

N00101.AR.002470
NAS SOUTH WEYMOUTH
5090.3a

LETTER AND COMMENTS FROM U S EPA REGION I REGARDING DRAFT LANDFILL GAS
SAMPLING PLAN FOR RUBBLE DISPOSAL AREA OPERABLE UNITS 2 (OU 2) AND 9 (OU 9)
NAS SOUTH WEYMOUTH MA
05/20/2010
U S EPA REGION I



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION I
5 Post Office Square, Suite 100
Boston, MA 02109-3912

May 20, 2010

Brian J. Helland, P.E.
BRAC Program Management Office NE
4911 South Broad Street
Philadelphia, PA 19112-1303

Re: Landfill Gas Sampling Plan for the Rubble Disposal Area

Dear Mr. Helland:

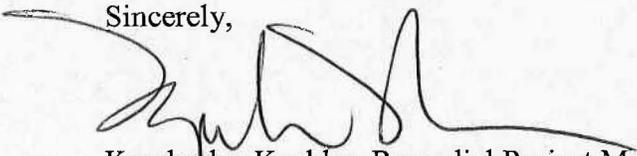
Thank you for the opportunity to review the reviewed the draft *Landfill Gas Sampling Plan* for the Rubble Disposal Area at the Naval Air Station South Weymouth dated May 2010. The document describes the means and methods that will be used to collect soil gas samples from the vicinity of the RDA landfill in order to identify the source of the methane and VOCs that have been detected during routine landfill gas monitoring of the RDA landfill. Detailed comments are provided in Attachment A.

Please include a table summarizing the samples to be collected and the analyses to be performed on each, including screening samples.

Please clarify how Navy intends to differentiate between biogenic and petrogenic origins for methane.

I look forward working with you and the Massachusetts Department of Environmental Protection on the investigation and remediation of the remaining sites. Please do not hesitate to contact me at (617) 918-1385 should you have any questions or wish to arrange a meeting.

Sincerely,



Kimberlee Keckler, Remedial Project Manager
Federal Facilities Superfund Section

Attachment

cc: Dave Barney, USN, South Weymouth, MA
Dave Chaffin, MADEP, Boston, MA
Kevin Donovan, SSTTDC, South Weymouth, MA
Phoebe Call, TTNUS, Wilmington, MA

ATTACHMENT A

<u>Page</u>	<u>Comment</u>
p. 4	In Step 4, the text describes the collection of a gas sample in a tedlar bag but does not include purging of the sampling line before the sample is collected. Therefore, EPA assumes that the tedlar bag sample will not be analyzed because it is not representative, but will be collected only to avoid discharging it to atmosphere and potentially contaminating the SUMMA sample. If that is not the intent, please correct the text. The same comment applies elsewhere in the document where tedlar bag samples are collected.
p. 6	In the partial paragraph at the top of the page, please clarify what the parameters will be screened for.
p. 9	The text suggests that because gas monitoring only occurs semi-annually that gas builds up in the gas probes and therefore represents worst-case conditions. However, because gases migrate by diffusion from high to low concentration areas, the gas concentration cannot exceed the gas concentration at the source. Consequently, while the pressure could build up over the six month period between samples, the gas concentration would actually be representative of average conditions, not worst-case conditions. Please correct the text needs to reflect that.
p. 10	In the penultimate paragraph of the <i>Permanent Gas Probes and Gas Vents</i> section, please better describe how the data suggest that air may be able to bypass the bentonite seal in the last sentence.
p. 12	In the <i>Soil Vapor Sample Analysis</i> section, it is not clear why forensic sampling is necessary. If methane and VOCs are present at concentrations above the action limits, there appears to be a need for action. Please include the laboratory SOPs for the fixed gases analysis (ASTM Method D1945), the forensic analysis (GC/IRMS), and regulatory VOC analysis (EPA Method TO-15).
Figure 1	Please include the limits of the proposed roadway in relation to the four transect lines.