

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF HAZARDOUS MATERIALS AND SOLID WASTE CONTROL

N60087.AR.000293
NAS BRUNSWICK
5090.3a

M E M O R A N D U M

TO: Mark Hyland, Federal Facilities Director
FROM: Dick Behr, ^{RB}Geologist - Division of Technical Services
DATE: May 11, 1992
RE: Focused Feasibility Study, Site 8 - Brunswick Naval Air Station April 1992

Based on review of the above document, I offer the following comments. If you have any questions, please ask.

The remedial alternatives evaluated for Site 8 include: 1) no action; 2) minimal action; and 3) soil cover. The third alternative, installation of a soil cover, is the least expensive alternative and may provide the greatest protection for the environment and public health. However, I am not convinced that six inches of soil is an acceptable cover system for this disposal area. Although the risk assessment did not find that Site 8 posed a significant threat to human health or the environment, there are several factors that must also be considered when choosing the remedial action alternative. These factors are explained below.

According to the Supplement RI Report (April 1991), groundwater has been impacted by this site. This is in contrast to the statement on page 3-15 indicating groundwater has not been impacted by Site 8. The occurrence of leachate breakouts along the eastern edge of the site, PAHs in soils, and elevated inorganics in groundwater, warrant consideration of a more sophisticated cover design. Consideration of more specific cover requirements is also in conformance with the closing requirements outlined in Chapter 404.5 (H) of Maine's Solid Waste Regulations. Furthermore, the above mentioned site characteristics suggest it may be more appropriately closed in accordance with the stricter Chapter 401 regulations. A compromise between the two requirements may be most appropriate.

The proposed soil cover system is estimated to cost \$42,000. Discussions with one of the Department's Solid Waste Engineers indicated that an additional 18 inches of low permeability soil could potentially be incorporated into the cover design for an additional \$25,000 - 30,000. The additional costs would cover borrow source testing, purchase of low permeability soils, and moisture and density measurements during construction in lieu of in-situ permeability testing. Even with these added costs, the final cost of an upgraded cover design could be substantially lower than either the no action or minimal action alternative.

In conclusion, installation of a low permeability cover system will reduce the amount of leachate generated, reduce or eliminate leachate breakouts and lessen the site's impact on groundwater. Consequently, the report should evaluate the feasibility of an upgraded cover design.

pc: Marianne Hubert

rsb/bnas1.doc