



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

August 18, 1998

MEMORANDUM TO: Carl Paperiello, Director
NMSS

FROM: John Greeves, Director *J. Greeves*
DWM/NMSS

SUBJECT: ERRONEOUS *ENERGY DAILY* ARTICLE OF AUGUST 13, 1998,
"TWO YEARS LATE, NRC WEIGHS IN ON SAVANNAH RIVER
CLEANUP"

The Natural Resources Defense Council (NRDC) submitted a petition dated July 28, 1998, to the U.S. Nuclear Regulatory Commission (NRC) requesting that NRC exercise immediate licensing authority over 51 high-level waste (HLW) tanks at the U.S. Department of Energy's (DOE's) Savannah River (SR) site. One of several recent articles related to the petition submission, the *Energy Daily* article of August 13, 1998, entitled "Two Years Late, NRC Weighs In On Savannah River Cleanup," is erroneous. My staff has prepared a chronology (attached) of the SR tank waste classification review which indicates the article is erroneous in the following respects.

First, the article states that 2 years after DOE asked for regulatory guidance, the NRC is belatedly raising questions regarding DOE's plans for tank closure, then cites "NRC's apparent reluctance to regulate the Savannah River tanks." In fact, the revised regulatory basis document was submitted by DOE to the staff for review on August 15, 1997, following the necessary establishment of a funding mechanism in the form of a Memorandum of Understanding (MOU) and an Interagency Agreement (IA). The MOU and IA were signed on July 9, 1997. The *Energy Daily* is perhaps referring to early discussions between the NRC and DOE, in August - September 1996, wherein DOE requested an expedited staff review (6 weeks) and was informed that even an expedited review would take on the order of 6-7 months, following establishment of a funding mechanism. Given DOE concerns about funding and schedule, DOE reevaluated the need for NRC staff review. A revised request for NRC review was submitted by DOE on December 20, 1996, which prompted the MOU/IA development. The staff informed the Commission of these activities in a February 18, 1997, memo on the status of DOE's tank closure plans.

Second, the article states that it is "up to the Department to decide if the tank closure program met regulatory requirements to protect groundwater and public health." It is true that DOE is responsible for making the initial determination as to whether tank waste is "incidental" in accordance with NRC guidance (not regulatory requirements); however, if it appears that the

CONTACTS: R. Weller, NMSS/ENGB
415-7287
B.J. Davis, NMSS/ENGB
415-5874

9808260209 980818
PDR WASTE PDR
WM-1

NHD 11
109.7
Wm-1

98-170

Delete: ACNW

NRC FILE CENTER COPY

waste may be subject to NRC licensing, NRC expects that DOE will communicate that concern to the NRC, as it has done in this case. Accordingly, NRC has not abdicated the regulatory authority it has under the Energy Reorganization Act of 1974.

Finally, in response to the statement that "NRC has refused to release the study done for it by the Center for Nuclear Waste Regulatory Analyses" (CNWRA), the fact is that the NRC staff review is still in process, and the letter dated June 30, 1998, from N.K. Stablein/NRC to R. Schepens/DOE is a Request for Additional Information (RAI), not a record of findings. The report authored by the CNWRA is predecisional and will not be finalized until the NRC staff review is complete. References in the article to the RAI and the CNWRA report incorrectly imply completion of the NRC staff review.

Ultimately, the Division of Waste Management does not consider that NRC's handling of the SR tanks is in any way inadequate or untimely. This review involves application, as appropriate, of guidance originally developed for wastes removed from tanks at the Hanford site. The review is detailed, complex, and highly technical, and is expected to influence the criteria and process for future tank closure evaluations at other DOE sites (e.g., Hanford and West Valley). In this respect, NRC's regulatory role at SR and Hanford does not differ as to the closure of the HLW tanks at those sites, and, therefore, it is not true that "NRC's handling of the Savannah River tanks contrasts sharply with its proposed role in overseeing the eventual closure of similar [HLW] storage tanks at DOE's Hanford site near Richland, Wash."

As previously noted, a detailed chronology of the SR incidental waste classification review is attached for your information. If you have any questions, please contact R. Weller or J. Davis of my staff.

Attachment: As stated

waste may be subject to NRC licensing, NRC expects that DOE will communicate that concern to the NRC, as it has done in this case. Accordingly, NRC has not abdicated the regulatory authority it has under the Energy Reorganization Act of 1974.

Finally, in response to the statement that "NRC has refused to release the study done for it by the Center for Nuclear Waste Regulatory Analyses" (CNWRA), the fact is that the NRC staff review is still in process, and the letter dated June 30, 1998, from N.K. Stablein/NRC to R. Schepens/DOE is a Request for Additional Information (RAI), not a record of findings. The report authored by the CNWRA is predecisional and will not be finalized until the NRC staff review is complete. References in the article to the RAI and the CNWRA report incorrectly imply completion of the NRC staff review.

Ultimately, the Division of Waste Management does not consider that NRC's handling of the SR tanks is in any way inadequate or untimely. This review involves application, as appropriate, of guidance originally developed for wastes removed from tanks at the Hanford site. The review is detailed, complex, and highly technical, and is expected to influence the criteria and process for future tank closure evaluations at other DOE sites (e.g., Hanford and West Valley). In this respect, NRC's regulatory role at SR and Hanford does not differ as to the closure of the HLW tanks at those sites, and, therefore, it is not true that "NRC's handling of the Savannah River tanks contrasts sharply with its proposed role in overseeing the eventual closure of similar [HLW] storage tanks at DOE's Hanford site near Richland, Wash."

As previously noted, a detailed chronology of the SR incidental waste classification review is attached for your information. If you have any questions, please contact R. Weller or J. Davis of my staff.

Attachment: As stated

DISTRIBUTION: Central File DWM r/f NMSS r/f ENGB r/f
 MWeber RJohnson MBell JHickey JHolonich
 TCJohnson JParrott DGauch

DOCUMENT NAME: S:\DWM\ENGB\BJD\NRGDAILY.LTR * See previous concurrence

OFC	ENGB*		ENGB*		ENGB*		OGC	DWM
NAME	JDavis/eb ^{prt rd eb'}		RWeller		NKStablein		CWReame	JGreeves
DATE	8/ 17 /98		8/ 18 /98		8/ 18/98		8/ 18/98	8/18/98

OFFICIAL RECORD COPY

ACNW: YES NO
 IG : YES NO Delete file after distribution: Yes No
 LSS : YES NO

It is important to note that DOE's December 20, 1996, letter states that "SR has determined that all 51 tanks can be closed under existing Nuclear Regulatory Commission (NRC) criteria for 'incidental' waste as specified in the Bernero (NRC) to Lytle (DOE) letter of March 1993...." The DOE letter also recognizes that closure of Tanks 20 and 17 prior to completion of the NRC review process "would involve only minimal risks."

Finally, in response to the statement that "NRC has refused to release the study done for it by the Center for Nuclear Waste Regulatory Analyses" (CNWRA), the fact is that the NRC staff review is still in process, and the letter dated June 30, 1998, from N.K. Stablein/NRC to R. Schepens/DOE is a Request for Additional Information (RAI), not a record of findings. The report authored by the CNWRA is predecisional and will not be finalized until the NRC staff review is complete. References in the article to the RAI and the CNWRA report are misleading and imply completion of the NRC staff review.

Ultimately, the Division of Waste Management does not consider that NRC's handling of the SR tanks is in any way inadequate or untimely. This is a precedent-setting review that involves application and possible modification of guidance originally developed for wastes removed from tanks at the Hanford site. The review is detailed, complex, and highly technical, and is expected to establish the criteria and process for future tank closure evaluations at other DOE sites (e.g., Hanford and West Valley). In this respect, NRC's regulatory role at SR and Hanford does not differ as to the closure of the HLW tanks at those sites, and, therefore, it is not true that "NRC's handling of the Savannah River tanks contrasts sharply with its proposed role in overseeing the eventual closure of similar [HLW] storage tanks at DOE's Hanford site near Richland, Wash."

For your information, a detailed chronology of the SR incidental waste classification review is attached. If you have any questions, please contact R. Weller or J. Davis of my staff.

Attachment: As stated

DISTRIBUTION: Central File DWM r/f NMSS r/f ENGB r/f
 MWeber RJohnson MBell JHickey JHolonich
 TCJohnson JParrott

DOCUMENT NAME: S:\DWM\ENGB\BJD\INRGDAILY.LTR

OFC	ENGB <i>BJD</i>	ENGB	ENGB	OGC	DWM
NAME	JDavis/eb ^{prtd} <i>W</i>	RWeller <i>RW</i>	NKStablein <i>NK</i>	CWReamer	JGreeves
DATE	8/11/98	8/18/98	8/18/98	8/ /98	8/ /98

OFFICIAL RECORD COPY

ACNW: YES NO
 IG : YES NO Delete file after distribution: Yes No
 LSS : YES NO

SAVANNAH RIVER SITE INCIDENTAL WASTE CLASSIFICATION REVIEW CHRONOLOGY

Letter from DOE Savannah River submitted August 28, 1996, requesting expedited staff review (end of September 1996) of methodology for classification of residual tank wastes as "incidental."

NRC response letter of September 13, 1996, to DOE letter request, advised that: (1) it would not be feasible to complete a review by the end of September 1996, (2) the review would take 6 to 7 months, (3) a funding mechanism would be necessary to perform the review.

EDO memorandum of September 13, 1996, informed the Commission of Savannah River waste classification issues, noting that March 1993 criteria would be applied, as appropriate, to DOE tank closure methodology, and that modification of criteria may be necessary.

NRC and DOE management meeting held September 17, 1996, to discuss DOE's August 28, 1996, letter. Given DOE concerns about schedule and funding for staff review, DOE would reconsider need for staff review.

Letter from DOE Savannah River submitted December 20, 1996, with revised request for NRC review of DOE's waste classification methodology. Letter also advises of DOE's plans to close 2 tanks concurrently with NRC's methodology review.

EDO memorandum of February 18, 1997, informed the Commission of DOE's updated tank closure plans and staff plans to review DOE's waste classification methodology. Memo also informs Commission of DOE's plans to close 2 of 51 HLW tanks prior to completion of staff methodology review.

On July 9, 1997, a Memorandum of Understanding (MOU) and Interagency Agreement (IA) were established with DOE for the staff's review of DOE's waste classification methodology.

The signed MOU and IA were transmitted to Savannah River via letter dated July 16, 1997, which also requested a revised report on DOE's regulatory basis for incidental waste classification.

Tank 20 closure completed July 31, 1997.

Following submission of DOE's revised regulatory basis report on August 15, 1997, NRC staff, in conjunction with CNWRA staff began the technical review. Various supporting documents for the technical basis were requested from DOE during this period and reviewed as they were received. The CNWRA draft report on assessment of DOE's methodology for waste classification was submitted to NRC on December 9, 1997.

A Request for Additional Information (RAI) was sent to DOE on June 30, 1998, which incorporated NRC staff comments, along with comments from CNWRA. Key issues from the technical review, which need to be resolved prior to a final decision include: (1) duration of institutional controls, (2) engineered barrier lifetimes, (3) concentration averaging to meet Class C limits, and (4) selection of intruder scenarios. In addition, questions regarding waste characterization, groundwater transport modeling, and specific aspects of performance assessment modeling, including selection of input parameters, require resolution.

Staff from NRC and DOE met on July 28-29, 1998, to discuss DOE proposed responses to the RAI issues and to clarify those issues where necessary.

A Petition requesting NRC to assume and exercise immediate licensing authority over all HLW stored in the 51 underground tanks located at the Savannah River site was submitted by the Natural Resources Defense Council (NRDC) on July 28, 1998. NRDC argues that although DOE claims that residual tank wastes can be classified as incidental, there is no statutory basis for such a term. Furthermore, NRDC states that even if the NRC criteria are applicable, the residual tank waste at Savannah River site does not meet the criteria.

Planned/Expected Future Actions

1. Letter to NRDC acknowledging receipt of the petition, and informing NRDC that the review of DOE's incidental waste classification methodology is still in-process, and is not anticipated to be completed for several months. A full response to the petition will be developed upon completion of the staff's ongoing waste classification methodology review.
2. Federal Register notice of receipt of petition.
3. Letter to DOE, enclosing NRDC petition, with opportunity to comment in 30 days.
4. DOE letter response to NRC RAI.
5. NRC review of DOE letter response to RAI.
6. Second RAI and DOE response, if necessary.
7. Commission Paper documenting staff review and enclosing draft response letter to DOE.
8. Commission review.
9. Letter response to DOE stating results of NRC review of incidental waste classification methodology.
10. Formal response to NRDC petition.