



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF

December 24, 1998

DW-8J

Mr. Phil Keith  
Environmental Protection Department  
Code 095 B-3260  
Naval Surface Warfare Center  
300 Highway 361  
Crane, Indiana 47522-5001

RE: Risk Assessment: Current Conditions  
Naval Surface Warfare Center  
Crane, Indiana

Dear Mr. Keith:

The purpose of this letter is to follow up on the verbal comments that the United States Environmental Protection Agency (U.S. EPA) expressed to the Navy at the partnering meeting in Indianapolis in September. The Navy stated recently that they needed these comments in writing in order for your contractor to continue their work. Please be aware that these attached comments just reiterate what was said verbally, and these comments and the previous comments need to be addressed in the finalized version of the document. Due to problems in our ecologist's workload, no further ecological comments will be sent. The previous deficiencies addressing ecological issues must be addressed. If there are any other ecological concerns they will be addressed in permit conditions.

A final revision, with recommendations on how to handle the risks at the sites needs to be submitted no later than January 30<sup>th</sup> in order for the U.S. EPA to begin writing permit conditions. If you have any questions regarding this matter, please contact me at (312) 886-6146.

Sincerely,



Carol Witt-Smith  
Corrective Action Expert  
WMB, IL/TN/MI Section

cc: Core Team Members: Tom Brent, NSWC  
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Mark Shultz, NTC  
Tom Linson, IDEM

Comments on the Current Conditions Risk Assessment  
Volume 1

1. The assessment appears to follow the approved Work Plan as promised.
2. The progression from site description through chemical selection, exposure assessment, and risk calculations is pretty easy to follow.
3. In some of the Tables (primarily Table 4-1), there are lines of text that appear to be misplaced. There are also some decision points in the tables that need further explanation. These should be straightforward revisions.
4. A major point to be further addressed is the high hazard indexes and cancer risks found for ingestion of contaminated water by current off-facility residents (Padanaram and other ground water and surface water users). In most scenarios (and perhaps all scenarios), data from the contaminated wells and springs were used as the surrogate for the actual location where the contaminated would be ingested. This is a conservative approach; however, since the risks calculated in this manner were found to be highly significant, the additional concern is for the off-site migration potential of the contaminated ground water and spring water, how significant this situation could be, together with more detailed understanding of the hydrology of the contaminated waters. We realize that we have gone over this issue previously with the Navy, but it is important, especially since the risk assessment is confirming in print the high risks from the current conditions. The risk assessment needs to address these issues more thoroughly, including discussion of the uncertainties and additional studies that could be performed.
5. The PETN value that needs to be used in calculations is an RfD of 1 mg/kg/day. The U.S.EPA National Risk Management Research Laboratory, located in Cincinnati, may be reached at (513) 569-7418, for further information since they established the values for Region 10.