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U-007-455.1

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**DISAPPROVAL OF SOUTH FIELD EXTRACTION DESIGN PACKAGE**

12/06/95

USEPA      DOE-FN  
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DISAPPROVAL

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

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REPLY TO THE ATTENTION OF:  
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DEC 0 6 1995

Mr. Johnny W. Reising  
United States Department of Energy  
Feed Materials Production Center  
P.O. Box 398705  
Cincinnati, Ohio 45239-8705

SRF-5J

RE: Disapproval of South Field  
Extraction Design Package

Dear Mr. Reising:

The United States Environmental Protection Agency (U.S. EPA) has completed its review of the United States Department of Energy's (U.S. DOE) South Field extraction system design package.

Although the design documents are generally adequate there are several items which require further clarification.

Therefore, U.S. EPA hereby disapproves the South Field design package pending receipt of adequate responses to U.S. EPA's attached comments, and their incorporation into the document. U.S. DOE must submit responses to comments and a revised document to U.S. EPA within thirty (30) days receipt of this letter.

Please contact me at (312) 886-0992 if you have any questions.

Sincerely,

James A. Saric  
Remedial Project Manager  
Federal Facilities Section  
SFD Remedial Response Branch #2

Enclosure

cc: Tom Schneider, OEPA-SWDO  
Jack Baublitz, U.S. DOE-HDQ  
Don Ofte, FERMCO  
Jim Thiesing, FERMCO  
Terry Hagen, FERMCO





Commenting Organization: U.S. EPA  
Section #: NA Page #: NA  
Original General Comment #: 5

Commentor: Saric  
Line #: NA

Comment: The documents are unclear about how the pump discharge pressure will be used with the flow measurement to control the speed of the variable frequency drives on the pumps. DOE should consider adding a description of the flow control rationale in the instrumentation portion of the technical specifications to clarify this issue.

SPECIFIC COMMENTS

Technical Specifications

Commenting Organization: U.S. EPA  
Section #: 01011 Page #: 1 through 3  
Original Specific Comment #: 1

Commentor: Saric  
Line #: NA

Comment: The Schedule of Drawings included in the specifications does not agree with the drawing titles and order presented in Sheet X0002. To avoid confusion, either the Schedule of Drawings should be deleted from the specifications or else the list should be revised to be consistent with the information presented in Sheet X0002.

Commenting Organization: U.S. EPA  
Section #: 02110, 3.2.A Page #: 3  
Original Specific Comment #: 2

Commentor: Saric  
Line #: Last sentence

Comment: The specifications state that the disposal of the collected runoff water will be determined by the Construction Manager. Because the disposal location is vague, it will be difficult for construction contractors to estimate the costs of disposal. Either a defined location for runoff water disposal should be proposed or else the specifications should be revised to state that it is the subcontractor's responsibility to dispose of the runoff water.

Commenting Organization: U.S. EPA  
Section #: 02200, 3.2A Page #: 9  
Original Specific Comment #: 3

Commentor: Saric  
Line #: NA

Comment: The specification should be revised to state that if dewatering is required during construction, the water will be collected, sampled, and disposed of appropriately.

Commenting Organization: U.S. EPA  
Section #: 09900, F2 Page #: 13  
Original Specific Comment #: 4

Commentor: Saric  
Line #: Last sentence







Commenting Organization: U.S. EPA  
Sheet #: P0001 Page #: NA  
Original Specific Comment #: 22

Commentor: Saric  
Line #: NA

Comment: The specifications state that all pumps will have a maximum flow rate of 400 gallons per minute (gpm) and a 6-inch discharge. Table A indicates that some pumps will discharge to a 6-inch line and some then increased to an 8-inch line. This should be reviewed to ensure that they are correct. A 400-gpm flow through an 8-inch meter has a velocity of under 2.5 feet per second, resulting in inaccurate flow measurements. The drawing should be revised as necessary if resulting inaccuracies in the flow measurement are unacceptable.

Commenting Organization: U.S. EPA  
Sheet #: P0003 Page #: NA  
Original Specific Comment #: 23

Commentor: Saric  
Line #: NA

Comment: Because air may become trapped in the piping in the treatment and discharge lines within the building, air release valves may be needed to easily release air. The drawings should be revised if necessary.

Commenting Organization: U.S. EPA  
Sheet #: P0004 Page #: NA  
Original Specific Comment #: 24

Commentor: Saric  
Line #: NA

Comment: Pipeline GW-12A-2910 would be seen in Section A and should be shown in this drawing. Also, the flow direction of Line GW-20A-2906 is incorrectly shown as being into the building. The flow direction is actually out of the building. The drawing should be corrected accordingly.

Commenting Organization: U.S. EPA  
Sheet #: N0002/N0003 Page #: NA  
Original Specific Comment #: 25

Commentor: Saric  
Line #: NA

Comment: The pressure transmitters on each pump are located after the check valves. The transmitters control the pumps in some manner based on high and low pressure. However, because the transmitters are located after the check valve, the transmitters would sense line pressure when the pump is off. The transmitters should possibly be located between the pump and the check valve. The drawing should be revised if necessary to relocate the pressure transmitters.

7