

TRIP REPORT

SHEFFIELD LOW LEVEL WASTE DISPOSAL FACILITY

DECEMBER 2, 1982

Purpose: (1) Familiarization tour of Sheffield LLWDF for Mr. Scarano.
(2) Meeting among NRC and Illinois Department of Nuclear Safety (IDNS) technical staff personnel to discuss aspects of site closure and decommissioning.

Persons Philip Gustafson, Director, IDNS
Contacted: James Blackburn, IDNS
David Ed, IDNS
Ronald Gaynor, Vice-President, US Ecology, Inc.
Russell Moore, US Ecology, Site Manager, Sheffield LLWDF
Andrew Ambrart, Assistant Site Manager
NRC Personnel: Ross A. Scarano, WMLL, Branch Chief
James A. Shaffner, WMLL, Project Manager

SUMMARY

We met with Dr. Gustafson in Willowbrook, Illinois on Thursday morning, December 2, 1982 and travelled together to the Sheffield site.

Upon arrival we were met by US Ecology personnel as well as Mr. Blackburn and Mr. Ed of IDNS. US Ecology personnel presented a briefing about the low-level waste site using aerial photographs and detailed site maps. Following the briefing US Ecology site personnel conducted a tour of the site. The tour was somewhat limited due to inclement weather. From limited observation however the site surface vegetation and drainage features seemed to be withstanding the rigors of the early winter climate rather well. There was no readily apparent evidence of severe erosion, surface instability, drainage problems or ponding of water on or near trenches. However there was still evidence of ponding in the northeast corner of the site near an apparently under-sized culvert.

Drainage in the northwest corner of the site has been changed since the May visit of the WMLL staff. All off site drainage from the portion of the chemical site which formerly outletted to channels on both the north and south sides of trench 18 has been rerouted to an off site stilling basin which outlets to a channel north of trench 18.

Following the site tour we met with IDNS personnel to discuss various aspects of site closure. The relationship of 10 CFR Part 61 to the closure of the Sheffield site was discussed. It was stated that NRC will evaluate requirements for existing sites on a case-by-case basis. It was recognized that Part 61 is directed at applications for new low-level waste and disposal sites. Also, other related aspects of site licensing during the post closure period were discussed.

Many of the technical aspects of site closure and decommissioning were broached during the dialogue, including:

- (1) Future site surface stability - The respective staff positions with regard to trench covers, an integrated site drainage plan, and the various options open to the licensee in this regard were discussed.
- (2) Site Monitoring - We discussed the need for considering the possibility of chemical migration in the monitoring plan.
- (3) Diversion of surface drainage from the chemical site across the radioactive waste site - Both IDNS and NRC agreed to look into the apparent state legal restriction barring US Ecology from rerouting the drainage from the chemical site to the south of and away from the radiological waste site.
- (4) The use of Part 20 limits to establish allowable concentrations in ground water - while current migration to the east on the site represents no threat from a health physics standpoint, by definition it represents an "uncontrolled release." However, by including its surface manifestation (the strip mine pond) in the buffer zone it can very easily be controlled by controlling releases from the pond.

The meeting was helpful in that it allowed NRC and IDNS staffs to reaffirm and clarify their respective technical positions. Points of agreement were recognized. Points of disagreement were clarified and alternative solutions were discussed. No agreements were made by any participants in the meeting.