

ATTACHMENT 14

Final Permit

Permit No. MA0100030
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AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act as amended, (33 U.S.C. §§1251 et seq.; the "CWA", and the Massachusetts Clean Water Act, as amended, (M.G.L. Chap. 21, §§26-53),

Town of Marion
Marion Wastewater Treatment Plant

is authorized to discharge from a facility located at

Benson Brook Road
Marion, MA 02738

to unnamed Brook to Aucoot Cove

Buzzards Bay

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on 30 days from the date of issuance.

This permit and the authorization to discharge expire at midnight, five years from the effective date.

This permit supersedes the permit issued on September 22, 1992.

This permit consists of 8 pages in Part I including effluent limitations, monitoring requirements, etc., 35 pages in Part II including General Conditions and Definitions and Attachment A. .

Signed this 30 day of September, 1998

Linda M. Nagy

Director
Office of Ecosystem Protection
Environmental Protection Agency
Region I
Boston, MA

Clayton

Director, Division of
Watershed Management
Department of Environmental
Protection
Boston, MA

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge from outfall serial number 001 (treated sanitary wastewater).

Such discharge shall be limited and monitored by the permittee as specified below:

Effluent Characteristic, Units	Discharge Limitations			Monitoring Requirements	
	Average Monthly	Average Weekly	Maximum ¹ Daily	Measurement ² Frequency	Sample Type
Flow, MGD	0.5	-	Report	Continuous	see note 2
BOD ₅ , mg/l	10	15	Report	1/week	24-hr comp.
TSS, mg/l	10	15	Report	1/week	24-hr comp.
pH ¹ , S.U.	See I.A.1.a			Daily	Grab
Fecal Coliform ¹ , #/100ml	200	400	400	1/week	Grab
Nitrate ¹ , mg/l	-	-	Report	1/month	24-hr comp.
Ammonia ,Total, ⁴ mg/l	2.6	5/1-6/1A	-	1/month	24-hr comp.
Ammonia ,Total, ⁴ mg/l	1.74	6/15-10/15 yearly even.	-	1/month	24-hr comp.
Total Kjeldahl Nitrogen, mg/l	-	-	Report	1/month	24-hr comp.
Copper-Total Recoverable, ⁵ ug/l	-	-	9.22	1/month	24-hr comp.
LC ₅₀ , ³	-	-	100%	4/year	24-hr comp.
C-NOEC, ³	-	-	100%	4/year	24-hr comp.

The discharge shall not cause violation of the water quality standards of the receiving waters.

See footnotes on page 3

Footnotes:

1. State certification requirements.
2. Report maximum daily flow rate for each operating date and monthly average flow. The flow measurement shall also be reported as a 12-month moving average, the arithmetic mean of the monthly flow totals for the preceding 12-month period.
3. "LC₅₀" is the concentration of wastewater that causes mortality to 50% of the test organisms. "C-NOEC" is the concentration at which there are no observed chronic effects on the organisms.
4. The ammonia nitrogen limits are seasonal and shall be effective from May 1 to June 14 with a limit of 2.6 mg/l and from June 15 to October 15 with a limit of 1.74 mg/l each year. From October 16 to April 30, ammonia nitrogen shall be monitored only.
5. For the first 90 days after the permit's effective date, the copper permit requirement shall be monitoring only. The copper effluent limit shall be effective starting 91 days after the permit's effective date. The permittee shall submit a report on the results of the clean metals sampling and analytical procedures for total copper sampling on March 15, 1999.

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- a. The pH of the effluent shall not be less than 6.5 nor greater than 8.3 at any time, unless these values are exceeded due to natural causes. The permittee shall take four (4) grab samples per sampling event and report the highest and lowest measured values.
- b. The discharge shall not cause objectionable discoloration of the receiving waters.
- c. The effluent shall contain neither a visible oil sheen, foam nor floating solids at any time.
- d. The permittee's treatment facility shall maintain a minimum of 85 percent removal of both total suspended solids and biochemical oxygen demand. The percent removal shall be based on monthly average values.
- e. When the effluent discharged for a period of 90 consecutive days exceed 80 percent of the design flow, the permittee shall submit to the permitting authorities a projection of loadings up to the time when the design capacity of the treatment facility will be reached, and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans.
- f. Samples taken in compliance with the monitoring requirements specified in the permit shall be taken at a representative point prior to mixing with other streams.
- g. Copper shall be tested using the Electro-thermal Atomic Absorption Spectrometric Method 3113 B published in the Standard Methods for the Examination of Water and Wastewater, 19th edition, or EPA Method 220.2.
- h. The permittee shall conduct chronic and modified acute toxicity tests using the Daphnid (*Ceriodaphnia dubia*) and Fathead Minnow (*Pimephales promelas*), in accordance with the test protocols found in Attachments A. All toxicity tests shall be conducted with 100% effluent and four times per year in January, April, July and October. A report is due in on the 15th of March, June, September and December respectively.

2. Industrial Users :

Pollutants introduced into POTW's by a nondomestic source (user) shall not Pass Through the POTW or Interfere with the operation or performance of the works

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3. All POTWs must provide adequate notice to the Director of the following:

- a. Any new introduction of pollutants into that POTW from an indirect discharger in a primary industry category discharging process water; and
- b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
- c. For purposes of this paragraph, adequate notice shall include information on:
 - (1) the quantity and quality of effluent introduced into the POTW; and
 - (2) any anticipated impact of change on the quantity or quality of effluent to be discharged from the POTW.

4. Sludge Condition

- a. The permittee shall comply with all existing Federal and State laws and regulations that apply to sewage sludge use and disposal practices with the CWA Section 405 (d) technical standards.

If applicable management practice or numerical limitation for pollutants in sewage sludge more stringent than existing Federal and State regulations is promulgated under Section 405 (d) of the Clean Water Act (CWA), this permit shall be modified or revoked and reissued to conform to such promulgated regulations.

The permittee shall comply with limitations no later than the compliance date specified in the applicable regulations as required by section 405 (d) of the Clean Water Act.

- b. The permittee shall give prior notice to the Director and the Administrator of any change (s) planned in the permittee's sludge use or disposal practice.
- c. A change in the permittee's sludge use or disposal practice is a cause for modification of the permit. It is a cause for revocation and reissuance of the permit if the permittee requests or agrees.

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- d. If at any time during the life of the permit sludge is produced and must be disposed, the permittee shall notify EPA no later than 120 days prior to disposal.

5. Toxics Control

The Massachusetts Surface Water Quality Standards (314 CMR 4.00) include requirements for the regulation and control of toxic constituents and also require that EPA criteria, established pursuant to Section 304(a) of the CWA, shall be used unless a site specific criteria is established.

- a. The toxic compounds of the effluent shall not result in any demonstrable harm to aquatic life or violate any water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be modified in accordance with such standards, upon notification to the permittee.

6. Whole Effluent Testing (WET)

After submitting 4 consecutive sets of whole effluent toxicity test results, demonstrating compliance with the permit limits for whole effluent toxicity, the permittee may request a reduction in the toxicity testing requirements. The permittee is required to continue testing in accordance with the permit until notice is received by certified mail from the EPA that the whole effluent testing requirement has been changed.

7. OPERATION AND MAINTENANCE OF THE SEWER SYSTEM

Operation and maintenance of the sewer system shall be in compliance with the requirements of Part II and the following terms and conditions:

1. Maintenance Staff

The permittee shall provide an adequate staff to carry out the operation, maintenance, repair, and testing functions required to ensure compliance with the terms and conditions of this permit.

2. Alternate Power Source

In order to maintain compliance with the terms and conditions of this permit, the permittee shall provide by the effective date of the permit an alternate power source sufficient to operate the publicly owned treatment works (as defined by the 40 CFR 122.2).

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3. Infiltration/Inflow

The permittee shall eliminate excessive infiltration/inflow to the sewer system. The permittee shall develop and submit an comprehensive plan to minimize infiltration/inflow problem during the first year of the permit. This plan shall be implemented within 30 days of submittal.

B. MONITORING AND REPORTING

1. Reporting

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate Discharge Monitoring Report Forms postmarked no later than the 15th day of the month following the completed reporting period. The first report is due on the 15th day of the month following the effective date of the permit.

a. Original signed Discharge Monitoring Reports and all other reports required herein, shall be submitted to the Director at the following address:

U.S. Environmental Protection Agency
Planning and Administration (SPA)
P.O. Box 8127
Boston, MA 02114

b. One signed copy of all Discharge Monitoring Reports and all other reports required herein except for Toxicity Test Reports, shall be submitted to the State at the following address:

Massachusetts Department of Environmental Protection
Southeastern Regional Office
20 Riverside Drive
Lakeville, MA 02347

c. Copies of all toxicity test reports and information required shall also be submitted to:

Massachusetts Department of Environmental Protection
Division of Watershed Management
627 Main Street
Worcester, MA 01608

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C. STATE PERMIT CONDITIONS

1. This discharge permit is issued jointly by the U.S. Environmental Protection Agency (EPA) and the Department of Environmental Protection Agency (EPA) under Federal and State laws, respectively. As such, all the terms and conditions of this permit are hereby incorporated into and constitute a discharge permit issued by the Commissioner of the Massachusetts Department of Environmental Protection pursuant to M.G.L. Chap. 21, §43.

2. Each Agency shall have the independent right to enforce the terms and conditions of this Permit. Any modification, suspension or revocation of this Permit shall be effective only with respect to the Agency taking such action, and shall not affect the validity or status of this Permit as issued by the other Agency, unless and until each Agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this Permit is declared invalid, illegal or otherwise issued in violation of State law such permit shall remain in full force and effect under Federal law as an NPDES Permit issued by the U.S. Environmental Protection Agency. In the event this Permit is declared invalid, illegal or otherwise issued in violation of Federal law, this Permit shall remain in full force and effect under State law a Permit issued by the Commonwealth of Massachusetts.

ATTACHMENT A

Chronic Toxicity Test Procedure and Protocol:

- o Daphnid (Ceriodaphnia dubia) chronic (and modified acute) static renewal survival and reproduction test.
- o Fathead Minnow (Pimephales promelas) chronic (and modified acute) static renewal larval growth and survival test.

I. GENERAL REQUIREMENTS

The permittee shall conduct acceptable toxicity tests in accordance with the appropriate test protocols described below. The permittee must collect discharge samples and perform the toxicity tests that are required by Part I of the NPDES permit. Chronic and acute toxicity data shall be reported as outlined in Section IX. The chronic fathead minnow and daphnid tests can be used to calculate the acute LC50 at the 48 hour exposure interval where both an acute (LC50) and a chronic (C-NOEC) test is specified in the permit.

II. TEST FREQUENCY AND SAMPLING REQUIREMENTS

See Part I of the NPDES permit for sampling location, sample type, test frequency, test species, and test date(s) requirements. Chain of Custody information should be provided for each sample tested.

A chronic toxicity test sampling event is defined as three discharge (composite or grab) samples collected over the seven-day test period (see Section IV).

III. METHODS

Methods to follow are those recommended by EPA in:

Weber, C.I., et al, 1989. Short Term Methods For Estimating The Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms, Second Edition. Office of Research and Development, Cincinnati, OH, EPA/600/4-89/001.

Any exceptions are stated herein.

IV. SAMPLE COLLECTION

For each sampling event, three discharge samples shall be collected over a 7-day exposure period. An initial sample (day 0) is used to start the test. The additional two samples are collected for use at the start of day 3 and 5. Renewal of test concentrations is conducted daily with the most recently collected discharge sample. The initial (day 0) sample will be analyzed chemically. Day 3 and 5 samples will be held until test completion. If either the day 3 or 5 renewal sample is of

sufficient potency to cause lethality to 50 percent or more test organisms in any of the dilutions for either species, then a chemical analysis shall be performed on the appropriate sample(s) as well.

Aliquots shall be split from the samples, containerized and preserved (as per 40 CFR Part 136) for chemical and physical analyses. The remaining samples shall be dechlorinated (if necessary) in the laboratory using sodium thiosulfate for subsequent toxicity testing. Grab samples must be used for pH, temperature, and total residual chlorine (as per 40 CFR Part 122.21).

The Methods for Aquatic Toxicity Identification Evaluations (Phase I) EPA/600/3-88/034, Section 8.7, provides detailed information regarding the use of sodium thiosulfate (i.e. dechlorination).

All samples held overnight shall be refrigerated at 4°C.

V. DILUTION WATER

Dilution water used for chronic toxicity analysis shall be collected at a point upstream of the discharge free from toxicity or other sources of contamination. When using receiving water as the dilution water an additional control (0% effluent), made up from a standard dilution water of known quality, will also be run.

If the receiving water diluent is found to be, or suspected to be toxic or unreliable, an alternate surface water or standard dilution water of known quality with a hardness, pH, conductivity, alkalinity, and total suspended solids similar to that of the receiving water may be substituted AFTER RECEIVING WRITTEN APPROVAL FROM THE PERMIT ISSUING AGENCY(S). It may prove beneficial to the permittee to have the proposed dilution water source screened for suitability prior to toxicity testing. For further information see Section 7, page 24 of EPA/600/4-89/001.

VI. REGION I RECOMMENDED EFFLUENT TOXICITY TEST CONDITIONS FOR THE DAPHNID (Ceriodaphnia dubia) SURVIVAL AND REPRODUCTION TEST1

- | | |
|--|--|
| 1. Test type: | Static, renewal |
| 2. Temperature (oC): | 25 ± 1oC |
| 3. Light quality: | Ambient laboratory illumination |
| 4. Photoperiod: | 16 hr. light, 8 hr. dark |
| 5. Test chamber size: | 30 ml |
| 6. Test solution volume: | 15 ml |
| 7. Renewal of test solutions: | Daily using most recently collected sample. |
| 8. Age of test organisms: | Less than 24 hr.; and all released within an 8 hr. period of each other. |
| 9. Number of neonates per test chamber: | 1 |
| 10. Number of replicate test chambers per treatment: | 10 |
| 11. Number of neonates per test concentration: | 10 |
| 12. Feeding regime: | Feed 0.1 ml each of YTC and algal suspension per exposure chamber daily. |
| 13. Aeration: | None |
| 14. Dilution water:2 | Receiving water, other surface water, moderately hard synthetic water (prepared using either Millipore Milli-QR or equivalent deionized water and reagent grade chemicals) or deionized water combined with mineral water. |

15. Effluent concentrations: 3 5 concentrations and a control. An additional dilution at the permitted effluent concentration (% effluent) is required if it is not included in the dilution series.
16. Dilution factor: 0.5
17. Test duration: Until 60% of control females have three broods (may require 7 days).
18. End points: Survival and reproduction
19. Test acceptability: 80% or greater survival and an average of 15 or more young/female in the control solutions. At least 60% of surviving females in controls must have produced third brood.
20. Sampling requirements: For on-site tests, samples are collected daily and used within 24 hr. of the time they are removed from the sampling device. For off-site tests, a minimum of three samples are collected (i.e. days 0, 3, 5) and used for renewal (see Sec IV). Off-site tests samples must be first used within 48 hours of collection.
21. Sample volume required: Minimum 2 liters/day.

Footnotes:

1. Adapted from EPA/600/4-89/001.
2. Standard dilution water must have hardness requirements to generally reflect characteristics of the receiving water.
3. When receiving water is used for dilution an additional control made up of standard dilution water (0% effluent) is required.

VII. REGION I RECOMMENDED EFFLUENT TEST CONDITIONS FOR THE
FATHEAD MINNOW (Pimephales promelas) LARVAL SURVIVAL
AND GROWTH TEST1

- | | |
|--|--|
| 1. Test type: | Static, renewal |
| 2. Temperature (oC): | 25 ± 1oC |
| 3. Light quality: | Ambient laboratory illumination |
| 4. Photoperiod: | 16 hr. light, 8 hr. dark |
| 5. Test chamber size: | 250 - 1000 ml |
| 6. Test solution volume: | Minimum 200 ml/replicate |
| 7. Renewal of test concentrations: | Daily using most recently collected sample. |
| 8. Age of test organisms: | Newly hatched larvae less than 24 hr. old |
| 9. No. larvae/test chamber and control: | 15 (minimum of 10) |
| 10. No. of replicate chambers/concentration: | 4 (minimum of 3) |
| 11. No. of larvae/concentration: | 60 (minimum of 30) |
| 12. Feeding regime: | Feed 0.1 ml newly hatched brine shrimp nauplii twice daily, 6 hrs. between feedings (at the beginning of the work day prior to renewal, and at the end of the work day following renewal). Sufficient larvae are added to provide an excess. |
| 13. Cleaning: | Siphon daily, immediately before test solution renewal. |
| 14. Aeration: | None, unless DO concentrations falls below 40% saturation. Rate should be less than 100 bubbles/min. |

15. Dilution water:2
Receiving water, other surface water, moderately hard synthetic water (prepared using either Millipore Milli-QR or equivalent deionized and reagent grade chemicals) or deionized water combined with mineral water.
16. Effluent concentrations:3
5 and a control. An additional dilution at the permitted effluent concentration (% effluent) is required if it is not included in the dilution series.
17. Dilution factor:
0.5
18. Test duration:
7 days
19. End points:
Survival and growth (weight)
20. Test acceptability:
80% or greater survival in controls: average dry weight of controls equals or exceeds 0.25 mg
21. Sampling requirements:
For on-site tests, samples are collected daily and used within 24 hours of the time they are removed from the sampling device. For off-site tests, a minimum of three samples are collected (i.e. days 0, 3, 5) and used for renewal (see Sec.IV). Off-site tests samples must be first used within 48 hours of collection.
22. Sample volume required: Minimum 2.5 liters/day.

Footnotes:

1. Adapted from EPA/600/4-89/001.
2. Standard dilution water must have hardness requirements to generally reflect characteristics of the receiving water.
3. When receiving water is used for dilution an additional control made up of standard dilution water (0% effluent) is required.

VIII. CHEMICAL ANALYSIS

The following chemical analyses shall be performed for each sampling event.

<u>Parameter</u>			Minimum
	<u>Effluent</u>	<u>Diluent</u>	<u>Detection</u>
			<u>Limit (mg/l)</u>
Hardness*1	x	x	0.5
Alkalinity	x	x	2.0
pH	x	x	--
Specific Conductance	x	x	--
Total Solids and Suspended Solids	x	x	--
Ammonia	x	x	0.1
Total Organic Carbon	x	x	0.5
Total Residual Chlorine (TRC)*2	x	x	0.02

Total Metals

Cd	x		0.005
Cr, Ni	x		0.05
Pb, Cu	x	x	0.005
Zn, Al	x	x	0.02
Mg, Ca	x	x	0.05

In addition, the following chemical analyses shall be performed as part of each daily renewal procedure on each dilution and the controls.

<u>Parameter</u>	<u>Beginning of 24-hr Exposure Period</u>	<u>End of 24-hr Exposure Period</u>
Dissolved Oxygen	x	x
Temperature	x	
pH	x	
Specific Conductance	x	
Alkalinity	x*3	
Hardness	x*3	

Superscripts:

- *1 Method 314 A (hardness by calculation) from APHA (1985) Standard Methods for the Examination of Water and Wastewater. 16th Edition.
- *2 Total Residual Chlorine
Methods: either of the following methods from the 16th Edition of the APHA (1985) Standard Methods for the Examination of Water and Wastewater must be used for these analyses:
Method 408-C (Amperometric Titration Method)-the preferred method;
Method 408-D (Ferrous Titrimetric Method).
- *3 These are performed on the 100% effluent and control samples

only.

IX. TOXICITY TEST REPORT ELEMENTS

A report of results will include the following:

- Description of sample collection procedures, site description;
- Names of individuals collecting and transporting samples, times and dates of sample collection and analysis; and
- General description of tests: age of test organisms, origin, dates and results of standard toxicant tests; light and temperature regime; other information on test conditions if different than procedures recommended.

Toxicity test data shall include the following:

Chronic

- Daily survival of test organisms in the controls and all replicates in each dilution. Survival data should be analyzed by Fisher's Exact Test prior to analysis of reproduction data.
- Young per female for all replicates in each dilution for Ceriodaphnia and weight for minnow larvae.
- Chronic test data shall undergo hypothesis testing to determine if the distribution of results is normal using the Shapiro-Wilks test. The variance must also be tested for homogeneity using Bartlett's Test. Then the endpoint estimates, NOEC and LOEC must be determined using Dunnett's Procedure, Bonferroni's T-Test, Steel's Many-One Rank Test, or Wilcoxon Rank Sum Test. The choice of test depends on the number of replicates and whether the variance is homogeneous or not. See EPA/600/4-87/028 for details. (Any printouts and graphical displays must be submitted, along with the name of the program, the date, and the author(s). When data is analyzed by hand, worksheets should be included.)
- C-NOEC: Chronic-No Observed Effect Concentration.
- LOEC: Lowest Observed Effect Concentration.
- MATC: Maximum Allowable Toxicant Concentration.

Acute (These data points are to be obtained 48-hrs into the chronic test.)

- Survival for each concentration and replication at time 24, and 48 hours; and
- LC50 and 95% confidence limits using one of the following methods in order of preference, Probit, Trimmed Spearman Karber, Moving Average Angle, or Graphical method; printout or copy of these calculations.

The Probit, Trimmed Spearman Karber, and Moving Average Angle methods of analyses can only be used when mortality of some of the test organisms are observed in at least two of the (% effluent) concentrations tested (i.e. partial mortality). If a test results in a 100% survival and 100% mortality in adjacent treatments ("all or nothing" effect), a LC50 may be estimated using the graphical method.

Chronic and Acute

- All chemical/physical data generated. (Include detection limits.)
- Raw data and bench sheets. (See sample data sheets, pp. 22-29.)
- Provide a description of dechlorination procedures (as applicable).
- Any other observations or test conditions affecting test outcome.

X. REPORTING

Signed copies of the toxicity testing reports shall be submitted as required by Part I of the permit.

**RESPONSE TO PUBLIC COMMENTS FOR
DRAFT NPDES PERMIT MA0100030**

**TOWN OF MARION
2 SPRING STREET
MARION, MA 02738**

On August 18, 1998, the U.S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MADEP) released for public notice and comment a draft National Pollutant Discharge Elimination System (NPDES) permit for the above draft NPDES permit. The public comment period for this draft permit expired on September 15, 1998.

The following comments were received from the permittee :

Comment No.1

The permittee requests that the maximum daily limits of BOD and TSS be removed from the draft permit.

Response :

EPA agrees and the limits were removed from the draft permit; however, monitoring will still be required.

Comment No. 2

The fact sheet states that the basis for ammonia limit is a temperature of 25 degrees centigrade and a pH of 6.75 s.u. Data from New Bedford Outer Harbor indicate that the average temperature is about 10.5 degrees centigrade in May and 15.5 degrees centigrade in June. These temperatures will be similar to those found in Marion's treatment lagoons. We request that the effective date of the nitrogen limit be changed to June 15. If EPA does not want to change the effective date, the Town would then request that two limits be placed in the permit; one limit would cover the colder water period until June 15, the other would be effective after this date.

Response :

The draft permit has been modified to reflect seasonal temperature variations. Two limits have been placed in the permit; one limit would cover from May 1 to June 14 with a limit of 2.6 mg/l based on a temperature of 15 degrees centigrade (representative of the unnamed tributary) and a pH of 6.75 s.u.; the other limit of 1.74 mg/l would cover from June 15 to October 15. From October 16 to April 30, ammonia nitrogen shall be monitored only.

Comment No. 3

The permittee contends that the available effluent monitoring data for copper are insufficient to establish the reasonable potential to exceed Gold Book criteria. The permittee proposes, as an alternative, that the limit be changed to a monitor only requirement (of limited duration) that stipulates that clean metals sampling and analytical procedures be followed to collect data that can be used accurately to determine the potential to exceed the EPA criterion. The permittee also

requests that this sampling program be conducted for dissolved copper in stead of total recoverable copper. The permittee further wants to perform a metals translator study or a site-specific investigation, and requests that permit limits be recalculated using the dissolved fraction of metals.

Response :

Five years of monthly effluent monitoring data for copper are available in the discharge monitoring reports submitted by the permittee. Most of the data indicate that copper levels are higher than those in the Gold Book criteria. The limit was imposed in the draft permit based on this information.

With respect to the request to investigate clean metals sampling, EPA and MA DEP have agreed to include a limited compliance schedule into the permit. In particular, for the first 90 days after the permit's effective date, copper monitoring only requirements have been established. The final copper limit of 9.22 ug/l shall be imposed after the first 90 days of the permit's effective date. The permittee should use this 90 day timeframe to conduct technically rigorous clean metals sampling and analytical procedures for measuring total copper effluent levels and/or other means to come into compliance with the permit's copper limit. If after 90 days and subsequent effluent monitoring, the permittee is determined to be in noncompliance with the final copper limit, then, EPA and MA DEP may work with the Town to negotiate an enforcement order. Such orders, in response to metals noncompliance, typically require the permittee to investigate sources of copper including industrial discharges, implement rigorous corrosion control and evaluate methods for improving the removal efficiency of the existing WWTP. Since EPA's regulations require metals permit limits to be established as total recoverable, EPA has established that the focus of this 90 day effort shall be on total copper values.

With respect to dissolved metals analyses, at any time the permittee may pursue efforts, in accordance with State and Federal guidance, to determine site specific criteria or to determine how the effluent partitions in the receiving water between the dissolved and particulate fractions. EPA and MADEP will evaluate the results and modify the permit, as appropriate, based on such new information.

The following comments were received from MADEP :

Comment No. 1

The flow measurements should be reported as a 12-month moving average.

Response:

The permit has been modified to accommodate this request. This language has been included in Footnote 2. However, because the permit limits are all concentration-based, in order to be able to assess real time pollutant mass loadings, the permit will also maintain the requirement to report maximum daily flow rate for each operating date.

Comment No. 2

MADEP has determined that the maximum daily limits of BOD and TSS are no longer required

for municipal plants.

Response :

The comment is noted and the permit has been changed accordingly; however, monitoring will still be required.

Comment No. 3

"Studies indicate that nitrogen loading and ammonia toxicity from the plant are not problems in Aucoot Cove. Consideration should be given to continue with monitor only requirements year-round. Nonetheless, if ammonia limits are imposed, the DMR data shows that the facility will need additional time to achieve nitrification. The seasonal ammonia limits should be in steps, with a higher limit from May to June, and water quality based limit for the rest of the season."

Response :

See response 2 to permittee's comment No. 2

Comment No. 4

"The copper limit should remain at monitor only, rather than imposing a numerical limit. Based on discussions with EPA staff, the permit should include language requiring the Town and the WWTP to implement BMPs, such as corrosion control for the water supply and pretreatment for any industrial discharges."

Response :

See response 3 to permittee's comment No. 3 above.

Comment No. 5

The effluent analysis for the toxicity tests show that cadmium is not a problem, therefore, it should be deleted from the chemical analysis.

Response :

EPA agrees and the permit has been changed accordingly.

Comment No. 6

Change upper pH limit from 8.5 to 8.3

Response :

EPA agrees and the permit has been changed accordingly.

Comment No. 7

Change Office to Division on page.6

Response :

EPA agrees and the permit has been changed accordingly.