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DEC 19 2002

Mr. James A. Saric, Remedial Project Manager
United States Environmental Protection Agency
Region V-SRF-5J
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DOE-0148-03

Mr. Tom Schneider, Project Manager
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RESPONSES TO THE OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENTS ON THE CERTIFIED FOR CONSTRUCTION PACKAGE FOR SOUTH FIELD PHASE II MODULE INFRASTRUCTURE

References: 1. Letter from J. W. Reising to J. Saric and T. Schneider, "Transmittal of Certified for Construction (CFC) Package for the South Field Phase II Groundwater Remediation Module Infrastructure," dated September 9, 2002

2. Letter from T. Schneider to J. Reising, "CFC Package for South Field Phase II Module Infrastructure," dated September 19, 2002

The purpose of this letter is to transmit, for your review and approval, draft responses to the Ohio Environmental Protection Agency (OEPA) comments on the Certified for Construction (CFC) package for the South Field Phase II Module Infrastructure. The CFC design package was transmitted to the agencies via Reference 1, while Reference 2 provided the OEPA comments.

If you should have any comments, please contact Robert Janke at (513) 648-3124.

Sincerely,

Johnny Reising

Johnny W. Reising
Fernald Remedial Action
Project Manager

FEMP:R.J. Janke

Enclosure: As Stated

cc w/enclosure:
R. J. Janke, OH/FEMP
A. Murphy, OH/FEMP
T. Schneider, OEPA-Dayton (three copies of enclosure)
G. Jablonowski, USEPA-V, SRF-5J
F. Bell, ATSDR
M. Cullerton, Tetra Tech
M. Shupe, HSI GeoTrans
R. Vandegrift, ODH
AR Coordinator, Fluor Fernald, Inc./MS78

cc w/o enclosure:
R. Greenberg, EM-31/CLOV
N. Hallein, EM-31/CLOV
A. Tanner, OH/FEMP
D. Brettschneider, Fluor Fernald, Inc./MS52-5
D. Carr, Fluor Fernald, Inc./MS2
M. Frank, Fluor Fernald, Inc./MS90
T. Hagen, Fluor Fernald, Inc./MS9
W. Hertel, Fluor Fernald, Inc./MS52-5
M. Jewett, Fluor Fernald, Inc./MS52-5
T. Poff, Fluor Fernald, Inc./MS65-2
ECDC, Fluor Fernald, Inc./MS52-7

RESPONSE TO OEPA COMMENTS ON THE CFC PACKAGE FOR THE SOUTH FIELD EXTRACTION SYSTEM PHASE II

1. Commenting Organization: Ohio EPA Commentor: DSW
Section #: Drawings 95X-5500-G-02067, 02068, 02069, 02070 Code: C
Comment: Each of these drawings have silt fence depicted but none show land surface water flow etc. To properly evaluate silt fence installation at the very minimum, contours must be shown. Please see Rainwater and Land Development page 118, left side of figure 4-5

Response: The silt fencing as shown on the drawings is to give the contractor the approximate locations and quantities required so that his bid can be prepared accordingly. The actual placement of the fencing is field located by Fluor Fernald.

Action: A Design Change Notice (DCN) will be prepared adding a note to the CFC drawings stating: Silt fences to be field located under Fluor Fernald direction to follow actual field contours, in accordance with ONDR recommendations.

2. Commenting Organization: Ohio EPA Commentor: DSW
Section #: Drawing 95X-5500-G-02075 and Tech Spec 02270
Pg #: 3 Line #: 2.1A Code: C
Comment: This drawing specifies a stake for the silt fence at 4'6" and the specification requires a minimum 2'8" in height. Although the specification states "minimum" this is a very large difference from the drawing. The drawing and the specification should be similar to the requirement.

Response: The minimum correct height is 2'8" per ODNR.

Action: The drawing will be changed (through the DCN mentioned in #1) to read the same as the specifications (i.e., 2'8").

3. Commenting Organization: Ohio EPA Commentor: DSW
Section #: Drawing 95X-5500-G-02070 and Tech Spec 02270 Pg #: 4 and 5
Line #: 3.1.A Code: C
Comment: Care should be taken during pipeline installation to minimize damage to restored/planted areas. For example, although difficult to tell due to lack of detail, it appears as though the pipeline and/or slit fence trenching in the above referenced drawing may encroach on a recently planted area. It may be preferable to forego silt fence installation in this area and not damage the recent plantings. There would be more to gain by this action than adding another trenching operation (to install silt fence). Additional language could be added to section 3.1.A.4, and more detail to Drawing 95X-5500-G-02070.

Response: As stated in #1, the actual locating of slit fencing will be as directed by Fluor Fernald and the decision whether to install the fence or not will be made at the time of location. Will coordinate with appropriate site personnel (e.g.,

Restoration Group) to locate silt fence in a manner that avoids/minimizes impact to planted areas. Every effort to protect the recent planting will be made. Any planting damaged during this activity will be replaced upon excavation completion and final stabilization.

Action: As stated in the response.

4. Commenting Organization: Ohio EPA Commentor: DSW
Section #: General Pg #: NA Line #: NA Code: DSW
Comment: There is a general tendency for access to wells on site to be insensitive to the environment. Although this document demonstrates an improvement e.g., drawing 95X-5500-G02066, field adjust road to save trees), each of these wells specifies the construction of a new gravel access road. We would like to see a justification for the construction of all these access roads and an attempt at making the roads more environmentally friendly if they are necessary.

Response: Load bearing access roadways are justified for each extraction and injection well due to the need for routine maintenance activities that require access by heavy equipment. Timely maintenance is required year round and access roads need to meet minimum wheel loading requirements for the type of equipment that is reasonably expected for these maintenance activities. Common maintenance activities include setting and pulling of pump/motor assemblies, and well rehabilitation. These require the use of drill rigs, mobile cranes, tanker trucks, and the associated support vehicles.

The use of gravel access roads is considered to be as environmentally friendly as possible while still meeting the basic requirement for a load bearing surface accessible by maintenance vehicles. In the past, several sections of the access roads in the South Field area were paved with asphalt pavement to allow year round access to the well fields. This was done so that snow removal equipment could maintain the steeply sloped sections to allow safe passage of operations, maintenance, and security vehicles. This section of maintainable, paved roadway was recently removed to support South Field remediation efforts and was subsequently replaced with gravel by the Soil and Disposal Facility Project. This may present access problems in inclement weather and may limit access to the south field wells for operational monitoring and/or maintenance.

Furthermore, it is assumed that the roadway recently installed in the South Field would meet your definition of environmentally friendly. This roadway was constructed by spreading a permeable geotextile fabric over compacted soil, placing GEOWEB® cellular confinement material, filling the openings of the GEOWEB® with soil, and covering with mulch. At some point in the near future, the mulch will be covered with seeding.

This roadway leads to several monitoring wells (2 of which were previously used as extraction wells). In this case, the roadway will normally support only light vehicle traffic. If the monitoring wells must be rehabbed in the future, it is expected that

the roadway will incur significant damage. Accordingly, to minimize damage to the roadway in the event that rehabilitation is required, access to the well with heavy equipment will probably be delayed until season and weather permit minimal damage.

However, in the case of access to operating extraction/injection wells, timely access to the wells in any type of weather to perform the operations and maintenance discussed above is considered to be of prime importance. Heavy equipment access on such an "environmentally friendly" roadway is, therefore, not realistic or practical. Heavy equipment access could be expected to significantly impact the stability of the roadway and result in significant maintenance and safety problems.

Construction of a suitable load bearing roadway for use year round, employing the GEOWEB® product would actually produce a roadway that is less environmentally friendly. GEOWEB's standard construction details for load bearing surfaces and roadways uses both Geotextile and GEOWEB with granular backfill (i.e., gravel). Since we are already in the mode of performing normal maintenance on our existing gravel roadways, the increase in maintenance costs for this additional low percentage of roadways would not justify the added cost incurred. Also, while this form of "environmental friendly" roadway would provide a much nicer appearance over the next several years of operation, they would also require higher costs to be incurred for their removal when the project is completed

In summary, the existing design, which proposes the use of gravel roadways to access each well, is considered to be a cost-effective compromise between ideal access conditions (paved roads) and unsafe dirt roads. Additionally, these roads are consistent with past design details approved by the EPA's. These gravel access ways can easily be regraded and seeded after aquifer remediation is complete and the piping and pumping systems are removed. Therefore, the existing design utilizing minimum load bearing access ways will be used for this expansion of the Aquifer Remediation Project.

Action: None Required