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INTERIM STORAGE OF NUCLEAR MATERIAL

03/20/97

DOE-0617-97
DOE-FEMP DOE-PORTSMOUTH
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MEMO

DOE F 1325.8
(5-83)

United States Government

Department of Energy
Fernald Area Office

memorandum

DATE: MAR 20 1997
DOE-0617-97

REPLY TO ATTN OF: FEMP:Gareis

SUBJECT: INTERIM STORAGE OF NUCLEAR MATERIAL

TO: Gene Gillespie, Site Manager, Portsmouth Site Office

Reference: Memorandum, G. Gillespie to J. Craig, "Fernald Material Disposition," dated January 23, 1997.

As you are aware, over the last two years the Fernald Environmental Management Project (FEMP) and Portsmouth have held several discussions on the possibility of using Portsmouth as an interim storage for FEMP materials. These discussions have recently been renewed over the last several months as the FEMP moves closer and closer to its deadlines.

In particular, an end user has been identified for a specific population of low enriched uranium. The end user is the Department of Energy's Office of Fissile Material Disposition (MD) in conjunction with the Tennessee Valley Authority (TVA). The two organizations have signed a Memorandum of Understanding for a blending demonstration project to be conducted at a blending site to be determined. The MD and TVA plan is to use approximately 350 MTUs of the FEMP's low enriched uranium. The material has been set aside for the program and is in the form of metal and oxides (see attached table). The materials have been sampled and analyzed and are currently being repackaged to meet Department of Transportation (DOT) regulations. The total number of containers (55 gal drums) that will be generated from the repackaging is about 7200, which would make up a total of 123 shipments. Allowing for stacking, the material is expected to require approximately 40,000 ft^2 of storage space.

At this time, we are requesting that you provide this office with an estimate of funds and time required to study the interim storage of the specific population of material for the TVA project at Portsmouth.

We understand there are numerous issues that will need to be addressed such as stakeholders, site acceptance limitations, regulators, storage time, possible building modifications, and funding. A rough order of magnitude estimate will assist the Department of Energy, Headquarters (DOE-HQ) and us in making a determination on the practicality of interim storage. We will proceed with approaching the appropriate program offices for funding support for this study as suggested in your recent correspondence (referenced above).

Recycled and Recyclable

If you have any questions regarding this issue, please contact Mary Beth Gareis at (513) 648-3181.

Glenn Griffith

for Jack R. Craig
Director

Attachment: As Stated

cc w/att:

B. Newton, DP-22/GTN
S. Fauver, EM-42/GTN
N. Hallein, EM-42/GTN
J. Parks, DOE-OR
R. Vranicar, DOE-PORTS
N. Mazzuckelli, DOE-FEMP
J. Sattler, DOE-FEMP
S. Kaushiva, FDF/50
AR Coordinator/78

URANIUM INVENTORY FOR USE IN BLENDING PROGRAM FOR
OFFICE OF FISSILE MATERIAL DISPOSITION

DESCRIPTION	METRIC TONS URANIUM WEIGHT	NET POUNDS
1.25% ^{235}U DERBIES	94	208,288
1.25% ^{235}U UO_3	162	435,630
1.25% ^{235}U U_3O_8	29	91,474
1.25% ^{235}U METAL DISSOLVER FEED	27	66,168
1.25% ^{235}U RECYCLE METAL PIECES	38	84,024
TOTAL	350	885,584