**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"),

New Hampshire Fish and Game Department

is authorized to discharge from a facility located at

**New Hampton State Fish Hatchery
204 Main Street
New Hampton, New Hampshire**

to receiving water named

**Dickerman Brook, Tributary to the Pemigewasset River
(Hydrologic Basin Code: 01070001)**

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

This permit shall become effective on the first day of the calendar month following 60 days after signature if comments are received. If no comments are received, this permit shall become effective on the data of signature.

This permit and the authorization to discharge expire at midnight, five (5) years from the effective date.

This permit supersedes the permit issued on May 27, 2004.

This permit consists of **21** pages in Part I including effluent limitations, monitoring requirements, etc., and **25** pages in Part II including Standard Conditions.

Signed this day of , 2011

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Stephen S. Perkins, Director
Office of Ecosystem Protection
U.S. Environmental Protection Agency
Boston, Massachusetts

Part I.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge culture water and treated hatchery effluent, from outfall serial number 001 into Dickerman Brook, upstream of Dickerman Pond. Such discharges shall be limited and monitored by the permittee as specified below. Samples taken in compliance with the monitoring requirements specified below shall be taken at a location that provides a representative analysis of the effluent.

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type
Flow (MGD)	Report	---	1/Week	Flow Meter or Weir Calculation[1]
TSS	Report lbs/day[2] 10 mg/l	Report lbs/day[2] 15 mg/l	1/Quarter[2]	24-Hour Composite
BOD_5	Report lbs/day Report mg/l	Report lbs/day Report mg/l	1/Quarter[2]	24-Hour Composite
Total Phosphorus as P[3]	Report lbs/day Report mg/l	Report lbs/day Report mg/l	1/Quarter[2] except as directed in Part I.C	24-Hour Composite
Total Ammonia as N	Report mg/l	Report mg/l	1/Quarter[2]	24-Hour Composite
Total Phosphorus as P[3]; Receiving water	-	Report mg/l	1/Month June - September	Grab
Chlorophyll-*a*; Receiving water	-	Report mg/l	1/Month June - September	Grab
pH Range[4]	6.5 to 8.0 standard units (see Part I.E.1.a)		1/Week	Grab
Fish Biomass on Hand[5], lbs	Report	---	1/Month	Calculation
Fish Feed Used, lbs	Report	---	1/Month	Calculation
Efficiency of Fish Feed Used[6], Percent	Report	---	1/Month	Calculation
Total Residual Chlorine[7] (when Chloramine-T in use), mg/l	0.011	0.019	1/Day	Grab
Hydrogen Peroxide (when in use), mg/l	---	0.7	1/Day	Grab

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type
Formalin Absent				
Dissolved Oxygen[8], mg/l	---	Report	1/Month	Grab
Dissolved Oxygen Saturation[8], Percent	---	Report	1/Month	Grab
Water Temperature[8], ˚F	---	Report	1/Month	Grab
Formalin Present				
Formaldehyde[9], mg/l	1.6	4.6	1/Week	Grab
Dissolved Oxygen[9], mg/l	---	Report	1/Week	Grab

NOTE: See pages 9 through 10 for explanation of the various footnotes.

Part I.
A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge culture water and treated hatchery effluent from outfall serial number 002 into Dickerman Brook, upstream of Dickerman Pond. Such discharges shall be limited and monitored by the permittee as specified below. Samples taken in compliance with the monitoring requirements specified below shall be taken at a location that provides a representative analysis of the effluent.

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type
Flow (MGD)	Report	---	1/Week	Flow Meter or Weir Calculation[1]
TSS	Report lbs/day[2] 10 mg/l	Report lbs/day[2] 15 mg/l	1/Quarter[2]	24-Hour Composite
BOD_5	Report lbs/day Report mg/l	Report lbs/day Report mg/l	1/Quarter[2]	24-Hour Composite
Total Phosphorus as P[3]	Report lbs/day Report mg/l	Report lbs/day Report mg/l	1/Quarter[2] except as directed in Part I.C	24-Hour Composite
Total Ammonia as N	Report mg/l	Report mg/l	1/Quarter[2]	24-Hour Composite
Total Phosphorus as P[3]; Receiving water	-	Report mg/l	1/Month June - September	Grab
Chlorophyll-*a*; Receiving water	-	Report mg/l	1/Month June - September	Grab
pH Range[4]	6.5 to 8.0 standard units (see Part I.E.1.a)		1/Week	Grab
Fish Biomass on Hand[5], lbs	Report	---	1/Month	Calculation
Fish Feed Used, lbs	Report	---	1/Month	Calculation
Efficiency of Fish Feed Used[6], Percent	Report	---	1/Month	Calculation
Total Residual Chlorine[7] (when Chloramine-T in use), mg/l	0.011	0.019	1/Day	Grab
Hydrogen Peroxide (when in use), mg/l	---	0.7	1/Day	Grab

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type
Formalin Absent				
Dissolved Oxygen[8], mg/l	---	Report	1/Month	Grab
Dissolved Oxygen Saturation[8], Percent	---	Report	1/Month	Grab
Water Temperature[8], ˚F	---	Report	1/Month	Grab
Formalin Present				
Formaldehyde[9], mg/l	1.6	4.6	1/Week	Grab
Dissolved Oxygen[9], mg/l	---	Report	1/Week	Grab

NOTE: See pages 9 through 10 for explanation of the various footnotes.

Part I.
A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

3. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge culture water and treated hatchery effluent from outfall serial number 004 into Dickerman Brook, downstream of Dickerman Pond. Such discharges shall be limited and monitored by the permittee as specified below. Samples taken in compliance with the monitoring requirements specified below shall be taken at a location that provides a representative analysis of the effluent.

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type
Flow (MGD)	Report	---	1/Week	Flow Meter or Weir Calculation[1]
TSS	Report lbs/day[2] 10 mg/l	Report lbs/day[2] 15 mg/l	1/Quarter[2]	24-Hour Composite
BOD_5	Report lbs/day Report mg/l	Report lbs/day Report mg/l	1/Quarter[2]	24-Hour Composite
Total Phosphorus as P[3]	Report lbs/day Report mg/l	Report lbs/day Report mg/l	1/Quarter[2] except as directed in Part I.C	24-Hour Composite
Total Ammonia as N	Report mg/l	Report mg/l	1/Quarter[2]	24-Hour Composite
Total Phosphorus as P[3]; Receiving water	-	Report mg/l	1/Month June - September	Grab
Chlorophyll-*a*; Receiving water	-	Report mg/l	1/Month June - September	Grab
pH Range[4]	6.5 to 8.0 standard units (see Part I.E.1.a)		1/Week	1/Week
Fish Biomass on Hand[5], lbs	Report	---	1/Month	Calculation
Fish Feed Used, lbs	Report	---	1/Month	Calculation
Efficiency of Fish Feed Used[6], Percent	Report	---	1/Month	Calculation
Total Residual Chlorine[7] (when Chloramine-T in use), mg/l	0.011	0.019	1/Day	Grab
Hydrogen Peroxide (when in use), mg/l	---	0.7	1/Day	Grab

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type
Formalin Absent				
Dissolved Oxygen[8], mg/l	---	Report	1/Month	Grab
Dissolved Oxygen Saturation[8], Percent	---	Report	1/Month	Grab
Water Temperature[8], ˚F	---	Report	1/Month	Grab
Formalin Present				
Formaldehyde[9], mg/l	1.6	4.6	1/Week	Grab
Dissolved Oxygen[9], mg/l	---	Report	1/Week	Grab

NOTE: See pages 9 through 10 for explanation of the various footnotes.

Part I.
A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

4. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall serial numbers 003 and 005 routine maintenance water, rainwater, and snowmelt (conveys water from Dickerman Pond to the various rearing units in the lower hatchery) into Dickerman Brook, downstream of Dickerman Pond. Such discharges shall be limited and monitored by the permittee as specified below. Samples taken in compliance with the monitoring requirements specified below shall be taken at a location that provides a representative analysis of the effluent.

This discharge shall be free of debris such as sticks, twigs, leaves, paper, plastics, dead aquatic animals, etc. Disposal of debris and aquatic organisms from this discharge shall be in accordance with **Part I.A.**11. on page 10 of this permit.

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Maximum	Maximum Daily	Measurement Frequency	Sample Type
Flow (MGD)	---	Report	Each Event	Estimate Total Daily
TSS	---	Report	Each Event	Grab
pH Range[4]	6.5 to 8.0 Standard Units (See Part I.E.1.a.)		Each Event	Grab
Discharge Event, days	Report	---	1/Month	Report Total Number of Days[10]

NOTE: See pages 9 through 10 for explanation of the various footnotes.

EXPLANATION OF FOOTNOTES APPLICABLE TO Parts I.A.1-4. on pages 2 – 8

(1) The effluent flow shall be continuously measured and recorded using a flow meter and totalizer. In lieu of an effluent flow meter, weir calculations may be used to report effluent flow. To obtain approval for flow measurement method(s) other than the designated method, the permittee shall submit a written description of the proposed method(s) to EPA-New England and receive written authorization via certified letter before proceeding.

(2) Once per quarter is defined as a sample collected once during each calendar quarter ending March 31st, June 30th, September 30th and December 31st each year. A sample is required each calendar quarter that a discharge occurs on more than one day. Analytical results shall be submitted with that month's DMR.

(3) The minimum level (ML) for phosphorus is defined as 10 micrograms per liter (µg/l). EPA defines the minimum level as the level at which the entire analytical system shall give recognizable signal and calibration points. This value is the minimum level for phosphorus using EPA approved methods found in the most currently approved version(s) of Standard Methods for the Examination of Water and Wastewater. One of these methods must be used to determine total phosphorus. Sample results less than 10 µg/l shall be reported as zero on the DMR.

(4) Limit is a State Certification Requirement.

(5) In addition to reporting fish biomass on hand, the permittee shall submit a written report with its monthly DMR of any significant import and/or export of fingerling or greater size fish which occurred during the reporting month. The report shall include the dates and quantities of each import and/or export. In lieu of a written report, the permittee is allowed to submit a copy of the permittee's appropriate in house "monthly reports form" as long as that form contains information relevant to any significant import and/or export of fingerling or greater size fish which occurred during the reporting month. This report excludes any fish mortality data as that is covered separately under Part I.A.6.

(6) Efficiency of Fish Feed Used = [Fish Weight Gain (lbs)/Fish Food Fed (lbs)] x 100

(7) The minimum level (ML) for total residual chlorine is defined as 20 µg/l. For total residual chlorine, this is the minimum level for chlorine using EPA-approved Method 4500-Cl Methods E and G found in the most currently approved version(s) Standard Methods for the Examination of Water and Wastewater. One of these methods must be used to determine total residual chlorine. Sample results of 20 µg/l or less shall be reported as zero on the DMR, since compliance/non-compliance is determined based on the ML.

(8) Dissolved oxygen samples shall be collected from a discharge that is free of Formalin. Report the MINIMUM DAILY Dissolved Oxygen (DO) concentration for the month, and the corresponding DO percent saturation and effluent temperature associated with the minimum monthly DO sampling result.

(9) In order to capture the maximum concentration of Formaldehyde in the effluent, sampling for Formaldehyde shall occur as soon as possible after any application of Formalin to the hatchery's culture water, after accounting for its detention time through the raceways, tanks and piping networks to the outfall. The detention time calculation shall take into account dosage, injection point; facility flow (both velocity and volume), etc. where possible [See Part I.B.4.e.ii.]. A sample for DO shall be collected concurrently with that for Formaldehyde and reported under the appropriate DO column on the monthly DMR. Report the MINIMUM DAILY DO concentration sampling result for the month.

Formaldehyde shall be tested using Method 1667, Revision A, or 8315A. The ML for Formaldehyde is 50 µg/l. Alternate analytical method(s) shall be approved by EPA at the permittee's written request as long as the permittee utilizes method(s) that obtain MLs that are equal to or less than 50 µg/l. Such a request, if granted, will be considered a minor modification to the permit.

(10) Discharge event is the total number of days a discharge occurs during the month. The No Data Indicator Code (NODI) for no discharge ("C") shall be entered on the monthly DMR form when there is no discharge.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Continued)

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

6. The discharge shall be adequately treated to ensure that the surface water remains free from pollutants in concentrations or combinations that settle to form harmful deposits, float as foam, debris, scum or other visible pollutants. It shall be adequately treated to ensure that the surface waters remain free from pollutants which produce odor, color, taste or turbidity in the receiving waters which is not naturally occurring and would render it unsuitable for its designated uses.

7. Toxic Controls

   a. No components of the effluent shall 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 revised or amended in accordance with such standards, with the permittee being so notified.

b. The permittee shall not discharge into the receiving water any pollutant or combination of pollutants in toxic amounts.

8. This permit shall be modified, or alternatively, revoked and reissued, to comply with any applicable standard or limitation promulgated or approved under sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the "CWA", if the effluent standard or limitation so issued or approved:

   a. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or

   b. Controls any pollutants not limited in the permit.

   If the permit is modified or reissued, it shall be revised to reflect all currently applicable requirements of the "CWA".

9. The permittee shall notify EPA and the New Hampshire Department of Environmental Services, Water Division (NHDES-WD) within 24 hours upon the occurrence of any mortality of greater than 25 percent in any aquatic species under culture at the facility (excluding larval fish and eggs) during a single mortality event in accordance with reporting requirements in Standard Conditions, Part II.D.1.e.

10. The permittee shall inform EPA and NHDES-WD in writing at least ninety (90) days before any change of the fish species to be raised or development stage to be attained at this facility, and before any increase in annual fish biomass greater than 20 percent.

11. At outfalls 003 and 005, all live fish and other aquatic organisms found in the discharge shall be returned to the natural habitat. In addition, all dead aquatic organisms, such as crayfish, fish, and frogs, etc. as well as all solid materials, such as sticks, twigs, leaves, paper, plastics, etc. found in the discharge shall be disposed of in accordance with all existing Federal, State, and/or local laws and regulations that apply to waste disposal. Such material shall not be discharged to the receiving water.

12. There shall be no direct discharge of "cleaning water." Cleaning water is defined as any water from the hatchery house, raceway, pond, canal, circular tank, etc. which contains settled solids that have accumulated on the bottom of such structures that is discharged, absent some form of solids removal, directly to the receiving water during periodic cleaning operations. The discharge of "cleaning water" to a settling pond, lagoon, empty raceway and/or clarifier for the purposes of settling solids including the temporary storage of those solids is allowed. The discharges of any decant water that accumulates above these solids and/or any water that flows slowly over these solids is allowed.

13. Any hypochlorite solution applied to the surface of any rearing equipment exposed to culture water must be neutralized prior to that equipment being exposed to culture water.

14. There shall be no discharge of iodine and/or phosphoric acid solution(s) to the receiving water.

15. The permittee shall use only those Aquaculture Drugs and Chemicals approved by the U.S. Food and Drug Administration (USFDA) and in accordance with labeling instructions or as allowed in Part B.1 immediately below. EPA will defer to the USFDA regarding whether or not a particular drug and/or chemical is used in accordance with appropriate USFDA requirements.

    Each year with the December Discharge Monitoring Report (to be postmarked by January 15th), the permittee shall certify in writing that all Aquaculture Drugs and Chemicals used at the hatchery during that calendar year were drugs approved by the USFDA and were used in accordance with FDA labeling or as allowed under Part B.1 "Drug Use."

B. NARRATIVE EFFLUENT LIMITATION REQUIREMENTS

1. Drug Use

    Except as noted below, the permittee must notify EPA and the NHDES-WD in accordance with the following procedures of any investigational new animal drug (INAD) or extra-label drug use which may lead to a discharge of the drug to waters of the United States as stipulated below. However, reporting is not required for any INAD or extra-label drug use that has been previously approved by the US Food and Drug Administration (USFDA) for a different species or disease if the INAD or extra-label use is at or below the approved dosage and involves similar conditions of use.

    a. The permittee must provide to EPA and NHDES-WD a written report of any impending INAD use within 7 days of agreeing or signing up to participate in an INAD study. The written report must identify the INAD to be used, method of use, the dosage, and the disease or condition the INAD is intended to treat.

    b. For INADs and extra-label drug uses, the permittee must provide an oral report to EPA and NHDES-WD as soon as possible, preferably in advance of use, but no later than 7 days after initiating use of that drug. The oral report must identify the drugs used, method of application, and the reason for using that drug.

    c. For INADs and extra-label drug uses, the permittee must provide a written report to EPA and NHDES-WD within 30 days after initiating use of that drug. The

written report must identify the drug used and include: the reason for treatment, date(s) and time(s) of the addition (including duration), method of application; and the amount added.

2. Structural Failure and/or Damage to Culture Units

The permittee must notify EPA and NHDES-WD in accordance with the following procedures when there is a "reportable failure" in, or damage to, the structure of an aquatic animal containment system (i.e., culture unit) or its wastewater treatment system that results in an unanticipated material discharge of pollutants to waters of the United States.

a. For this facility, a "reportable failure" applies only to active culture units (ones that contain fish and flowing water) and their ancillary components and refers to the collapse or damage of a rearing unit or its wastewater treatment system; damage to pipes, valves, and other plumbing fixtures; and damage or malfunction to screens or physical barriers in the system, which would prevent the rearing unit from containing water, sediment (e.g., settled solids), and the aquatic animals being reared. Wastewater treatment systems include ponds or settling tanks to which cleaning water is directly discharged and culture units which are used for the temporary storage of settled solids removed from active culture units.

b. The permittee must provide an oral report to EPA and NHDES-WD within 24 hours of discovery of any reportable failure as defined in item 2.a. or damage that results in a material discharge of pollutants. The report shall describe the cause of the failure or damage in the containment system and identify materials that have been released to the environment as a result of that failure.

c. The permittee must provide a written report to EPA and NHDES-WD within 5 days of discovery of the failure or damage documenting the cause, an estimate of the material released as a result of the failure or damage, and steps being taken to prevent a recurrence of such an event.

3. Spills

In the event a spill of drugs, pesticides or feed occurs that results in a discharge to water of the United States, the permittee must provide an oral report of the spill to EPA and NHDES-WD within 24 hours of its occurrence and a written report within 5 days to the above Agencies. The report shall include the identity and quantity of the material spilled.

4. Best Management Practices (BMP) Plan

The permittee must implement and maintain a BMP Plan (PLAN) upon the permit's effective date that describes how the following requirements will be achieved. The permittee will make the current version of that PLAN available to EPA and/or the NHDES-WD upon request. Within 90 days following the permit's effective date, the permittee shall certify in writing to EPA and NHDES-WD that a written PLAN

has been developed in accordance with requirements listed in this part and must submit that certification with the appropriate DMR.

Further, the permittee shall amend the PLAN within 30 days following any change in facility design, construction, operation, or maintenance which affects the potential for the discharge of pollutants into surface waters or after the EPA and/or NHDES-WD determine certain changes are required following an event that results in non-compliance, a facility inspection, or review of the PLAN. The PLAN shall include a written documentation of each amended change along with a brief description stating the reason for the amendment; include the date the change triggering the amendment occurred. The permittee shall also document the date the amended PLAN was implemented.

The PLAN must address, at a minimum, the following requirements:

a. Solids Control

i. Employ efficient feed management and feeding strategies that limit feed input to the minimum amount reasonably necessary to achieve production goals and sustain targeted rates of aquatic animal growth in order to minimize potential discharges of uneaten feed and waste products to waters of the United States.

ii. In order to minimize the discharge of accumulated solids from settling tanks, basins and production systems, identify and implement procedures for routine cleaning of rearing units and settling tanks, and procedures to minimize any discharge of accumulated solids during the inventorying, grading and harvesting of aquatic animals in the production system. Part I.A.12. prohibits the direct discharge of cleaning water absent some form of solids removal prior to discharge.

iii. If any material is removed from the rearing units and/or settling tanks, describe where it is to be placed and the techniques used to prevent it from re-entering the surface waters from any on-site storage. If the material is removed from the site, describe who received the material and its method of disposal and/or reuse.

iv. Remove and dispose of aquatic animal mortalities properly on a regular basis to prevent discharge to waters of the United States, except in cases where EPA and NHDES-WD authorizes such discharges in order to benefit the aquatic environment.

b. Biological Control

i. Describe in detail the precautions that will be exercised by the facility to prevent aquatic organisms that are neither indigenous nor naturalized to New Hampshire waters from becoming established in the local surface waters.

ii. Provide a description for the storage and treatment of discharges to prevent biological pollution (non-indigenous organisms including fish parasites and fish pathogens and dead or dying fish) from entering the receiving water when the cultured fish population or a portion thereof are showing signs of stress.

c. Materials Storage

i. Ensure proper storage of drugs, pesticides, and feed in a manner designed to prevent spills that may result in the discharge of drugs, pesticides or feed to water of the United States.

ii. Implement procedures for properly containing, cleaning, and disposing of any spilled material.

d. Structural Maintenance

i. Inspect the production system and the wastewater treatment system on a routine basis in order to identify and promptly repair any damage.

ii. Conduct regular maintenance of the production system and the wastewater treatment system in order to ensure that they are properly functioning.

e. Recordkeeping

i. In order to show how representative feed conversion ratios were calculated, maintain records for aquatic animal rearing units documenting the feed amounts and estimates of the number and weight of aquatic animals.

ii. In order to show how the maximum concentration of Formaldehyde in the discharge was derived, maintain records by outfall of the approach/analyses used to determine the elapsed time from its dosage to its maximum (peak) effluent concentration.

iii. Keep records that document the frequency of cleaning, inspections, repairs and maintenance. In addition, records of all medicinal and chemical usage (i.e., for each occurrence) at the facility shall be recorded and filed in the PLAN to include the dosage concentration, frequency of application

(hourly, daily, etc.) and the duration (hours, days) of treatment, and the method of application.

f. Training

i. In order to ensure the proper clean-up and disposal of material, adequately train all relevant facility personnel in spill prevention and how to respond in the event of a spill.

ii. Train staff on the proper operation and cleaning of production and wastewater treatment systems including training in feeding procedures and proper use of equipment.

g. Aquaculture Drugs and Chemicals Used for Disease Control and/or Prevention

List in the PLAN all aquaculture drugs and chemicals including all INAD and extra-label drugs and for each, identify:

i. Product name and manufacturer.

ii. Chemical formulation.

iii. Purpose/reason for its use.

iv. Dosage concentration, frequency of application (hourly, daily, etc.) and the duration (hours, days) of application.

v. The method of application.

vi. Material Safety Data Sheets (MSDS) and Chemical Abstracts Service Registry number for each active therapeutic ingredient.

vii. The method or methods, if any, used to detoxify the wastewater prior to its discharge.

viii. The persistence and toxicity in the environment.

ix. Information on the USFDA approval for the use of said medication or chemical on fish or fish related products used for human consumption.

x. Available aquatic toxicity data (vendor data, literature data, etc.); Lethal Concentration to 50 percent test organisms (LC_{50}) at 48 and/or 96 hours and No Effect Level (NOEL) concentrations for typical aquatic organisms (salmon, trout, daphnia, fathead minnow, etc.).

5. General Definitions

a. Approved Dosage - the dose of a drug that has been found to be safe and effective under the conditions of a new animal drug application.

b. Aquatic Animal Containment System - a culture or rearing unit such as a raceway, pond, tank, net or other structure used to contain, hold or produce aquatic animals. The containment system includes structures designed to hold sediments and other materials that are part of a wastewater treatment system.

c. Drug - any substance defined as a drug in section 201(g)(2) of the Federal Food, Drug and Cosmetic Act (21 U.S.C. 321).

d. Extra-label Drug Use - a drug approved under the Federal Food, Drug and Cosmetic Act that is not used in accordance with the approved label direction, See 21 CFR Part 530.

e. Investigational New Animal Drug (INAD) - drug for which there is a valid exemption in effect under section 512(j) of the Federal Food, Drug, and Cosmetic Act, 21 U.S.C. 360b(j), to conduct experiments.

f. New Animal Drug Application - defined in 512(b)(1) of the Federal Food, Drug, and Cosmetic Act [21 U.S.C. 360(b)(1)].

g. Pesticide - any substance defined as a "pesticide" in section 2(u)of the Federal Insecticide, Fungicide, and Rodenticide Act [7 U.S.C. 136(u)].

C. SPECIAL CONDITIONS

Ambient Monitoring of Dickerman Pond and Dickerman Brook

The permittee shall conduct ambient monitoring once per month from June through September each year for the duration of the permit at the following locations: a mid-stream location in Dickerman Brook upstream of Outfall 001 at a location representative of ambient conditions prior to mixing with effluent from the hatchery; at the point of greatest depth in Dickerman Pond; and a mid-stream location in Dickerman Brook downstream of Outfall 004 at a location representative of the receiving water after complete mixing of effluent from the hatchery. At all three locations, the permittee shall report total phosphorus, chlorophyll-*a*, dissolved oxygen concentration, percent dissolved oxygen saturation, and temperature. In Dickerman Brook, grab samples shall be collected for all parameters. In Dickerman Pond, a 3 meter depth-integrated composite sample shall be collected for total phosphorus and chlorophyll-*a*. The permittee shall also obtain a Secchi disk reading in Dickerman Pond. Dissolved oxygen and temperature

measurements shall be made at one foot intervals from one foot below the surface to approximately one foot off the pond bottom. The depth-integrated composite sample shall be collected from the pond's water surface to a point no closer than 3 feet above the pond's bottom sediments. If the depth at the deepest point does not allow for the collection of a 3 meter depth-integrated composite sample, collect a depth-integrated composite sample from the pond's water surface to a point 3 feet above the pond's bottom sediments recording the depth (in feet or meters) over which the depth-integrated water sample was collected. To the extent practicable, ambient monitoring shall be collected following a minimum of 72-hours with no precipitation (i.e., dry weather). Sampling for dissolved oxygen shall be collected between 10:00 am and 2:00 pm. Each year, results from all monitoring shall be reported with the DMRs for October which are due to the Agencies by November 15th.

For purposes of analysis and reporting, chlorophyll-*a* analysis shall be performed using ***Standard Methods for the Examination of Water and Wastewater, 20th*** or subsequent Edition(s), Method 10200 H Chlorophyll using a modification by **Strickland, J.D.H. and Parsons, T.R.*, A Practical Handbook of Sea Water Analysis*, Fisheries Research Board of Canada, Bulletin No. 167, 1972, 310 pages** and total phosphorus shall be performed using a method with a ML of 10 µg/l. This ML is exactly the same ML used for analyzing total phosphorus in effluent samples [See footnote (3) on page 8 of this permit]. The modification to Method 10200 H utilizes an alternative filter medium (i.e., replaces glass fiber or membrane filter with a nitrocellulose membrane filter) and that modification can be found in the Standard Operating Procedures for chlorophyll-*a* performed by the NHDES-WD Limnology Center.

D. MONITORING AND REPORTING

1. For a period of one year from the effective date of the permit, the permittee may either submit monitoring data and other reports to EPA in hard copy form or report electronically using NetDMR, a web-based tool that allows a permittee to electronically submit discharge monitoring reports (DMRs) and other required reports via a secure internet connection. Beginning no later than one year after the effective date of the permit, the permittee shall begin reporting using NetDMR, unless the facility is able to demonstrate a reasonable basis that precludes the use of NetDMR for submitting DMRs and reports. Specific requirements regarding submittal of data and reports in hard copy form and for submittal using NetDMR are described below:

    a. Submittal of Reports Using NetDMR

        NetDMR is accessed from: http://www.epa.gov/netdmr. Within one year of the effective date of this permit, the permittee shall begin submitting DMRs and reports required under this permit electronically to EPA using NetDMR, unless the facility is able to demonstrate a reasonable basis, such as technical

or administrative infeasibility, that precludes the use of NetDMR for submitting DMRs and reports ("opt-out request").

DMRs shall be submitted electronically to EPA no later than the 15th day of the month following the completed reporting period. All reports required under the permit shall be submitted to EPA as an electronic attachment to the DMR. Once a permittee begins submitting reports using NetDMR, it will no longer be required to submit hard copies of DMRs or other reports to EPA or to NHDES.

Notification required herein or in Part II shall be submitted to EPA and NHDES at the address listed in Part I.D.1.c below.

b. Submittal of NetDMR Opt-Out Requests

Opt-out requests must be submitted in writing to EPA for written approval at least sixty (60) days prior to the date a facility would be required under this permit to begin using NetDMR. This demonstration shall be valid for twelve (12) months from the date of EPA approval and shall thereupon expire. At such time, DMRs and reports shall be submitted electronically to EPA unless the permittee submits a renewed opt-out request and such request is approved by EPA. All opt-out requests should be sent to the following addresses:

U.S. Environmental Protection Agency
Water Technical Unit
Attn: NetDMR Coordinator
5 Post Office Square, Suite 100 (OES04-4)
Boston, MA 02109-3912

and

New Hampshire Department of Environmental Services
Water Division; Wastewater Engineering Bureau
Attn: Compliance Supervisor
29 Hazen Drive
P.O. Box 95
Concord, New Hampshire 03302-0095

c. Submittal of Reports in Hard Copy Form

Monitoring results shall be summarized for each calendar month and reported on separate hard copy DMRs postmarked no later than the 15th day of the month following the completed reporting period. All reports required under the permit shall be submitted as an attachment to the DMRs. Signed and dated

original DMRs and all other reports or notifications required herein or in Part II shall be submitted to the Director at the following address:

U.S. Environmental Protection Agency
Water Technical Unit (OES04-SMR)
5 Post Office Square - Suite 100
Boston, MA 02109-3912

Duplicate signed copies of all reports or notifications required above shall be submitted to the State at the following address:

New Hampshire Department of Environmental Services
Water Division
Wastewater Engineering Bureau
29 Hazen Drive
P.O. Box 95
Concord, New Hampshire 03302-0095

2. Any verbal reports, if required in Parts I and/or II of this permit, shall be made to both EPA and to NHDES-WD.

E. STATE PERMIT CONDITIONS

1. The permittee shall comply with the following conditions which are included as State Certification requirements.

   a. The pH of the discharge shall be in the range of 6.5 to 8.0 standards units (s.u.) unless the upstream ambient pH in the receiving water is outside of this range, and is not altered by the facility's discharge or activities. If the permittee's discharge pH is lower than 6.5 S.U., the permittee may demonstrate compliance by showing that the discharge pH is either higher than, or no more than 0.5 S.U. lower than, the ambient upstream river water pH. For this demonstration, the upstream river water sample must be collected on the same day as the discharge pH is measured. The location where the upstream ambient pH sample is collected must be representative of the upstream conditions unaffected by the facility's discharge(s) or activities. Results of the ambient upstream river water pH sampling that are obtained to determine compliance with this limit shall be submitted as an attachment with the DMR.

   b. The permittee shall not at any time, either alone or in conjunction with any person or persons, cause directly or indirectly the discharge of waste into the said receiving water unless it has been treated in such a manner as will not lower the legislated water quality classification or interfere with the uses assigned to said water by the New Hampshire Legislature (RSA 485-A:12).

2. This NPDES Discharge Permit is issued by the EPA under Federal and State law. Upon final issuance by the EPA, the NHDES-WD may adopt this permit, including all terms and conditions, as a State permit pursuant to RSA 485-A:13. 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 the Permit as issued by the other Agency, unless and until each Agency has concurred in writing with such modification, suspension or revocation.