

RESPONSE TO COMMENTS - DATED MAY 25, 2004
REISSUANCE OF NPDES PERMIT NO. NH0000752
NEW HAMPSHIRE FISH AND GAME DEPARTMENT'S
NEW HAMPTON FISH HATCHERY

The U.S. Environmental Protection Agency (EPA-New England) and the New Hampshire Department of Environmental Services, Water Division (NHDES-WD) solicited public comments from March 24, 2004, through April 22, 2004, on the draft National Pollutant Discharge Elimination System (NPDES) permit to be reissued to the New Hampshire Fish and Game Department (NHF&GD) for its fish hatchery in Milford, New Hampshire. This permit is for the discharge of fish hatchery overflow (culture) water from several outfalls into a tributary to the Pemigewasset River, know locally as Dickerman Brook.

EPA-New England received one set of written comments during the public-notice (comment) period, that from the NHF&GD dated April 22, 2004. The following is a list of responses to those comments and any corrections made to the public-noticed permit as a result of those comments.

These five pages of responses and associated comments are complementary to the Fact Sheet and Draft Permit. For the reader to fully understand them, he or she should be familiar with the draft permit, the associated Fact Sheet, applicable federal National Pollutant Discharge Elimination System (NPDES) permit regulations and the State of New Hampshire's Water Quality Statutes, Administrative Rules and Surface Water Quality Regulations.

The effective date of this permit has been set at August 1, 2004, which is a little over 60 days from the anticipated date of issuance. The Agency's general rule for NPDES Permits with comments is to make them effective 60 days following the permit's effective date.

COMMENT NO. 1.

Page 2 of 20: The Department understands that DIS-002 is not permitted. We plan to consolidate that pipe with 005 and 006, or cap it. Page 11 of 20: Please add 002 to the consolidation. We plan to use the lower three or four raceways in A-3 as quiescent zones for settling, and temporary storage of solids prior to land application.

RESPONSE NO. 1:

In Table 3 of the Fact Sheet, cleaning water discharge (from the Hatchery House) is shown as the only discharge type that occurs at outfall DIS-002. Since the permit prohibits the discharge of cleaning waters and no other discharge type occurs from DIS-002, that outfall was not included in the consolidation plan. That plan only consolidates outfalls that discharge overflow water as a component of flow. Accordingly, the permittee's request is denied and this section of the permit is being issued unchanged from that in the public-noticed version.

The EPA-New England understands from this comment, comment number 3 below and recent phone

conversations with Mr. Fawcett of NHF&GD, that selected segments of Raceway A-3 in the upper hatchery and Raceway C in the lower hatchery will be set aside for the “temporary storage” of solids vacuumed from active raceways. Recent phone conversations with Mr. Fawcett indicate that “temporary storage” could mean for as little as a few days to as long as a few months. It also appears that exact details of how NHF&GD intends to manage these solids is still evolving, but their current thinking is to store them uncovered in empty raceways (inactive culture units containing no fish) and to decant any water that accumulates above those settled solids and discharge it with overflow water from active raceways. At placement, this liquid material is composed of about five percent solids. Only during the winter period (freezing conditions), will NHF&GD flood the raceways, allowing water to pass slowly over these solids to prevent them from freezing, expanding and damaging the raceway structures.

The NHF&GD informs the Agency that they have received several inquiries from parties willing to take both forms of the settled solids: that is, the liquid form (composed of about five percent solids), and the semi-dry form (most of the water removed).

In this context, the NHF&GD is using these raceways as clarifiers. EPA-New England concurs with this assessment as long as the discharge end of those raceways used for temporary storage of settled solids is engineered to prevent the discharge of floatables, foams, scums and/or solids. Accordingly, there should be no exceedances of the issued permit.

Given the storage approach presented by the NHF&GD in their public comments, language in the draft permit on page 14, **Part I.A.10.** is confusing; therefore, does not appear in the issued permit. As a result of the elimination, **Parts I.A.11.** through 14. in the draft permit have been renumbered to **Part I.A.10.** through 13. in the issued permit. Similarly, language on page 14, **Part I.A.9.** has been edited slightly to make it less confusing in the issued permit.

COMMENT NO. 2.

Page 6 of 20: The Department understands that DIS-011 and DIS-012 are permitted as type of discharge water. (Same explanation as 011.) [Page 30 of 30, DIS-012 was not included in the sketch.] Editor’s Note: Permittee means Fact Sheet, Attachment C (continued) on page 30.

RESPONSE NO. 2:

The permittee is correct in pointing out that outfall DIS-012 should have been included in the Fact Sheet and Draft Permit. Recent phone conversations with Mr. Fawcett of the NHF&GD indicate that DIS-012 drains standing water from the “distribution” or “headworks” area at the head end of Raceway C when that raceway is inactive. The headworks area in linear raceways such as Raceway C are used to equalize water flow to the various rearing units/sectors.

Authorization to discharge from this outfall under the same requirements as DIS-011 have been included in the final permit. Accordingly, DIS-012 has been added to **Part I.A.1.i.** on page 10 of the issued permit.

Since the Fact Sheet supports the public-noticed version of the draft permit, it is not revised at final issuance, even though changes have occurred. New Hampton's Fact Sheet was dated March 15, 2004, for a permit public noticed on March 24nd. However, this response serves to document any correction and its associated rationale to the public-noticed version of the Fact Sheet for future reference.

COMMENT NO. 3.

Page 9 of 20: We believe that the requirement to engineer a settling/screening device and/or "salutation" basin in the discharge pathway to DIS-028 to capture debris, is unreasonable. The material of concern is living organism (i.e. crayfish) from waters of the United States . Flushing the line just reduces the risk of them plugging spray holes in the pipes delivering water to the pools. They are alive and not debris. They will die if they get stuck in the spray holes. When that happens, the spray pipe will be unscrewed and cleaned out manually, so any dead material is removed in that manner, or with nets, as is the trout mortality.

We plan to use vacuum pumps to remove solids, and provide for settling in quiescent zones/settling basins located in the former fish rearing raceways at the lower end of C-Raceway. The last two lower sets of raceways will be used for settling, and temporary storage of solids prior to land application.

RESPONSE NO. 3:

According to a phone conversation on March 12, 2004 with Mr. Royce Benedict, a staff member at New Hampton, debris flushed from the pipeline includes sand, crayfish, frogs, fish, etc. with some of the aquatic organisms (i.e., frogs) expired from being stuck in the pipe. Apparently, these items pass through the one inch by one and half inch mesh screen that covers the intake structure located just behind Dickerman Pond dam. The Agency assumes that besides the aquatic life, small debris items such as sticks, twigs, leaves, paper and plastics are also entrained in the pipeline, the sum total being responsible for the loss in flow. This drop in flow capacity is the impetus for the periodic flushing.

If the Agency were to allow the discharge sticks, twigs, leaves, paper plastics and the carcasses of dead animals, such as frogs, from this outfall, that would be a direct violation of **Part A.3.** on page 13 of the issued permit. That section is backed up by cites in the NH Standards, specifically Env-Ws 1703.03 and 1703.12.

It is an EPA practice not to specify how a permittee shall meet a limit or narrative standard in their permit; therefore, in the draft permit on page 9, **Part I.A.1.h.**, first paragraph, the entire sentence in bolded, plus second paragraph, the reference to “*settling/screening device and/or siltation basin*” all have been deleted and replaced with a new single sentence paragraph inserted between the first and second paragraphs that reads, *This discharge shall be free of debris such as sticks, twigs, leaves, paper, plastics, dead aquatic animals, etc.* This narrative approach is in line with EPA’s practice of not specify control measures or even a series of broad control measures such as was done in the draft permit. Similarly, language on page 14, **Part I.A.8.** of the draft permit has been edited to accommodate changes made to the issued permit on page 9, **Part I.A.1.h.** Furthermore, Dickerman Pond acts as an effective sediment trap for sand and silt-sized particles entering that pond, thus there is no need for a settling or siltation basin at the end of this pipeline for little or none of that material should be present in the discharge.

Accordingly, the issued permit has been corrected to reflect the changes described above.

COMMENT NO. 4.

Page 12 of 20 (11): The Department was preparing to consolidate pipes this summer, however, there are new concerns about the November 30, 2005 “built-in compliance schedule”. March 31, 2004 consultation with the Department of Cultural Resources, Division of Historical Resources, resulted in directives to take on further economic burden and time delays, obstructing our ability to consolidate pipes until we have their approval. Since no preliminary assessment has been performed, this is expected to involve significant additional delays.

The Department questions whether **Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470), implemented by the procedures of the federal Advisory Council on Historic Preservation (ACHP) Protection of Historic Properties (36 CFR Part 800)**, was taken into consideration during drafting of this permit.

RESPONSE NO. 4:

The Agency was unaware that construction at this site would be subject to the National Historic Preservation Act when the permit was placed on public notice. There were no indications that there were any historic preservation issues from any of the other major parties (NHDES-WD or NHF&GD) until NHF&GD met with the historical preservationists during the public-notice period as explained in their comment.

The public-noticed version of the draft permit was configured to foster a quick consolidation of outfalls to prevent unnecessary purchases of expensive composite samplers and analytical services by the NHF&GD. In phone conversations with Mr. Fawcett of the NHF&GD, he indicated that they were striving for consolidation this summer (2004) and if not achieved, the following summer (2005). EPA-England considered the summer of 2004 overly optimistic given funding constraints at the State level and decided a more realistic time frame was through the end of the 2005 construction season

or by November 30, 2005. Since the Agency has already provided extra time for unforeseen exigencies, we are not inclined to extend the November 30th date, because it is too early in the consultation process to construct a reasonable estimate for how long the archeological work will take and whether the findings will impact the consolidation process. If during the spring of 2005 it appears that outfall consolidation will extend past November 30, 2005, due to activities related to compliance with the National Historical Preservation Act, the NHF&GD should notify EPA-New England and request an extension of the schedule. If the NHF&GD can show that the delay is beyond their control, a schedule extension may be granted through a permit modification or an administrative order.

EPA-New England just received a letter from NHF&GD dated May 11, 2004, outlining their outfall consolidation plans. In summary, for the upper hatchery, they plan to eliminate outfall 005 (drains Raceway A-2), move the broodfish presently held in Raceway A-5 to Raceway A-3, reclassify Raceway A-5 to “emergency use only” and maintain its overflow discharge through outfall 008 only when that raceway is being used to rear fish. This means that Raceways A-2 and A-3 along with the Hatchery House will be used for rearing fish on a regular basis with overflow waters from Raceway A-2 and the Hatchery House flowing into the headworks area of Raceway A-3 which, in turn after its use in Raceway A-3, will discharge to outfall 006. For the lower hatchery, overflow water from all the Circular C tanks (outfalls 013-016 and 018-026) will be consolidated with the overflow water from Raceway C (outfall 027).

Due to the potential of Raceway A-5 changing to “emergency use only”, the following sentence in *italics* has been added to page 4, **Part I.A.1.c.** of the issued permit. *When Raceway A-5 is not in use, the discharge of rainwater and snowmelt is allowed without monitoring in the same manner as outfalls listed and described in Part I.A.1.i. on page 10 of this permit.*

COMMENT NO. 5.

FACT SHEET Page 15 of 30, first paragraph, last sentence : the solids removed will likely be land applied on local agricultural land, rather than just at New Hampton hatchery.

RESPONSE NO. 5:

Comparison of the sentence in the comment with the one referenced in the Fact Sheet , page 15, shows NHF&GD has shifted emphasis for settled solids application to the “local agriculture land” scenario from the Hatchery one. The Agency has no problem with this shift in emphasis.

Comment noted, however, it’s an EPA regulation that the Fact Sheet supports the draft public-noticed permit, and, therefore, is not revised at final issuance. However, the permittee’s clarified description serves to correct any inadequacy the permittee may have with EPA-New England’s version of that sentence in the Fact Sheet.