

FEB 12 1989

PART 61 COMMENTS

- 1 -

MEMORANDUM FOR: Eric S. Beckford, Director
Office of Nuclear Regulatory Research

FROM: Robert M. Bernero, Acting Director
Office of Nuclear Material Safety and Safeguards

SUBJECT: COMMENTS AND CONCURRENCE ON FINAL PART 61 AMENDMENTS
PACKAGE DEALING WITH GREATER-THAN-CLASS-C-WASTES
(NMSS-8900025)

I have reviewed the Commission paper package forwarding the subject final amendments to Part 61. These amendments would require disposal of greater-than-Class-C (GTCC) wastes in a deep geologic repository unless an alternative disposal facility is approved by the Commission. Some editorial comments have already been transmitted to your staff, and additional comments are enclosed. Subject to incorporation of the enclosed changes, I concur in the final rule package.

(Signed) Robert M. Bernero

Robert M. Bernero, Acting Director
Office of Nuclear Material Safety
and Safeguards

Enclosure:
Comments on Final
Rule Package

DISTRIBUTION: NMSS-8900025

Central Files	REBrowning, DHLWM	BJYoungblood, DHLWM	RLBallard, HLGP
JOBunting, HLEN	JLinehan, HLPM	HLGP r/f	NMSS r/f
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*SEE PREVIOUS CONCURRENCE

FC	: HLGP/HLWM*	: HLGP/HLWM*	: LLRB/LLWMD*	: HLGP/HLWM*	: LLRB/LLWMD*	: HLWM/NMSS*
AME	: DFehringer/cj	: SCoplan	: RBoyle	: RBallard	: MBell	: RBrowning
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FC	: NMSS <i>W</i>	: NMSS <i>RB</i>	:	:	:	:	214.1
AME	: MRKnapp	: RMBernero	:	:	:	:	NH19
ATE	: <i>D2</i> /89	: <i>2/14</i> /89	:	:	:	:	WM-3 0137

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MEMORANDUM FOR: Eric S. Beckjord, Director
Office of Nuclear Regulatory Research

FROM: Robert M. Bernero, Acting Director
Office of Nuclear Material Safety and Safeguards

SUBJECT: COMMENTS AND CONCURRENCE ON FINAL PART 61 AMENDMENTS
PACKAGE DEALING WITH GREATER THAN CLASS C WASTES
(NMSS-8900025)

I have reviewed the Commission paper package forwarding the subject final amendments to Part 61. These amendments would require disposal of greater-than-Class-C (GTCC) wastes in a deep geologic repository unless an alternative disposal facility is approved by the Commission. Some editorial comments have already been transmitted to your staff, and additional comments are enclosed. Subject to incorporation of the enclosed changes, I concur in the final rule package.

Robert M. Bernero, Acting Director
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*SEE PREVIOUS CONCURRENCE

DFC	: HLGP/HLWM*	: HLGP/HLWM*	: LLRB/LLWMD*	: HLGP/HLWM*	: LLRB/LLWMD*	: HLWM/NMSS
NAME	: DFehring/cj	: SCoplan	: RBoyle	: RBallard	: MBell	: RBrowning
DATE	: 1/ /89	: 1/ /89	: 1/ /89	: 1/ /89	: 1/ /89	: 1/ /89
JFC	: NMSS	: NMSS	:	:	:	:
NAME	: MRKnapp	: RMBernero	:	:	:	:
DATE	: 1/ /89	: 1/ /89	:	:	:	:

MORE CHANGES

- 1 -

MEMORANDUM FOR: Eric S. Beckjord, Director
Office of Nuclear Regulatory Research

FROM: Hugh L. Thompson, Jr., Director
Office of Nuclear Material Safety and Safeguards

SUBJECT: COMMENTS AND CONCURRENCE ON FINAL PART 61 AMENDMENTS
PACKAGE DEALING WITH GREATER THAN CLASS C WASTES
(NMSS-8900025)

I have reviewed the Commission paper package forwarding the subject final amendments to Part 61, and have the following comments (additions underlined, deletions lined through).

--On page 8 of the Commission paper, revise the first sentence of the second paragraph to read: "The expected volume of the disposal facility needed for GTCC wastes is very small relative to that needed for volumes of HLW and Classes A, B, and C LLW."

--On page 2 of the Federal Register notice, revise the last sentence of the second paragraph to read: "Technical criteria to implement the performance objectives and environmental standards would be developed by the Commission after DOE had completed its conceptual design and selected a site for a specific type of facility selected a specific disposal technology and decided to pursue development of an intermediate facility."

--Revise the text at the top of page 6 of the Federal Register notice to read:

to be applicable to all wastes emplaced in a repository. However, the total radioactive inventory of GTCC wastes is expected to be very much smaller than the spent nuclear fuel inventory. Therefore, these performance objectives would impose significant constraints on GTCC disposal only to the extent that the radionuclides in GTCC wastes were different and/or more mobile than those present in solidified HLW and spent nuclear fuel. This is not expected to be the case since DOE studies indicate that the principal source of radioactivity in GTCC waste is activated metals from decommissioning reactors, which are similar to spent fuel hardware. The Commission

~~recognizes-that-it-may-be-necessary-to-add-additional-regulatory requirements-to-Part-60-in-the-future-if-DOE-should-elect-to-pursue repository-disposal-of-GTGG-wastes.~~

Previous development of EPA's standards has addressed types of wastes rather than types of disposal facilities as in NRC's regulations. Thus, it is possible that a repository containing both HLW and GTCC LLW would be subject to two EPA standards. The NRC does not anticipate that this will cause significant problems for DOE, since the LLW standard has not yet been proposed and this situation can be taken into account as the standard is developed. ~~if-it-should-pose-an-insurmountable-difficulty,-DOE-would-still be-able-to-develop-a-separate,-GTGG-only-facility.~~

--On page 10 of the Federal Register notice, revise the first sentence of the last paragraph to read: "that its statements were potentially misleading could have been misunderstood."

--On page 11 of the Federal Register notice, revise the third paragraph of section (g) to read: "On the contrary, as provided in § 61.1, Part 61 establishes procedures, criteria, and terms and conditions with respect to "land disposal of radioactive waste". In implementing this objective, § 61.3 requires that the disposal of waste at any "land disposal facility" must be authorized under Part 61. § 61.7 notes that additional technical criteria might be needed for licensing of disposal facilities other than "near surface" disposal. If needed, such criteria would be added to Part 61 before licensing an "intermediate" disposal facility. Since . . ."

--In the proposed press release, it is stated that no significant changes were made to the proposed rule as a result of public comments. I suggest that the change identified on p. 12 of the Federal Register notice (that dealing with Commission approval of disposal techniques rather than simply submitting proposals) be noted in the press release.

--On page 5 of the Regulatory Impact Analysis, the third sentence of the first paragraph should be revised to read: "Highly radioactive" waste would be defined as any waste with radionuclide concentrations above Class-G those listed for Class C waste in Table 2 of 10 CFR Part 61.

--On page 5 of the Regulatory Impact Analysis, the second and third paragraphs should be revised to read:

The case against this alternative was made in detail in the supplementary information to the proposed Part 61 amendments. Briefly, there is no consensus underlying any specific method to classify radioactive waste by concentration. To develop such a method would be costly, time-consuming, and highly controversial. The technical studies referred to above would be quite expensive to carry out and involve a good deal of arbitrary determinations. For instance, as no intermediate facilities now exist, what reference case facilities would be selected for inclusion in the studies. Almost all comments on the advance notice showed concern for waste classification only to the extent it affected disposal methods, and, since "intermediate" disposal facilities are not available to serve as the basis for classification analyses, hypothetical facilities would have to be postulated based on somewhat arbitrary assumptions.

More importantly, as discussed in the advance notice and in the proposed amendments, Reprocessing waste now classified as HLW, such as some Hanford . . .

--On page 6 of the Regulatory Impact Analysis, revise paragraph (c) to read:

(c) For non-reprocessing waste not now classified as A, B, or C LLW (essentially GTCC LLW), only a small amount is generated. DOE estimates that less than 2,000 cubic meters will need disposal through 2020. (A more recent, unpublished DOE estimate suggests that the GTCC volume may be twice this large.) This relatively small amount of waste suitable for reclassification does not justify a major technical effort to establish a numerical classification system. Some might be reclassified as HLW and presumably go to a repository. The only benefit of such a classification system would be to ensure a disposal "home" for those GTCC wastes requiring disposal in a repository. However, the remainder would still not be routinely eligible for shallow land burial, and would not be a State responsibility. The problem would still exist as to where to dispose of this GTCC waste. The Commission can accomplish much more by simply requiring repository disposal of all GTCC wastes, unless DOE has developed an approved "intermediate" disposal facility.

MORE CHANGES

Additional editorial comments have already been transmitted to your staff. Subject to incorporation of the changes in this memo, I concur in the final rule package.

Hugh L. Thompson, Jr., Director
Office of Nuclear Material Safety
and Safeguards

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NAME : DFehringer/cj	: SCoplan	: RBoyle	: RBattard	: MBell	: RBrowning	: SURMEIER
DATE : 1/30/89	: 1/30/89	: 1/30/89	: 1/30/89	: 1/30/89	: 1/ /89	: 1/31/89
FC : NMSS	: NMSS	:	:	:	:	:
NAME : RBernero	: HLThompson	:	:	:	:	:
DATE : 1/ /89	: 1/ /89	:	:	:	:	:

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 (Additions underlined, deletions lined through)

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3. Revise the text at the top of page 6 of the Federal Register notice to read:

to be applicable to all wastes emplaced in a repository. However, the total radioactive inventory of GTCC wastes is expected to be very much smaller than the radioactive inventory of solidified HLW and spent nuclear fuel inventory. Therefore, these performance objectives would impose significant constraints on GTCC disposal only to the extent that the radionuclides in GTCC wastes were different and/or more mobile than those present in solidified HLW and spent nuclear fuel. This is not expected to be the case since DOE studies indicate that the principal source of radioactivity in GTCC waste is activated metals from decommissioning reactors, which are similar to spent fuel hardware. ~~The Commission recognizes that it may be necessary to add additional regulatory requirements to Part 60 in the future if DOE should elect to pursue repository disposal of GTCC wastes.~~

Previous development of EPA's standards has addressed types of wastes rather than types of disposal facilities as in NRC's regulations. Thus, it is possible that a repository containing both HLW and GTCC LLW would be subject to two EPA standards. The NRC does not anticipate that this will cause significant problems for DOE, since the LLW standard has not yet been proposed and this situation can be taken into account as the standard is developed. ~~if it should pose an insurmountable difficulty, DOE would still be able to develop a separate, GTCC-only facility.~~

4. On page 10 of the Federal Register notice, revise the first sentence of the last paragraph to read: that its statements were-potentially misleading could have been misunderstood.
5. On page 11 of the Federal Register notice, revise the third paragraph of section (g) to read: On the contrary, as provided in § 61.1, Part 61 establishes procedures, criteria, and terms and conditions with respect to "land disposal of radioactive waste". In implementing this objective, § 61.3 requires that the disposal of low-level waste at any "land disposal facility" must be authorized under Part 61. § 61.7 notes that additional technical criteria might be needed for licensing of disposal facilities other than "near surface" disposal. If needed, such criteria would be added to Part 61 before licensing an "intermediate" disposal facility. Since . . .
6. In the proposed press release, it is stated that no significant changes were made to the proposed rule as a result of public comments. I suggest that the change identified on p. 12 of the Federal Register notice (that dealing with Commission approval of disposal techniques rather than simply submitting proposals) be noted in the press release.
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9. On page 6 of the Regulatory Impact Analysis, revise paragraph (c) to read:

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Ticket

DATE RECEIVED: 01/12/89 ORIGINAL DUE DT: 01/27/89 CONTROL NO: B900025
DIVISION DATE: DOC DT: 01/11/89
FROM: TIME: COMP DT:

ARLOTTO, GUY A.
RES
TO:
THOMPSON, HUSH L.

ACTION

FOR SIGNATURE OF: ** BLUE ** SECY NO:

ASSIGNED TO: CONTACT:
HLWM

DESC: ROUTING:

MEMORANDUM FROM ARLOTTO, RES TO THOMPSON, ET AL
RE: FINAL PART 61 AMENDMENTS
THOMPSON
BERNERO
FUNCHES
BROWN/LEAR
JENKINS

SPECIAL INSTRUCTIONS OR REMARKS:
DIVISION OF HLWM - REVIEW AND PREPARE MEMORANDUM
WITH COMMENTS/CONCURRENCE TO RESPOND FOR NMSS
PROVIDE TO THOMPSON BY 1/27 89.

HLG-P

Due to Thompson 1/27

requires a memo to Arlotto from Thompson

extended 1/31 per Febringer