

**MALCOLM
PIRNIE**MALCOLM PIRNIE, INC.
ENVIRONMENTAL ENGINEERS, SCIENTISTS & PLANNERS
June 8, 1984

Commander, Atlantic Division
Naval Facilities Engineering Command
Norfolk, Virginia 23511

Attention: Mr. Joseph G. Wallmeyer
Code 114

Gentlemen:

We are pleased to submit one original and 15 copies of the Site Suitability Assessment of the Proposed Brig Expansion (P-977) report.

In response to NAVENENVSA comments contained in the Port Hueneme, California review signed by Jay L. Crane, the following discussion is presented to address those items not included in the revised report (separated by chapters).

Comment: Question regarding background wells (pg. 3-3).

Response: The eleven ground water monitoring wells were located within the landfill boundaries to insure adequate coverage of the existing facilities and potential construction area. These wells were used to identify existing constituents which may create a health or environmental problem during construction and/or operation of on-site facilities. Background data collected beyond the study boundaries would have no bearing on the purpose of this study. Consequently, no background wells were installed.

Comment: Question regarding gas sampling and analysis (pg. 3-4).

Response: The question was concerned with gas sampling stations being placed at the periphery of the landfill. This was apparently a misinterpretation. All of the monitoring stations were located within the landfill area as described by historical records. The locations were chosen to represent locations of critical exposure potential (i.e. areas adjacent to existing or proposed facilities). Security requirements did not allow stations to be located within the fenced confinement area. For this reason, stations were not placed directly adjacent to existing facilities, but rather as close as permissible.

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Comment: Question regarding interpretation of methane analysis data (pg. 4-3).

Response: The intent of the discussion on gas monitoring was not to suggest organics in landfills "always produce just a small amount of methane." On the contrary, Pirnie's contention is that the low methane levels found in all but one location could be caused by the natural breakdown of organics not associated with landfilling. Consequently, these concentrations were determined to be insignificant.

The statement contained in our report, 'the measured value of 1,000+ ppm methane was much higher than expected', has been restated to alleviate any misinterpretation of the intent. The intent was to show that the 1,000+ ppm reading was significant, however, could not be conclusively attributed to the landfill debris.

The presence of the sewer pipe adjacent to the monitoring station which connects to a grease trap type structure, in our opinion, is the most probable cause of the high methane reading. As recommended in our report, additional sampling would be required to justify or invalidate this hypothesis.

Comment: Question regarding ground water sampling.

Response: The nature of the study did not require investigation of pollutants beyond the limits of the existing or proposed facilities. The wells were located within the landfill to give coverage of the study area. The one time sampling, required because of time constraints initiated by the Navy, was considered adequate. Sampling being performed at the site as part of our Confirmation Study five site investigation will include periodic sampling of the Camp Allen area.

Comment: Question regarding monitoring of volatile organics.

Response: Precautions have been recommended concerning the potential existence of drums containing toxic materials. Where proposed structures are located, it is assumed drums, containers or other debris

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will be exposed and properly disposed of during construction. As stated in the report, a monitoring program is recommended to identify any release of volatile organics which may result from drum deterioration. A long term monitoring program should be developed, based on information gathered during construction and the initial year of operation. Sufficient data is not presently available to develop such a program.

Comment: Question regarding chronic exposure to inmates of the brig.

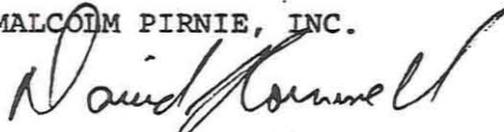
Response: Evidence gathered to date does not indicate a chronic exposure concern to inmates of the existing brig. The investigation has not identified the release of volatile organics from undisturbed materials. Gas production tests and measurements to determine the quantity and type of gas migrating to and releasing from installed monitoring stations showed no significant results. The potential for release of gases during construction, particularly excavation activities, and the short term exposure potential was recognized and the report has been revised to further emphasize this point.

It has been a pleasure working with the Navy on this project and we appreciate the assistance provided by Mr. Joseph G. Wallmeyer, EIC.

If you have any further comments or questions regarding this report, please feel free to call.

Very truly yours,

MALCOLM PIRNIE, INC.



David A. Cornwell, PhD, P.E.
Senior Project Manager

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