



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
OCEAN ASSESSMENTS DIVISION
HAZARDOUS MATERIALS RESPONSE BRANCH
c/o U.S. Environmental Protection Agency
Waste Management Division - HEE-6
J.F. Kennedy Federal Building
Boston, MA 02203
1 May 1991

Ms. Meghan Cassidy
U.S. EPA Waste Management Division
J.F. Kennedy Federal Office Building
Boston, MA 02203

Dear Meghan:

Thank you for the the three most recent Brunswick NAS documents produced by E.C. Jordan; 1. the Draft Focused Feasibility Study for Sites 1 and 3, 2. the Draft Supplemental Remedial Investigation for the entire site, 3. the Draft Supplemental Feasibility Study for Sites 5, 6, and 12.

1. The Draft Focused Feasibility Study for Sites 1 and 3. It is clear that comments made by NOAA are completely ignored by Jordan/the Navy in subsequent documents. For example, in my 1 May 1990 review of the Draft RI, Risk Assessment and Post-Screening Workplan I noted that in Mere Brook "During the first three sampling rounds, iron and lead exceeded their chronic AWQC and zinc exceeded its acute AWQC, whereas in the fourth round of sampling cadmium, chromium, copper, lead, mercury and zinc exceeded their respective acute AWQC and iron and nickel exceeded their chronic AWQC." I also noted that "No hardness data were supplied in the RI, so it is not known if the criteria based on 100 mg CaCO₃/l are appropriate to surface waters from Brunswick NAS. The target levels should be based on water hardness at Brunswick NAS." On Pages 2-7 and Table 2-1 of this document both these comments were apparently ignored. Only zinc and iron in excess of their AWQC were addressed and a hardness of 100 mg/l as CaCO₃ was considered. Hence, the Ecological Surface Water Target Clean-Up Levels are either incomplete (other inorganics need to be considered) or inappropriate (AWQC levels need to be defined by a site-specific hardness)

I also disagree with the 1.0 mg/kg target level for mercury in Mere Brook sediments (as originally stated in my 1 May 1990 letter). Based on available literature, this proposed target level should be, at least, reduced to 0.2 ppm. Mercury bioaccumulates and biomagnifies to a great degree - this appears to be the case at the Charles George site in Massachusetts.

In reviewing the remedial alternatives NOAA would accept any of the alternatives besides No-Action and Minimal Action. However, NOAA would prefer the Cap/Groundwater Extraction/Treatment or the Cap/Passive Groundwater Collection/Treatment alternatives (1, 3 E or F). The Containment alternative (1,3 C) might result in some latent discharge of contaminants into Mere Brook and the Passive Groundwater Collection/Treatment (alternative 1,3 D) might result in some contamination bypassing the system; this latter





alternative also does not specifically address the removal of the inorganics although the pre-treatment step would probably do so.

2. The Draft Supplemental Remedial Investigation for the entire site. NOAA previously in writing (note RI review - 1 May 1990 and reviews of Sampling Rounds 2, 3, and 4) and at TRC meetings stressed the need to further assess sediment and surface waters at Site 8. These requests were apparently ignored despite the elevated inorganic levels found in some rounds (e.g., zinc and cyanide). Leachate inorganic levels were elevated at Site 8 in all rounds. In addition, Site 9 showed high zinc and cyanide levels in Merriconeag Stream, elevated levels was also found downstream. As discussed above, it is becoming increasingly frustrating to make such requests only to have Jordan and the Navy disregard them. I found a response to the Site 8 request on Page P-2; NOAA is certainly concerned with impacts to the Androscoggin River, however general environmental impacts are also considered especially in streams that discharge to rivers that support natural resources of trust. The dilution of contaminants in the river is very likely but the fact remains that the extent and nature of the contamination along this stream is still not known. It is also not known what species may be impacted by this contamination - Jordan admits "some deleterious impacts are occurring in the aquatic habitat downstream from Site 8". Round 4 sampling may have put this issue to rest; sediment and water sampling should be completed in the streams adjacent and downstream of Sites 8 and 9. Lastly, I disagree with Jordan's answer on Page P-15 concerning the source of zinc. Zinc either approaches or is greater than the acute AWQC adjacent to Site 8 (Round 3) and Site 9 (Round 4). I know of no other site where low ph and local geology is the cause of such elevated surface water zinc levels (>acute AWQC).

3. The Draft Supplemental Feasibility Study for Sites 5, 6, and 12. NOAA has no trustee resources potentially affected by these three sites. In addition, the three sites do not appear to pose an aquatic threat. Hence, no comments are included.

Let me know if you have any questions. I would appreciate Jordan and/or the Navy reviewing it.

Sincerely,

Kenneth Finkelstein, Ph.D.

