

N60478.AR.000705
NWS EARLE
5090.3a



6 August 2003

Ms. Jessica Mollin
Remedial Project Manager
Federal Facilities Section
United States Environmental Protection Agency
Region 2
290 Broadway
New York, New York 10007-1866

RE: Preliminary Assessment/Site Investigation Report
for Sites 47 and 48, June 2003
Naval Weapons Station Earle
Colts Neck, New Jersey
EA Project No. 296.0100.0005

Dear Ms. Mollin:

Enclosed please find the Navy's responses to the U.S. Environmental Protection Agency's comments dated 10 July 2003 regarding the referenced report. Please note that copies of the documents requested in Comment No. 1 will be provided under separate cover.

The Navy and EA Engineering, Science, and Technology appreciate the U.S. Environmental Protection Agency's rapid review of the referenced report and look forward to closure of the referenced sites. If you have any questions or require further information, please contact Michele DiGeambeardino of the Navy at (610) 595-0567, extension 117, or me at (732) 404-9370, extension 220.

Sincerely,

EA ENGINEERING, SCIENCE,
AND TECHNOLOGY, INC.

A handwritten signature in black ink, appearing to read 'Christopher J. Kerlish', written in a cursive style.

Christopher J. Kerlish
Contract Task Order Manager

Cc: L. Burg, NWS Earle
M. DiGeambeardino, EFANE ✓
R. Marcolina, NJDEP

**RESPONSE TO COMMENTS (DATED 10 JULY 2003)
FROM THE U.S. ENVIRONMENTAL PROTECTION AGENCY
REGARDING THE FINAL PRELIMINARY ASSESSMENT/SITE
INVESTIGATION REPORT FOR SITES 47 AND 48
AT NAVAL WEAPONS STATION EARLE, COLTS NECK, NEW JERSEY**

Comment 1. Please provide one copy each of the following documents: (1) The NJDEP's Summary of Selected Soil Constituents and Contaminants at Background Locations in New Jersey and (2) the New Jersey Geological Survey Investigation Report of Baseline Concentrations of Arsenic, Beryllium, and Associated Elements in Glauconite and Glauconitic Soils in the New Jersey Coastal Plain.

Response—Copies of the requested documents will be provided to U.S. Environmental Protection Agency under separate cover.

Comment 2. Section 4.2.5 discusses the results of the TCLP of an actuator. This section states that concentrations of cadmium and lead were above RCRA TCLP Hazardous Waste Regulatory levels in the core sample and from the battery (cadmium only). The report indicates that in a number of samples, cadmium has exceeded screening levels and background concentrations for soils and sediments (see pages 18, 19 and 21). However, on page 25, section 5.2.5, it is stated that although the core sample of the actuator does not pass RCRA leachability, it does not appear at this time to have impacted site media. The PA/SI provides no justification that the cadmium from the actuator did not cause any impact to site media.

Further clarification or discussion on cadmium is needed to support the idea that the actuators have not caused elevated analytical results, otherwise a Remedial Investigation may be necessary.

Response—Although cadmium was detected during Toxicity Characteristic Leaching Procedure analysis of an actuator core, elevated concentrations of cadmium in soil at Site 48 did not correspond with locations where actuators or portions of actuators were observed. As discussed in Section 5.2.1, this lack of discernable trends between the presence of actuators and elevated analytical results indicates that the elevated concentrations are not the result of the presence of actuators. Furthermore, cadmium concentrations exceed only the New Jersey Department of Environmental Protection (NJDEP) Residential Direct Contact Cleanup Criterion for cadmium in soil and do not exceed NJDEP's Non Residential Direct Contact Cleanup Criterion. Because Site 48 is located in a secure area of NWS Earle, future residential use of this area is unlikely. As a result, removal of actuators to minimize potential future impacts is recommended, but no action is warranted for cadmium in soil.

As noted in Table 5 in the PA/SI Report, 2 of 5 sediment samples collected in and downstream of West Pond contained cadmium at or above the guidance criterion for cadmium (1 mg/kg) listed in NJDEP's Guidance for Sediment Quality Investigations. Of these, 1 sediment sample contained cadmium at a concentration equivalent to the guidance criterion and the other contained cadmium at a concentration (1.2 mg/kg), which slightly exceeds the criterion. Although these 2 samples on an individual basis exceed the representative conservative sediment screening value (i.e., Threshold Effects Level [TEL]), when all samples are considered, an average concentration does not exceed that level as shown in Table 1 below. The TEL represents the concentration below which adverse effects

to a freshwater benthic community are expected to occur only rarely. When both the maximum and average concentrations are compared to a less conservative sediment benchmark, like the Probable Effects Level (PEL) for cadmium, both concentrations are significantly less than the benchmark concentration. The PEL represents the concentration above which adverse effects to a freshwater benthic community are frequently expected. Therefore, none of the sediment samples collected at Site 48 have concentrations that would be expected to cause adverse impacts to the benthic community had actuators leached with considerable significance in the past. However, the removal of actuators remaining at Site 48 will ensure that leaching of cadmium from their cores into the surrounding soil and sediment does not occur in the future.

TABLE 1

Chemical	Maximum Concentration (mg/kg)	Average Concentration (mg/kg) ¹	Threshold Effects Level	Probable Effects Level
Cadmium	1.2	0.57	0.60	3.53
NOTE: ¹ – Average Concentration calculated using SD-01 through SD-05. One-half the detection limit was used to represent concentration for SD-01 and SD-5 where cadmium was not detected.				

Comment 3. Page 25, first full sentence on page 25. Explain why the analytical results in the previous sentence would indicate no impact to surface water.

Response—The referenced sentence should read as follows:

Given that surface water samples collected upstream of the pond are generally consistent with those observed in and downstream of the pond and because arsenic was not known or suspected to have been used in the area of Site 48 by the Navy, arsenic concentrations in surface water appear to result from elevated, naturally-occurring concentrations in local soils. As such, no further action is required for surface water at Site 48.