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.

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:

(1) 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.

AUTHORITY: 38 MRSA §§ 341-D and 420 (1-A); PL 1999, c. 500; PL 2001, c.418

EFFECTIVE DATE:
February 5, 2000

MINOR CORRECTIONS:
March 6, 2000 - spacing and number styles

AMENDED:
October 6, 2001 - removed sunset provision