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**DISPUTE RESOLUTION - RESPONSE TO
COMMENTS ON THE OCTOBER, 1990 OPERABLE
UNIT 1 - INITIAL SCREENING OF
ALTERNATIVES FERNALD, OHIO
JANUARY 4, 1991**

01/04/91

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Supplement to US EPA Comment No. 11, Relevancy and
Appropriateness of 10CFR161

Relevancy & Appropriateness of 10CFR61

On December 3, 1990, DOE and EPA met in Chicago to discuss the resolution of comments for FMPC's Operable Unit 1 (OU 1) Initial Screening of Alternatives (ISA) report. This meeting raised questions regarding the relevance and appropriateness of the requirements set forth in 10CFR61 to the on-site disposal of waste from OU1. It was asserted at this meeting that 10CFR61 is a necessary complement to 40CFR192. This discussion will first provide brief synopses of the relevant sections of these two regulations, and then explain how these two regulations complement each other when considering the disposal or storage of wastes from OU1. Finally, the importance of considering 10CFR61 as relevant and appropriate will be presented.

Environmental Protection Agency Standards for Protection Against Mill Tailings (40CFR192) applies to the control of residual radioactive material and uranium by-product material both operating and closed processing or depository sites. Pertinent requirements for closed sites include:

- * Radium-226 and radium-228 concentrations in soil.
- * Radon-222 and radon-220 concentrations in the air.
- * Gamma radiation standards.
- * Compliance with performance requirements for nonradiological hazards, as required by RCRA.
- * Effective isolation of wastes for a minimum of 200

years, and up to 1000 years if reasonably achievable.

- * Post-operational exposures limits to the whole body, thyroid, or any other critical organ.

Licensing Requirements for Land Disposal of Radioactive Waste (10CRF61) establishes the procedures, criteria, and terms and conditions upon which the Nuclear Regulatory Commission issues licenses for the disposal of low-level radioactive wastes. Subparts C and D of this regulation details the performance objectivess and technical requirements governing the selection of the location of the disposal facility, the type of facility design, and the operational procedures which would provide reasonable assurance that human exposures are within established limits. These criteria include:

- * Specific criteria evaluating the long-term suitability of the disposal facility's location. These criteria consider geologic, hydrologic, demographic, and environmental issues.
- * The amenity of the site to characterization, modeling, analysis, and monitoring.
- * Specific facility design performance requirements such as minimization of active maintenance requirements, enhancement of those natural site characteristics that contribute to facility performance, cover design, and contact with water.
- * Specific operational requirements regarding emplacment of waste in the facility.
- * Waste packaging requirements to slow or prevent subsidence.
- * Tight controls on permissible amounts of gases, free-standing liquid, and pyrophoric/explosive materials.
- * Environmental monitoring requirements.

Regulations specified in 40CFR192 provide performance objectives for any Uranium Mill Tailing remediation project. It is not

specific regarding actions or designs will satisfy these requirements. The requirements presented in 10CFR61 provide performance objectives for new low-level radioactive waste disposal facilities, and provide specific requirements and guidelines as to how performance objectives may be achieved. When the performance requirements of the two regulations differ, the more restrictive of the two will be adhered to. The regulations in 10CFR61 complement 40CFR192 because they provide specific criteria to meet the general performance requirements of both 40CFR192 and 10CFR61, Subpart C.

The requirements contained in 10CFR61 are relevant and appropriate because they address the problems associated with the on-site disposal of low-level radioactive waste:

- * Its purpose is to protect the public from exposures attributable to the disposal of radioactive waste.
- * It specifically addresses land disposal of radioactive waste.
- * It regulates substances found in OU1 waste (eg. fission products).
- * It describes actions required to safely dispose of radioactive waste.