURN	5.2	7.8
ME0100790	WELLS	36.7	55.1
ME0100846	WESTBROOK	15.5	23.2
ME0102181	WHITNEYVILLE	5.8	8.8
ME0101915	WILTON	27.2	40.8
ME0100731	WINTER HARBOR	6.0	9.0
ME0100749	WINTERPORT	44.8	67.2
ME0100757	WISCASSET	10.1	15.1
ME0100765	YARMOUTH	10.1	15.1
ME0101222	YORK	4.5	6.8

APPENDIX C

Interim Mercury Limits

(Limit Concentration)

NPDES Number	Facility Name	Average Limit in p.p.t.	Maximum Limit in p.p.t.
ME0101966	SEARSPORT	411.9	617.9
ME0100200	EASTPORT MAIN PLANT	236.9	355.4
ME0002381	OSRAM SYLVANIA	144.5	216.7
ME0100315	LIVERMORE FALLS	126.8	190.2
ME0100111	BUCKSPORT	108.8	163.2
ME0100714	WALDOBORO	85.4	128.2
ME0100137	CAMDEN	83.4	125.1
ME0102059	SCARBOROUGH	82.5	123.8
ME0000396	ENGELHARD	72.6	108.9
ME0023329	AVEC	72.5	108.7
ME0102016	LUBEC	61.1	91.6
ME0100102	BRUNSWICK	58.9	88.4
ME0100307	LISBON	58.1	87.1
ME0102253	WARREN	57.7	86.6
ME0023043	PENOBSCOT FROZEN FOODS	50.8	76.3
ME0101907	NORTH HAVEN	50.1	75.2
ME0100226	FORT FAIRFIELD	49.3	74.0
ME0101664	BAYVILLE VILLAGE CORP.	46.1	69.2
ME0100749	WINTERPORT	44.8	67.2
ME0101281	DEGREEGOIRE (BAR HARBOR)	43.2	64.8
MEU506634	MAINE CENTRAL RAILROAD	39.6	59.5
ME0023230	PENOBSCOT ENERGY REC. CO.	39.0	58.5
ME0101851	STONINGTON	38.0	57.1
ME0102156	EAST MACHIAS	37.3	55.9
ME0100790	WELLS	36.7	55.1
ME0000272	CMP FLP WYMAN STA 004	36.0	54.0
ME0001872	GEORGIA PACIFIC CORP	35.6	53.3
ME0102075	PWD PORTLAND	35.3	53.0
ME0100901	NORTHPORT VILLAGE CORP.	33.4	50.1
ME0101338	MT. DESERT OTTER CREEK	33.3	49.9
ME0100889	ELLSWORTH	32.9	49.3
ME0100064	BOOTHBAY HARBOR	32.6	48.8
ME0100439	MILO	29.1	43.7
ME0002003	LINCOLN PULP & PAPER 001	28.9	43.3
ME0101524	OLD ORCHARD BEACH	28.5	42.8
ME0021521	SD WARREN (K)	28.5	42.7
ME0101532	BELFAST	27.6	41.5
ME0101249	FARMINGTON	27.4	41.0
ME0101915	WILTON	27.2	40.8
ME0102032	GUILFORD/SANGERVILLE	25.8	38.7

Page 24 of 30

NPDES Number	Facility Name	Average Limit in p.p.t.	Maximum Limit in p.p.t.
ME0023710	Beaver Wood (Livermore Falls)	25.0	37.5
ME0101273	HELLS COVE (BAR HARBOR)	24.4	36.6
ME0100641	SOUTHWEST HARBOR	24.0	36.0
ME0101036	FREEPORT	24.0	36.0
ME0100404	MILBRIDGE	23.3	35.0
ME0000736	TOGUS	22.7	34.0
ME0100218	FALMOUTH	22.5	33.8
ME0101516	GREAT SALT BAY SANITARY DISTRICT	20.9	31.3
ME0101362	SOMESVILLE (MDI)	19.7	29.6
ME0102369	FORT KENT	19.6	29.4
ME0100323	MACHIAS	19.3	29.0
ME0100986	OGUNQUIT	19.3	29.0
ME0100471	OLD TOWN	18.6	27.8
ME0100871	LIMERICK	18.6	27.8
ME0002020	FORT JAMES	18.5	27.8
ME0100145	CARIBOU	18.3	27.5
MEU501007	SEAL HARBOR SAND FILTER (MDI)	17.8	26.7
ME0100056	BINGHAM	17.4	26.2
ME0101796	LINCOLN	17.3	26.0
ME0100501	DOVER-FOXCROFT	16.9	25.3
ME0100668	THOMASTON	16.8	25.2
ME0100129	CALAIS	16.7	25.1
ME0000256	CMP FLP MASON STA 019	16.6	25.0
ME0100561	PRESQUE ISLE	16.6	24.9
ME0101320	BAILEYVILLE	16.6	24.9
ME0100951	PARIS	16.5	24.8
ME0100684	VAN BUREN	16.0	24.0
ME0001937	INTERNATIONAL PAPER	15.8	23.7
ME0100013	AUGUSTA	15.7	23.6
ME0100846	WESTBROOK	15.5	23.2
ME0100935	KENNEBUNK	15.1	22.7
ME0100455	NORWAY	14.7	22.1
ME0100048	BIDDEFORD	14.6	22.0
ME0100161	DANFORTH	14.3	21.4
MEU507581	BIDDEFORD POOL	13.8	20.7
MEU502345	SKOWHEGAN (RIVER ROAD)	13.7	20.6
ME0101231	BLUE HILL	13.5	20.3
ME0101192	CASTINE	13.5	20.2
ME0002526	ROBINSON MANUFACTURING	12.9	19.4

NPDES Number	Facility Name	Average Limit in p.p.t.	Maximum Limit in p.p.t.
ME0101702	GARDINER	12.7	19.1
ME0100803	MILLINOCKET	12.4	18.6
MEU507044	GSBSD, DAMARISCOTTA MILLS	12.4	18.5
ME0101788	HOWLAND	12.1	18.1
ME0002216	A.E.STALEY	11.8	17.6
ME0100854	KSTD	11.7	17.6
ME0100552	RUMFORD/MEXICO	11.7	17.6
ME0100781	BANGOR	11.3	16.9
ME0102245	MATTAWAMKEAG	11.1	16.7
ME0002054	MEAD PAPER COMPANY	10.6	15.9
ME0100587	RICHMOND	10.5	15.7
ME0101176	BETHEL	10.2	15.2
ME0100757	WISCASSET	10.1	15.1
ME0100765	YARMOUTH	10.1	15.1
ME0101214	BAR HARBOR (MAIN PLANT)	9.9	14.8
ME0022055	CHAMPION (COSTIGAN STUD MILL)	9.7	14.6
ME0100498	ORONO	9.4	14.2
ME0101354	SEAL HARBOR (MDI)	9.4	14.1
ME0101346	N.E. HARBOR (MDI)	9.1	13.7
ME0100269	ISLESBORO	9.1	13.6
ME0102237	PWD PEAKS ISLAND	8.9	13.4
ME0100609	ST. AGATHA	8.8	13.2
MEU508101	VASSALBORO (N. MAIN ST.)	8.7	13.1
ME0101443	HARTLAND	8.1	12.1
ME0101117	SACO	8.1	12.1
ME0101184	KENNEBUNKPORT	7.5	11.2
MEU508102	VASSALBORO (CEMETARY RD.)	7.4	11.0
ME0023299	SEA MEADOWS	7.4	11.0
ME0101311	PENOBSCOT NATION	7.2	10.9
ME0101389	ANSON-MADISON	7.1	10.6
ME0101681	MADAWASKA	7.1	10.6
ME0100625	SKOWHEGAN	7.0	10.6
ME0101885	NORTH BERWICK	7.0	10.5
ME0100447	NEWPORT	6.8	10.2
ME0100285	KITTERY	6.8	10.2
ME0102121	CAPE ELIZABETH	6.5	9.8
ME0100706	VEAZIE	6.3	9.4
ME0101095	LIMESTONE	6.2	9.3
ME0101079	MARS HILL	6.1	9.1
ME0100595	ROCKLAND	6.0	9.0

NPDES Number	Facility Name	Average Limit in p.p.t.	Maximum Limit in p.p.t.
ME0100731	WINTER HARBOR	6.0	9.0
ME0102181	WHITNEYVILLE	5.8	8.8
ME0000159	FRASER PAPER	5.7	8.6
ME0100978	JACKMAN	5.7	8.6
ME0100153	CORINNA	5.7	8.6
ME0100391	MECHANIC FALLS	5.6	8.5
ME0101028	WASHBURN	5.2	7.8
ME0101397	BERWICK	5.2	7.7
ME0101290	HOULTON	5.0	7.4
ME0101982	FRENCHVILLE	5.0	7.4
ME0100021	BATH	4.9	7.4
ME0100692	VASSALBORO (E. VASSALBORO)	4.9	7.4
ME0100633	SOUTH PORTLAND	4.8	7.2
ME0090174	LORING	4.6	6.9
ME0000167	GREAT NORTHERN PAPER, WEST	4.5	6.8
ME0000175	GREAT NORTHERN PAPER, EAST	4.5	6.8
ME0001856	NATIONAL STARCH	4.5	6.8
ME0002160	CHAMPION INTERNATIONAL	4.5	6.8
ME0002321	SD WARREN	4.5	6.8
ME0002399	CONTROL DEVICES	4.5	6.8
ME0022861	PRATT & WHITNEY	4.5	6.8
ME0100072	BREWER	4.5	6.8
ME0100242	PWD GORHAM (LITTLE FALLS)	4.5	6.8
ME0100463	OAKLAND	4.5	6.8
ME0100528	PITTSFIELD	4.5	6.8
ME0100617	SANFORD	4.5	6.8
ME0100820	SOUTH BERWICK	4.5	6.8
ME0101061	NORTH JAY	4.5	6.8
ME0101150	UNITY	4.5	6.8
ME0101222	YORK	4.5	6.8
ME0101478	LEWISTON/AUBURN	4.5	6.8
ME0101486	RUMFORD/MEXICO (RUMFORD POINT)	4.5	6.8
ME0101699	CLINTON	4.5	6.8
ME0101842	SABATTUS	4.5	6.8
ME0102067	CANTON	4.5	6.8
ME0102113	BRUNSWICK LANDFILL	4.5	6.8
ME0102318	GRAND ISLE	4.5	6.8
ME0102334	NORRIDGEWOCK	4.5	6.8

APPENDIX D

Pollution Prevention Progress Survey Form

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

MERCURY POLLUTION PREVENTION PLAN PROGRESS REPORT for

Name	e of the Wastewater Treatment Facility/ M	Aaine Waste Discharge Licensee	
NPD	ES License Number:		
Addr	ress:		
	(Street)		
	(Municipality)	(zip code)	
Telep	phone:	E-mail:	
Chec	k all items that have been completed:		
	 Awaiting model DEP plan. Designated a person to develop the mercury reduction plan. Adopted a mission statement. Developed goals and measurement strategies. Developed baseline information strategy. Identified potential internal sources (within the treatment plant). Identified potential external sources (outside the treatment plant). Assessed the relative contribution from each identified potential source. Identified tools and options for potential sources. Established priority actions for potential sources. Established employee training and public education. Developed an implementation plan for priority potential sources. 		
Num	ber of clean mercury analysis (EPA Meth	od 1669/1631) performed	
Desc	ribe any other activities to reduce internal	and external sources of mercury:	

Note: This report is due back to the DEP by November 24, 2000.

Mail to: Donald Albert Department of Environmental Protection 17 State House Station Augusta, Maine 04333