



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II

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NEW YORK, NEW YORK 10278

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Dear Mr. Hoover:

This is a follow-up to our conference call with Frank Csulak of the National Oceanic and Atmospheric Administration (NOAA) which was held on February 19, 1992 concerning recommendations for sampling and biological assessment at the Naval Weapons Station (NWS) Earle, located in Colts Neck, New Jersey.

As I have previously stated, this site is of importance to NOAA because the headwaters and drainage basins of three major coastal plain rivers - the Swimming River, Manasquan River, and the Shark River are present on the Main Base. In addition, surface water drainage from the Waterfront Area drains into Ware Creek and Sandy Hook Bay. A large variety of anadromous, catadromous, freshwater and marine resources use these areas for habitat, foraging, and spawning.

Considering the sensitive nature of the environments potentially impacted (headwaters of several streams: productive salt marshes of Sandy Hook Bay) from contamination, in August 1991 NOAA submitted a recommendation to both the U.S. Environmental Protection Agency (EPA) and the U.S. Navy (Navy) that additional sampling was needed to evaluate potential impacts to NOAA, the Department of Interior (DOI), and the State of New Jersey trust natural resources. NOAA's recommendation included a proposal to collect surface water and sediment samples at 15 specific locations in Ware Creek Drainage, Hockhockson Brook Drainage, and Pine Brook Drainage. There were three primary reasons why this additional sampling needs to be taken: (1) contaminants may have migrated long distances over time; (2) the objectives of the remedial investigation program so far have not included a broad understanding of the site for its effects on natural resources; and (3) at least for the sites identified as part of the Site Investigation program, the sites will receive no further study. This additional information would allow NOAA, DOI, and the State of New Jersey to carry out their responsibility for the protection of trust natural resources.

In general, remedial investigations at NWS Earle should take the approach that waste disposal has occurred over wide areas, on several different watersheds, over a long period of time, and may have been greater in the past, and therefore, contamination may be present in environmental media over a wider area than might otherwise be expected. The additional sampling recommended takes into account such circumstances. I believe that this level of effort is warranted even though previous limited investigations did not observe extensive contamination.

In follow-up to NOAA's comments a meeting was held on August 29, 1991 to explain in detail NOAA's recommendation for additional sampling. During the meeting, a tentative agreement on additional monitoring was reached which was designed to meet the Navy's objectives, and address NOAA's natural resource concerns. The Navy submitted a letter to EPA, dated September 14, 1991 with a proposed sampling plan. The sampling plan proposed the collection of surface water, sediment, soil, and groundwater samples from various locations in the Ware Creek, Hockhockson Brook, and Pine Creek watersheds.

Upon receiving this sampling proposal, members of EPA's Biological Technical Assistance Group (BTAG) reviewed the proposal. It was the consensus of the group members that the Navy's proposed sampling plan would not satisfactorily address ecological concerns. Recommendations were made that more sampling locations were needed in order to assess the potential impacts of site contaminants on the "biology and ecology, including flora, fauna, and sensitive areas" and "natural resources". At the BTAG meeting it was recommended by EPA's BTAG coordinator that EPA should conduct a site reconnaissance of NWS Earle for determination of applicability of rapid bioassessment techniques for surface waters found on the Station. Rapid bioassessments are used only as a screening tool and based on the species diversity and abundance of aquatic insects and macro-invertebrates a generalization may be made as to the overall water quality of a stream or river. However, if a depauperate community is found, one cannot make any statement as to the source or level of contamination. All they can indicate is whether or not an area is impacted.

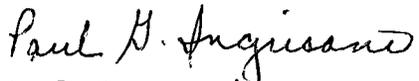
On October 24, 1991, EPA's Environmental Services Division (ESD) visited NWS Earle for the purpose of determining the applicability of rapid bioassessment techniques for site surface waters. After visiting Hockhockson Brook and Mingamahone Brook, the biologists determined that the streams examined were not amenable to rapid bioassessment due to their relatively small size and general lack of aquatic insects. This resulted in their recommendation that surface water and sediment sampling for chemical analysis be conducted to determine if contaminants have entered streams and wetland areas from on-site sources.

Based upon the recommendations made by the BTAG and the lack of results from ESD's rapid bioassessment sampling effort, EPA recommends to the Navy that NOAA's original recommendations (see August 12, 1991 letter - attached) for additional sampling to evaluate impacts on NOAA, DOI, and the State of New Jersey natural resources in the drainages of Ware Creek and Pine Brook, including Hockhockson Brook be incorporated into the Site Investigation Workplan. I discussed this recommendation with Nick Stencil of your office on February 24, 1992.

EPA and NOAA will be available to participate in the selection of specific sampling locations during a field visit scheduled for either late March or early April 1992.

If you have any questions concerning this matter, please contact me at (212) 264-6609.

Sincerely yours,



Paul G. Ingrisano
Project Manager
Federal Facilities Section

~~Enclosures~~

cc: CPT W.M. Migrala, Jr., NWS Earle
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