N60478.AR.000632
NWS EARLE
5090.3a

DEPARTMENT OF THE NAVY
ENGINEERING FIELD ACTIVITY, NORTHEAST
NAVAL FACILITIES ENGINEERING COMMAND
10 INDUSTRIAL HIGHWAY
MAIL STOP, #82
LESTER, PA 19113-2090

IN REPLY REFER TO
5090
Code EV21/JK
17 September 2001

Ms. Jessica Mollin - Project Manager, Federal Facilities Section
U. S. Environmental Protection Agency - Region 2
290 Broadway, 20th Floor
New York, NY 10007

Dear Ms. Mollin:

SUBJECT: NAVY RESPONSE TO EPA COMMENTS ON THE DRAFT *RECORD OF DECISION FOR SITES 3 & 10 (OPERABLE UNIT 6)* FOR NAVAL WEAPONS STATION EARLE, COLTS NECK, NEW JERSEY

Navy responses to comments presented in your letter of September, 5, 2001 are attached. Hopefully these responses resolve all your outstanding concerns and we can now prepare the Final Record of Decision for signature.

Please call me at (610) 595-0567 ext. 157 if you have any questions or if you feel any of these responses need further clarification.

Sincerely,

JOHN P. KOLICIUS
Remedial Project Manager
By direction of the
Commanding Officer

Copy to:
Mr. Robert Marcolina - New Jersey DEP
Mr. Greg Goepfert - NWS Earle, Code 043
Mr. Russ Turner - Tetra Tech NUS

Response to Comments on Record of Decision - OU-6

1. Page II-17, first paragraph. Provide further explanation as to why arsenic was found at an elevated level of 0.37 ppm (i.e., unfiltered sample). Also, include that arsenic was found at a level of .015 ppm (this is in Table 5 but is not stated in the text).

The following text will be added to the first paragraph of Page II-17:

> ... sampling events. The elevated reading was obtained from an unfiltered sample. While turbidity was not recorded during the first sampling round, analysis of a highly turbid sample could yield artificially high levels of metals due to suspended solids. Given the low recovery from wells at this site and the fine silty sand in the subsurface soils, it is reasonable to assume the high reading for arsenic in the first sampling round could have been due to a turbid sample. Turbidity readings from subsequent sampling rounds at Site 3 were as high as 1240 turbidity units versus the primary drinking water standard of 1-5 turbidity units. Since subsequent...

The following text will be added to the first paragraph of Page II-23:

> ...filtered sample. Arsenic was present in the unfiltered sample at the slightly elevated level of 0.0151 ppm in the unfiltered sample but at only 0.0045 ppm in the filtered sample. Sample 03 GW 05...

2.Explain why a low-permeability cap is being used for Site 10 versus a soil cap for Site 3.

The following text will be added to the first paragraph of Page II-57:

> ...disposal area. While this site is similar in many ways to Site 3, the Navy chose to implement a more protective low-permeability cover at Site 10 for the following reasons:
>
> - The waste materials at Site 10 are primarily metals and existing cover is minimal. Potential for contaminant leaching to groundwater is greater than at Site 3.
> - Site 10 is in close proximity to extensive wetlands and a stream. It is also bordered by an active rail line. The proposed cover system can be installed without impact to the wetlands or stream or encroachment onto the rail line. A limited soil cover would need to extend further beyond the filled area to be effective and would impact one or more of these features.
> - The military nature of the landfilled materials warrants a higher level of protection. While all evidence suggests only demilitarized items were placed in this landfill, a cautious approach can certainly be justified.
> - The incremental cost difference for the low-permeability cover versus a soil cover at a site this small (2 acres) relatively small for the increased level of protection achieved.

3.Page II-24, Figure 9. Sample location MW3-04 is missing.

Location of MW3-04 will be added.

4. Please provide the following:

·an aerial view map for Site 10 with sample locations with exceedances (similar to Figure 9)

This will be provided.

·a cross-sectional view of the soil cap for Site 3 (similar to Figure 13).

This will be provided. See attached.

·a table for the occurrence and distribution of organics in groundwater for Site 3

Organics detected in groundwater were either below all applicable cleanup standards (2-butanone, gamma-chlordane) or attributed to laboratory contamination (xylene, acetone). A table for occurrence and distribution would be misleading. If desired, a table could be inserted showing organics detected (with clarification as appropriate). See attached.

·a table for the occurrence and distribution of organics in groundwater for Site 10

Organics detected in groundwater were either below detection limits (Carbon Disulfide, bis (2-Ethylhexyl)phthalate and/or attributed to laboratory contamination (methylene chloride, acetone). A table for occurrence and distribution would be misleading. If desired, a table could be inserted showing organics detected (with clarification as appropriate). See attached.

5. Page II-13, Figure 6, this map has no groundwater contours, there is no purpose for this map.

Agreed.

6. Page II-53, third paragraph. This paragraph states that the RAOs would be fully achieved in one year (design and installation of the vegetative cover, implementation of the CEA). The goal of the RAO should be reaching cleanup levels (i.e., MCLs), not design and construction of the remedy nor implementation of the CEA. Please change this paragraph accordingly.

This paragraph will be replaced with the following:

Alternative 1 would not achieve any of the RAOs. Alternative 3 will prevent exposure to the landfill contents within approximately 1 year once the vegetative cover is installed and the CEA is implemented. The risk of exposure due to ingestion of site groundwater will not be completely eliminated until cleanup levels (i.e., MCLs) are reached by dispersion. Once the vegetative cover is in place, however, precipitation infiltration into the landfill and the subsequent leaching of landfill materials into the groundwater will be minimized. Implementation of the CEA will formally prohibit groundwater usage until monitoring determines that cleanup levels have been reached.

7. Explain why organics weren't a problem at Site 10 (i.e., issue of lab contamination).

The following paragraph will be inserted after the last paragraph on Page II-26:

Organics

Sampling for organics was not conducted during the Phase II Remedial Investigation. While organics, primarily acetone, were detected in several samples, it was also found in the equipment and trip blanks. Acetone was used in both the field and laboratory equipment decontamination processes. Since all the test pits in the Phase I Remedial Investigation found only metallic debris (consistent with the reported use of the site), it is assumed the organics found in Phase I were due to poor laboratory or field decontamination procedures. The occurrence and distribution of organics in groundwater for Site 10 is provided in Table ___.

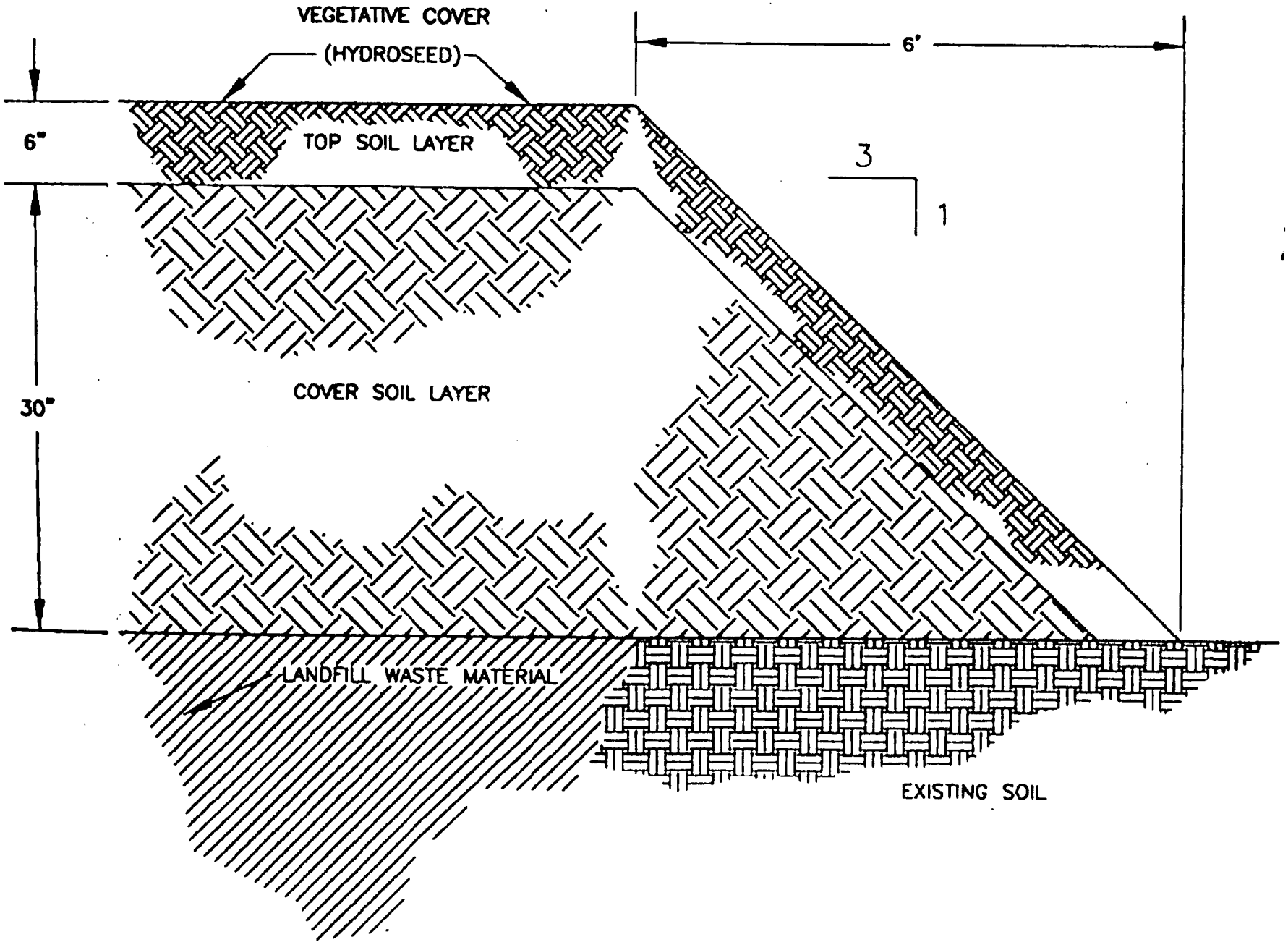
VEGETATIVE COVER
(HYDROSEED)
6"
TOP SOIL LAYER
6'
3
1
30"
COVER SOIL LAYER
LANDFILL WASTE MATERIAL
EXISTING SOIL

TABLE ___
SUMMARY OF ORGANICS IN GROUNDWATER
OU-6, SITE 3
NWS EARLE, COLTS NECK, NEW JERSEY
(micrograms/Liter)

COMPOUND	SAMPLING ROUND	FREQUENCY OF DETECTION	RANGE OF DETECTION	QUALIFIERS
Acetone	Phase I RI – Round 1	7-8	8-4400	Present in blank
	Phase I RI – Round 2	7-7	12-140	Present in blank
	Phase I RI – Round 3	6-6	22-7700	Present in blank
Methylene Chloride	Phase I RI – Round 1	3-8	4-42	Below detection limit Present in blank
	Phase I RI – Round 2	3-3	1-3	Below detection limit Present in blank
	Phase I RI – Round 3	4-6	3-5	Below detection limit Present in blank
Toluene	Phase I RI – Round 1	1-8	77	Below detection limit
Chlorobenzene	Phase I RI – Round 1	1-8	10	Below detection limit
	Phase I RI – Round 2	1-7	13	
Chloroform	Phase I RI – Round 2	1-7	6	
	Phase I RI – Round 3	1-6	6	Present only in blank
Ethylbenzene	Phase I RI – Round 1	1-8	180	
Xylene	Phase I RI – Round 1	1-8	470	
Bis (2-Ethylhexyl)phthalate	Phase I RI – Round 1	4-8	1-3	Below detection limit
	Phase I RI – Round 2	3-3	2-3	Below detection limit Present in blank
	Phase I RI – Round 3	1-3	3	Below detection limit
N-Nitrosodiphenylamine(1)	Phase I RI – Round 1	1-8	1	Below detection limit
Diethylphthalate	Phase I RI – Round 1	1-8	4	Below detection limit
	Phase I RI – Round 3	2-3	1-26	Present in blank
2-Methylnaphthalene	Phase I RI – Round 1	1-8	5	Below detection limit
Naphthalene	Phase I RI – Round 1	1-8	74	
4-Methylphenol	Phase I RI – Round 1	1-8	52	
1,4-Dichlorobenzene	Phase I RI – Round 1	1-8	10	Below detection limit
	Phase I RI – Round 2	1-2	3	Below detection limit
Di-n-Butylphthalate	Phase I RI – Round 2	3-3	1-3	Below detection limit Present in blank
	Phase I RI – Round 3	3-3	2-4	Below detection limit Present in blank
2-Butanone	Phase II RI	1-4	5	
Gamma-Chlordane	Phase II RI	1-4	0.0081	

TABLE ___
SUMMARY OF ORGANICS IN GROUNDWATER
OU-6, SITE 10
NWS EARLE, COLTS NECK, NEW JERSEY
(micrograms/Liter)

COMPOUND	SAMPLING ROUND	FREQUENCY OF DETECTION	RANGE OF DETECTION	QUALIFIERS
Acetone	Phase I RI – Round 1	7-9	12-4000	Present in blank
	Phase I RI – Round 2	9-10	4-30	Present in blank
	Phase I RI – Round 3	11-11	25-3300	Present in blank
Methylene Chloride	Phase I RI – Round 1	9-9	3-34	Present in blank
	Phase I RI – Round 2	10-10	2-15	Present in blank
	Phase I RI – Round 3	11-11	2-9	Present in blank
Carbon Disulfide	Phase I RI – Round 1	6-9	2-2	Below detection limit Present in blank
Chloroform	Phase I RI – Round 3	1-11	6	Present only in blank
Bis (2-Ethylhexyl)phthalate	Phase I RI – Round 1	2-8	2-2	Present in blank