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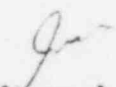
MEMORANDUM FOR: R. Dale Smith, Chief
Low-Level Waste Licensing Branch

THRU: Edward F. Hawkins ~~ETX~~
Project Management and Operations Section, WMLL

FROM: James A. Shaffner
Low-Level Waste Licensing Branch

SUBJECT: REPORT ON TRIP TO SHEFFIELD, ILLINOIS LLW DISPOSAL SITE

Enclosed is the trip report for my meeting with various agencies of the Illinois state government and the federal government concerning the status of the low-level waste disposal site at Sheffield, Illinois.


James A. Shaffner
Low-Level Waste Licensing Branch

Enclosure:
As stated

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REPORT ON TRIP TO SHEFFIELD, ILLINOIS LLW DISPOSAL SITE

Date of Trip: November 24-25, 1980

Place of Meeting: Champaign, IL
Springfield, IL

Attendees:	James A. Shaffner	NRC
	Thomas M. Johnson	ISGS
	Keros Cartwright	ISGS
	Howard O. Chinn	Attorney General's Office
	Kenneth Anspactt	Attorney General's Office
	Barbara Chasnoff	Attorney General's Office
	Clifford C. Weaver	Ross, Hardies, O'Keefe
	Susan Harmon	Ross, Hardies, O'Keefe
	Maury Neuweg	Illinois Dept. Nuclear Safety (IDNS)
	William O'Conner	IDNS
	Bruce A. Meyer	IDNS
	Richard W. Healy	USGS
	James Foster	USGS, Champaign, IL
	Gary O. Balding	USGS-WRD, Champaign, IL

On November 24, 1980 I traveled to Champaign, Illinois to attend a meeting among various agencies of the Illinois State Government and the federal government concerning the status of the low-level waste disposal site at Sheffield, Illinois. Agencies represented included the Illinois Geological Survey, Illinois Department of Nuclear Safety, Illinois State Attorney General's Office, U. S. Geological Survey, and NRC. The purpose of the meeting was to discuss the present status of on-going technical projects and to update all parties on findings of previous studies and on-going environmental surveillance.

Representatives of USGS, IGS, IDNS, and NRC each gave capsule summaries of technical studies on monitoring in which their agencies are involved. Where appropriate, results of studies were discussed. In the case of on-going studies, time tables and possible results were discussed. The Attorney General's Office attended to update itself on the studies of other agencies.

Mr. Foster mentioned the USGS studies on unsaturated flow and groundwater flow modeling. The latter study is being funded by NRC and is anticipated to be a two year study. The former study could last up to four years.

Mr. Cartwright discussed ISGS's effort to run the NRC groundwater model using data supplied by NECO. He stressed that the USGS model would be a good deal more site intensive and, in his opinion, would yield more reliable results than the NRC model. The point was made, however, that no matter how sophisticated the model was, it is only as good as the data provided. In the case of Sheffield accurate source term and leach rate data will be virtually impossible to get. Therefore, all modeling efforts will require some assumptions regarding these parameters.

Mr. Cartwright also mentioned the trench cap infiltration study ISGS was doing under contract with NRC. The study is currently designed to be a 26 month effort. He stated, however, that ISGS intends to collect data from model trenches for 2 years after the study ends regardless of NRC participation.

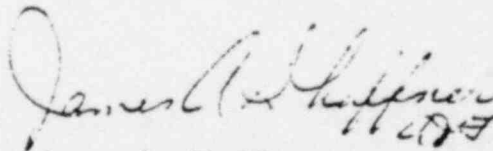
Mr. Meyer discussed the monitoring programs which his department now has on-going. They look at groundwater, surface water, air, vegetation, and some fauna (primarily fish). Except for readings in some on-site wells of tritium which show action levels, environmental samples have been negative.

Mr. Meyer also outlined what he considers the minimum post-closure maintenance functions. His department plans to develop more definitive requirements over the next 12 months. He expressed the desire to work closely with NRC in this matter.

I discussed studies, not previously alluded to, which NRC was involved in. I mentioned that Ralph Stone Associates was performing a trench settlement study. I touched briefly on the completed HLA Study which discusses surface conditions at the site as of last July. I mentioned the GeoCenters Study to investigate trench geometry and waste placement. (USGS was most interested in the results of this study. I said that I would let them know when results became available.) Finally, I mentioned that NRC would be compiling an Environmental Appraisal. I said it would probably be available for their information and comment by early 1981.

Everyone agreed that the technical problems at Sheffield were complex. The on-going technical studies can only reasonably be expected to point the way to problem definition and solution. It was recognized that decisions regarding the site would ultimately involve sound judgments made by all the involved parties.

On November 25, 1980 I traveled to Springfield, Illinois to visit the offices of the Illinois Department of Nuclear Safety. I met with Bruce Meyer to discuss in more detail the status of environmental monitoring being performed by IDNS. Further, I discussed the proposed Environmental Appraisal. I then asked him if IDNS has data in its files that might be of use in compiling the appraisal. Bruce showed me the IDNS files and invited me to peruse them. I found some data of interest, particularly data on costs of certain aspects of decommissioning. Bruce agreed to send me copies of these data.



James A. Shaffner
Project Manager