

**RECORD OF MEETING PROCEEDINGS
ST. JULIENS CREEK ANNEX
ECOLOGICAL RISK ASSESSMENT REVIEW FOR
LANDFILL B (SITE 2), BURNING GROUNDS (SITE 5)
LANDFILL C (SITE 3), & LANDFILL D (SITE 4)**

17 MARCH 1998

DATE: 17 March 1998; 8:00 - 15:00

LOCATION: LANTDIV Office Building, Norfolk, Virginia

PURPOSE: Ecological Risk Assessment Meeting to Discuss "Work in Progress" Ecological Risk Assessment Document for the Four Investigated Sites at St. Juliens Creek Annex (listed above).

ATTENDEES:

<u>REPRESENTATIVE</u>	<u>AFFILIATION</u>	<u>PHONE</u>
Devlin Harris	VADEQ	(804) 698-4226
Randy Jackson	LANTDIV	(757) 322-4587
Peter Knight	NOAA	(215) 566-3321
Paul Nikituk	CH2M HILL	(703) 471-1441
Tim Reisch	COMNAVBASE	(757) 322-2896
Dave Schroeder	CDM Federal Programs Corp.	(703) 968-0900
Rob Thomson	USEPA, Hazardous Sites Div.	(215) 566-3357
Nancy Zygmunt	CDM Federal Programs Corp.	(908) 757-9500

St. Juliens Creek Annex Site Visit

Attendees arrived at the LANTDIV office building at 08:00 to depart for St. Juliens Creek Annex. A site reconnaissance was performed of all four sites. All attendees were present except for R. Thomson who planned on meeting the group later that morning at the St. Juliens Creek site.

0850 Arrive at Landfill B (Site 2). Everyone departs the van and walks around the perimeter of the landfill. P. Knight asks if environmental samples were analyzed for explosives at this site. D. Schroeder answers no, however, this is incorrect. Immunoassay nitramine testing of all samples for all media was performed at Landfill B and the Burning Grounds. Select samples (as described in the Project Workplan) were submitted for laboratory analysis (SW-846-Method 8330). P. Knight also asks why no sediment samples were collected in St. Juliens Creek. R. Jackson, T. Reisch and D. Schroeder explain that the initial

sampling efforts at all of the investigated sites was to focus on site conditions and determine if any of the sites posed a threat to human health or the environment. After the initial sampling effort was complete and data was reviewed, additional sampling locations in the vicinity of the sites would be determined. Additional sampling locations at the site were discussed.

- 0940 R. Thomson arrives and joins group for additional site visits.
- 0945 Several sites unrelated to the current ecological risk assessment for Site 2, Site 5, Site 3, and Site 4 are viewed in transit.
- 1000 Arrive at the Burning Grounds (Site 5). View the site from the van. The location of the “caged pit” and “drop tower” are identified. R. Thomson asks how deep the surface soil samples were collected within the Burning Grounds. D. Schroeder says that surface soil samples collected within the gravel area of the site were collected at a depth below the gravel. This was done to try and obtain soil samples representative of conditions during Burning Grounds operations.
- 1005 Drive through Landfill C (Site 3). D. Schroeder shows the location of the western edge of the landfill (distinguishable by the raised surface elevation). Arrive at Landfill D (Site 4). Everyone departs the van and walks the perimeter of the landfill as well as most of the landfill interior. P. Knight asks to see location of sediment sample (SD-04) collected immediately upgradient of Blows Creek. N. Zygmunt identifies survey flagging in the reeds which marks the sampling location. P. Knight and others walk along Patrol Road (the eastern boundary of Landfill D) to the foot bridge which crosses Blows Creek at its confluence with the South Branch of the Elizabeth River. The southern edge of Landfill D is identified based on sample location maps and location of monitoring wells observed in the field. P. Knight indicates a need to sample surface water and sediment in Blows Creek.
- 1100 Leave St. Juliens Creek Annex and return to LANTDIV office building.
- 1130 Arrive at LANTDIV office building.

Discussion of “Work in Progress” Document for St Juliens Creek Annex Sites

- 1245 Begin discussion of “Work in Progress” Ecological Risk Assessment Document. R. Jackson opens meeting by stating CDM Federal will present ecological risk information obtained as a result of field investigative activities during the summer of 1997. D. Schroeder hands out meeting outline and indicates that the meeting will attempt to examine the approach of the “Work in Progress” Ecological Risk Assessment Document as well as the assumptions which were used during the preparation of this document.

N. Zygmunt begins presentation of meeting materials. Topics to be covered are as follows:

- Introduction to Work in Progress Document
- Processes common to each risk assessment
 - Selection of COPC's
 - Endpoints
 - Receptor selection
 - Means of evaluation
- Discussion of individual sites

P. Knight comments on the omission of naturally occurring inorganics (calcium, potassium, magnesium, and sodium). P. Knight suggests adding wording indicating that these inorganics are not just naturally occurring in high concentrations but are also "not toxic". N. Zygmunt agrees to edit wording to include statement that these inorganics are not toxic.

P. Knight questioned the removal of blank-associated contaminants according to human health risk assessment guidance procedures. P. Knight said that he would check on the acceptability of this method with Barbara Okorn (Region III EPA). P. Knight and R. Thomson discuss non COPC's and the need to screen these using one-half their detection limit. P. Nikituk indicates that including one-half the detection limit for non-detects is usually not done. P. Knight and R. Thomson state that it is beneficial to have detection limits below the screening values.

P. Knight asks if groundwater data is included in the document. N. Zygmunt indicates yes, and shows P. Knight where it is located. P. Knight requests that future documents include page numbers and section numbers. N. Zygmunt agrees to include them in all future documents.

P. Knight states that all sites at St. Juliens Creek should be analyzed for explosives. D. Schroeder asks if the historical records for a site do not indicate that explosives were used or disposed of should explosive analysis still be performed. P. Knight says yes.

P. Knight recommends that all ecological reports follow the ERT format. P. Knight will provide an example copy of this format to CDM Federal and CH2M HILL.

P. Knight states that all eleven (11) endpoints presented in the document are fine but terrestrial vegetation should be added. N. Zygmunt asks what vegetative measurement endpoints are to be used. P. Knight is not sure. N. Zygmunt says she will look into available databases or call ERT.

P. Knight says that the number of measurement endpoint bullets must match the assessment endpoint bullets. N. Zygmunt says she has combined some. P. Knight says to make sure the text indicates which have been combined.

P. Knight asks to have the first measurement endpoint bullet clarified. Also, the second measurement endpoint bullet is confusing regarding which fish receptor will be used. N. Zygmunt will edit text to clarify these statements. N. Zygmunt pointed out that there are aquatic toxicity values for mummichog from the AQUIRE database that could be used to assess the potential ecological risk to fish from contaminated water. P. Knight agreed that it would be useful as another means of evaluation in addition to the foodchain model assessment using bass.

N. Zygmunt discusses receptor selection process. P. Knight says the receptor selection list is O.K.

P. Knight asks why the fox diet is 100% mammals when this is not realistic. N. Zygmunt indicates that other Navy ecological documents used this and that it is more conservative. P. Knight noted that the text should indicate that conservative diets are chosen for the assessment and that they do not necessarily represent typical receptor diets. P. Knight points out that the text says the Blue Heron eats only bullfrogs but later the document mentions that fish are also part of the diet. P. Knight says it should be one or the other. N. Zygmunt will correct.

P. Knight asks if Table 2-10 can show both the first screening and second screening for contaminants of concern. Also, the HQ values greater than 1.0 should stand out (i.e., shading, bolding).

P. Knight indicates that apparent data gaps are lack of explosives analysis at all sites and no sampling in Blows Creek and St. Juliens Creek. P. Knight also commented that the groundwater needs more information (only the data from the most downgradient wells were presented) to see if contaminant plumes exist, where they are located, or if there is no concern.

P. Knight stated that the composite subsurface soil samples were not sufficient for ecological risk assessment purposes for several reasons:

- Samples were not co-located with surface soil samples
- Too few samples per site to make conclusions
- The sample composite was collected over to great a distance (3ft.)

R. Thomson draws site plans of Landfill B and the Burning Grounds and shows the distribution of lead contamination in surface soils. R. Thomson indicates that this data could cause these site to be listed as NPL sites. R. Thomson asks for a full list of St. Juliens Creek Annex SWMU's and sites.

R. Jackson says that a background study and site management plan (which are tentatively planned) would have a full list of SWMU's and sites included. R. Jackson asks what is

the next site that should be investigated. R. Thomson says the Navy might want to closeout the landfills before starting the next sites. R. Jackson asks if 1ft to 3ft of landfill soil cover over a landfill would be acceptable to BTAG if all other criteria for this type of alternative were satisfied. P. Knight says 3ft of fill would be acceptable. D. Harris says if groundwater contamination is low then landfill cover would be O.K. If groundwater contamination is not low then more stringent requirements are required.

R. Jackson asks if CDM Federal could generate proposed sample locations for review. D. Schroeder says CDM Federal will prepare proposed sample location maps. P. Knight says samples in St. Juliens Creek need to be located offshore from any site at St. Juliens Creek Annex.

R. Jackson asks if additional samples should be collected before producing the draft ecological risk assessment document. R. Thomson, P. Knight, and D. Harris agree to wait until additional sampling is completed.

R. Thomson recommends looking at the Yorktown site for an example background study.

T. Reisch says that a RAB for St. Juliens Creek is being developed. D. Harris indicates a RAB is a good idea.

1500 Meeting is adjourned.

CDM Federal Programs Corporation
A Subsidiary of Camp Dresser & McKee Inc.

consulting
engineering
construction
operations

13135 Lee Jackson Memorial Highway
Suite 200
Fairfax, Virginia 22033
Tel: (703) 968-0900 Fax: (703) 968-0915

April 3, 1998

Atlantic Division, Naval Facilities Engineering Command
Attention: Code 18221 Mr. Randy Jackson, P.E.
1510 Gilbert Street
Norfolk, VA 23511-2699

Subject: Contract N62470-95-D-6007
Navy CLEAN II Program
Contract Task Orders - 027 & 028

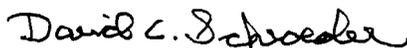
Dear Mr. Jackson:

Enclosed are the meeting minutes from the ecological risk assessment review meeting held on 17 March 1998 at your offices in Norfolk Virginia.

If you have any questions regarding this submittal, please contact me at (703) 968-0900 or Ms. Nancy Zygmont at (908) 757-9504.

Sincerely,

CDM FEDERAL PROGRAMS CORPORATION



David C. Schroeder, P.G.
Project Manager

Enclosure

cc: Mr. Peter Knight / NOAA
Mr. Robert Thomson / EPA
Mr. Devlin Harris / VDEQ
Mr. Randy Jackson / LANTDIV
Mr. Tim Reisch / COMNAVBASE
Mr. Michael Tilchin / CH2M HILL
Mr. Paul Nikituk / CH2M HILL
Ms. Nancy Zygmont / CDM Federal
Project File (CDM)