



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
1 CONGRESS STREET, SUITE 1100 (HBT)
BOSTON, MASSACHUSETTS 02114-2023

October 27, 2000

Lonnie Monaco (monacolj@exchange.efdnorth.northdiv.navy.mil)
Northern Division, Naval Facilities Engineering Command
Code 1821/LM
10 Industrial Highway, Mailstop 82
Lester, PA 19113-2090

**Re: EPA Comments to Draft Letter Work Plan for Groundwater and Soil
Investigations/Removal at Site 7, Naval Air Station, Brunswick, Maine**

Dear Mr. Monaco:

Thank you for the opportunity to review the above work plan which was prepared for the Navy by EA Engineering, Science and Technology, Inc. The EPA concurs that the project scope and approach is appropriate to the localized and low level contamination present at Site 7.

We do have several comments regarding execution of the investigations for your consideration; they are attached. Our comments are of a minor nature and we suggest they be discussed at a conference call prior to your response.

We look forward to the success of this work in order to reach a No Further CERCLA Action Record of Decision for Site 7. If you have any questions, please contact me at 617-918-1344 or barry.michael@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "M. Barry", written over a horizontal line.

Michael S. Barry
Remedial Project Manager
Federal Facilities Superfund Section

Attachment

cc. Al Easterday/EA (aeasterd@eaest.com)
Mike Fohner/NORTHDIV (fornermr@efdnorth.navfac.navy.mil)
Tom Fusco/BACSE (tfusco@clinic.net)
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Tony Williams/NASB (WilliamsA@nasb.navy.mil)

Attachment

1. Unrestricted discharge to sanitary sewer shouldn't be a problem for this site, but should only be conducted if the Brunswick Sewer District's cadmium discharge concentration limit (if any) is reasonably above the highest cadmium concentration expected (EPA understands this to be in the range of 10-20 ppb). Please verify what the cadmium discharge limit is. If the discharge limit is near the current cadmium concentration, containers may be required by prudent engineering practice. As a reference, pumping at 5 gpm for the duration cited in the work plan will produce about three standard size tank wagons of water (approx 15,000 gallons total).
2. Regarding the pumping tests.
 - a. EPA expects some degree of rebound after the pumping test as cadmium desorbs from soil into the now "cleaner" fresh groundwater so as to achieve equilibrium. The rebound rate will be dependent upon actual conditions, but will likely occur over several months to years, not days or weeks. Thus consideration should be given to "surging" the pumping or performing several cycles to better determine rebounding rate and magnitude. We concur that an assessment should be made after the pumping test.
 - b. Regardless of the results of the pumping test, EPA strongly supports the envisioned excavation due to uncertainty about rebound rate and magnitude. We are concerned that without an excavation, the situation could be the same a year from now. We assume project personnel will solicit NORTHDIV/MEDEP/EPA RPM input, as in the past.
3. EPA doesn't have any experience with naturally occurring cadmium in Region 1, though it's possible that local geochemical conditions facilitate the mobilization of the cadmium present. Another explanation is that the numerous test pits merely missed a small area with higher cadmium contaminations that are responsible for the groundwater contamination. The fact that the highest detected cadmium in soil was only 8 ppm (test pit 12), which was lower than the calculated concentration required to cause groundwater concentrations in the range of 10-15 ppb at MW-94 & 229 supports this.
4. Even though it's sensitivity for cadmium in soil is 10 ppm, use of an XRF scanner is a great idea that we strongly support. It will be useful if the test pits missed the highest cadmium concentrations in soil.
5. EPA concurs with the soil disposal plan.
 - a. The Maine Residential Guideline of 27 ppm cadmium in soil is the appropriate cleanup standard as it is more restrictive than federal standards. EPA Region 1 uses the Region 9 PRG's which for cadmium in soil are 1400 ppm for cancer risk and 37 ppm for a hazard quotient of 1.0. Though they won't be used, please cite the federal standards in the final work-plan.
 - b. Though soils of less than 27 ppm cadmium could be disposed of on-site, we strongly concur that they be disposed somewhere else on NASB because they could be a source of groundwater contamination at site 7. Such disposal wouldn't have any restrictions due to cadmium.