



Department of Energy

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26 JAN 2001

Mr. James A. Saric, Remedial Project Manager
U.S. Environmental Protection Agency
Region V, SRF-5J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

DOE-0285-01

Mr. Tom Schneider, Project Manager
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

**RESPONSES TO THE OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENTS ON
ENHANCED PERMANENT LEACHATE TRANSMISSION SYSTEM TIE-IN PLAN**

Reference: Letter, T. Schneider to J. Reising, "Comments on the EPLTS Tie-In Plan,"
dated January 11, 2001

Enclosed are responses to your comments on the Tie-In Plan for the Leachate Collection System (LCS), Redundant Leachate Collection System (RLCS), and Leachate Detection System (LDS) piping associated with the Enhanced Permanent Leachate Transmission System (EPLTS) project.

These responses provide clarifications, as requested in the comments. These responses are considered adequate to address the comments, such that revision of the Tie-In Plan is not required.

Sincerely,

Johnny W. Reising
Fernald Remedial Action
Project Manager

FEMP:Jalovec

Enclosures

26 JAN 2001

Mr. James A. Saric
Mr. Thomas A. Schneider

-2-

cc w/enclosures:

J. Jalovec, OH/FEMP
R. J. Janke, OH/FEMP
G. Jablonowski, USEPA-V, SRF-5J
T. Schneider, OEPA-Dayton (three copies of enclosures)
F. Bell, ATSDR
F. Hodge, Tetra Tech
M. Schupe, HSI GeoTrans
R. Vandegrift, ODH
AR Coordinator, Fluor Fernald, Inc./78

cc w/o enclosures:

N. Hallein, EM-31/CLOV
A. Tanner, OH/FEMP
D. Carr, Fluor Fernald, Inc./2
T. Hagen, Fluor Fernald, Inc./65-2
J. Harmon, Fluor Fernald, Inc./90
S. Hinnefeld, Fluor Fernald, Inc./31
M. Jewett, Fluor Fernald, Inc./52-2
T. Walsh, Fluor Fernald, Inc./65-2
ECDC, Fluor Fernald, Inc./52-7

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 3.1

Pg. #: 3 of 8

Line #: Last paragraph

Code: C

Original Comment #: 3

Comment: It is our understanding that SOT and SSR will be performed prior to the completion of the tie-in, so operations can begin immediately when the tie-in is complete. This section states these will be performed upon completion of the tie-in work. Please clarify.

Response: The statement in Section 3.1 refers to the LTS/ILTS tie-in at the Control Valve House (CVH), not the LDS, RLCS, and LCS tie-ins at Cells 1, 2, and 3. Following completion of the LTS/ILTS tie-in at the CVH, SOT and SSR will be performed on the new EPLTS; LDS and LCS liquids from the cells will be conveyed through the existing ILTS during this time period. Following satisfactory SOT and completion of SSR, the tie-ins at Cells 1, 2, and 3 will begin. As individual pipes are tied in, the flow from the tied-in pipe is conveyed by the new LTS.

Action: Revision of Tie-in Plan is not required.

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 3.5

Pg. #: 5 of 8

Line # 1st paragraph

Code: C

Original Comment #: 4

Comment: The packer is critically important to this plan. How many packers will be available in case one breaks?

Response: The contractor plans to have 3 packers available.

Action: Revision of Tie-in Plan is not required.

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 3.5

Pg. #: 5 of 8

Line #: 1st paragraph

Code: C

Original Comment #: 5

Comment: The text states that the liquid level in the pipe will be verified to be low prior to cutting the pipe. How will this be accomplished?

Response: The liquid level in the LCS and RLCS pipes can be verified by observation or measurement at the existing pipe cleanout just upstream of the existing LCS manhole. The LDS flow rate can be observed at the LDS pipe outlet into the primary containment vessel inside the LDS manhole.

Action: Revision of Tie-in Plan is not required.

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 3.6

Pg. #: 5 of 8

Line #: 1st paragraph

Code: C

Original Comment #: 6

Comment: We do not understand the meaning of the phrase "Isolation of other LDS, RLCS and LCS flows may be required". We have commented elsewhere that it is our expectation that flows from the other lateral lines will be maintained.

Response: Agree. See response to Comment 1, above.

Action: Revision of Tie-in Plan is not required.

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 3.6

Pg. #: 6 of 8

Line #: NOTE

Code: C

Original Comment #: 7

Comment: This note addresses the testing of the existing containment pipe and the events which would follow a failure of this test. While it is understood that construction of the EPLTS must continue if the problem cannot readily be identified and fixed, it is not satisfactory for Fluor to simply commit to evaluating the failure at a future time. Any leak, but especially on in the LCS line could mean a release to the environment. At the very least it would indicate that the required double containment is no longer present. Fluor needs to commit to addressing these problems in a very timely matter.

Response: This test also tests the carrier pipe from the tie-in point to the containment fixed end seal at the cell liner penetration. A test failure may also be due to a leak in the carrier pipe or at the fixed end seal inside the cell, just upstream of the cell liner penetration.

Fluor Fernald will evaluate any problem immediately to initiate corrective measures in a very timely manner. The note simply indicates that the scope of this construction contract does not currently include such corrective measures. If a contractor is required to implement additional corrective measures, this contract may be amended or a new contract may be initiated.

Action: Revision of Tie-in Plan is not required, as the corrective action for this problem is a Fluor Fernald responsibility and does not affect the contractor's current plan.

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 3.9

Pg. #: 7 of 8

Line #: 4th paragraph

Code: C

Original Comment #: 8

Comment: It is unclear why testing of the containment pipe will be performed at the tie-in point if tests on the existing piping failed. While a large leak may be detected at the tie-in, the passage of such a test will qualify the joint as certifiably passing. Only after the existing piping has passed testing will the tie-in joint be ready for pneumatic testing which will confirm the fusion of the joints.

Response: If the existing piping test fails, it is correct to assume that a pneumatic pressure drop test cannot be performed unless the existing piping problem is corrected. Unless a corrective measure is feasible immediately, the contractor's only immediate course of action is to soap bubble test the containment pipe tie-in joint and leave the carrier pipe tie-in joint untested. This soap bubble test will identify a small leak, as well as a large leak.

Action: Revision of Tie-in Plan is not required, as the corrective action for this problem is a Fluor Fernald responsibility and does not affect the contractor's current plan.

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 3.10

Pg. #: 8 of 8

Line #: 2nd paragraph

Code: C

Original Comment #: 9

Comment: How was it determined that water would be added to 14' above the valve house floor to equalize the hydraulic head on either side of the packer? We would expect the back up behind the packer to vary depending on the lateral. We expect the backup would be largest in the case of the LCS line and negligible in the case of the RLCS line.

Response: The primary objective here is to keep the deflated packer from being "pushed" quickly toward the valve house cleanout, which could tangle the retrieval cable or lodge the packer downstream of the cleanout, making removal of the packer more difficult. Due to the relatively small volume of water, excessive head (i.e., 14') on the downstream side of the packer is not significant; a momentary backflow of water, following packer deflation, toward the cell is not considered detrimental.

Action: Revision of Tie-in Plan is not required.

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 3.9

Pg. #: 7 of 8

Line #: 2nd paragraph

Code: C

Original Comment #: 10

Comment: We acknowledge that the nine laterals from the cells to the valve houses cannot be hydrostatically tested after construction as has been standard procedure since the construction of the Interim line. The carrier pipes are open to the interior of the cell and cannot be pressurized. A high pressure hydrostatic test cannot be performed on the container pipe either, since the carrier pipe needs to be maintained at a similar pressure to prevent collapse of the carrier.

This plan calls for a low-pressure pneumatic test of the container pipe. Justify why a pneumatic test was chosen instead of a low-pressure hydrostatic test.

Response: The high point of the containment pipe is at the cell liner penetration box and, as such, cannot be accessed to tap in a vent valve to allow venting of trapped air from the pipe during hydrostatic testing, which is necessary to obtain accurate, credible test results (i.e., trapped air will compress and result in erroneous pressure drop results). Therefore, pneumatic testing was selected.

Action: Revision of Tie-in Plan is not required.

Comment on the Appendix

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: Step 34

Pg. #: A-3

Line #:

Code: C

Original Comment #: 11

Comment: What wall penetration work remains to be done?

Response: As described on Page 8, Section 3.11, grout will be placed in the wall openings and HDPE flatstock plates will be installed on the new piping and walls (HDPE).

Action: Revision of Tie-in Plan is not required.

7

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