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OU 5 SOUTH FIELD INJECTION TEST REPORT

02/22/96

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COMMENTS

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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:
SRF-5J

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

RE: OU 5 South Field
Injection Test Report

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) Operable Unit 5 South Field Injection Test Report. U.S. EPA's specific review comments are presented in the enclosure to this letter. Please contact me at (312) 886-0992 if you have any questions.

Sincerely,

E Jablonowski for

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
Charles Little, FERMCO
Terry Hagen, FERMCO
Michael Yates, FERMCO

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ENCLOSURE

TECHNICAL REVIEW COMMENTS ON THE OPERABLE UNIT 5 SOUTH FIELD INJECTION TEST REPORT

SPECIFIC COMMENTS

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 7.0 Page #: 24 Line #: 8
Original Specific Comment #: 1
Comment: The work plan states that two vacuum slug tests and two pneumatic slug tests will be conducted each test session before and after injection testing; however, because of problems encountered in the field, only the vacuum slug test was conducted. An explanation should be provided explaining how this change in the amount and type of data collected will affect the results.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 8.0 Page #: 26 Line #: 11 & 12
Original Specific Comment #: 2
Comment: The text states that the aquifer can accept water at injection rates of 450 gallons per minute (gpm) or more. The highest injection rate used for the test was 450 gpm; this rate was only used during the step test. During the constant rate test, 300 gpm was used as the injection rate. Without running injection tests at higher rates the report cannot claim that the aquifer can accept injection rates exceeding 450 gpm. The text should be revised accordingly.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 5.0 Page #: 14 Line #: 28 to 32
Original Specific Comment #: 3
Comment: The text is unclear about what a "shut-in line pressure" is. The text should explain shut-in line pressure or use different clearer terms.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 8.1 Page #: 26 Line #: 18
Original Specific Comment #: 4
Comment: The report states that actual field conditions and modified predictions of the water table rise are in closely agree. The water level rise of 1.0 foot in well 31550 does not seem to match any data presented for well 31550 in the report. The report should clarify where a 1.0 foot water level rise in well 31550 was measured. Additionally, before stating conclusions based on the model's ability to predict aquifer response to injection, the text should present a more rigorous model validation. This validation should use all data from all the wells affected in the test and calibration targets.