

FUSRAP

CCN 105735

FUSRAP COMMUNICATIONS DISTRIBUTION DOE/ORO FORMER SITES RESTORATION DIVISION (EW-93)

DATE PROCESSED BY PDCC 07102193

FSRD ☒ COMM TYPE 11G 1H

SAIC SENSITIVE ☐

COMM REF _____

ADMIN RCD _____

SUBJECT NES - Response to Seay's ltr dtd 5/10/93, Installation of Final Cap

FROM Muszynski TO Grimm COMM DATE 6/24/93

ADDR CODE 1 1 CLOSING CCN _____ WBS 158

SUBJECT CODE 2552 AFFECTED DOCUMENT _____

RESPONSE TRACKING INFORMATION

ACTION DESCRIPTION:

PRIMARY:

OWED TO: _____ OWED BY: _____ (ORG) _____

(ORG) _____ TARGET DATE 1/1 CLOSING CCN _____ COMPL. DATE 1/1 CLOSING REF _____

SECONDARY:

OWED TO: _____ OWED BY: _____ (ORG) _____

(ORG) _____ TARGET DATE 1/1 CLOSING CCN _____ COMPL. DATE 1/1 CLOSING REF _____

MESSAGE:

2 sided

*** 2 SIDED ***

W/A W/O				W/A W/O				W/A W/O			
DIRECTOR, FSRD:	L. Price	FSRD		PROGRAM MANAGER:	J. King	SAIC		PROGRAM MANAGER:	R. Harbert	BPM	
DEP. DIRECTOR, FSRD:	W. Seay	FSRD	1	DEPUTY PROGRAM MGR	J. Waddell	SAIC		DEPUTY PROGRAM MGR	P. Crowell	BPM	
SITE MANAGER:	D. Adler	FSRD		PROGRAM ADMIN	R. Wright	SAIC			W. Wagner	BPM	
	S. Cange	FSRD		PROJECT MANAGER:	T. Gangwer	SAIC		PROJECT MANAGER:	M. Redmon	BPM	
	R. Kirk	FSRD	1		M. Khan	SAIC	1		G. Palau	BPM	
	T. Perry	FSRD			T. Patterson	SAIC			C. Hickey	BPM	1
	M. Noe	FSRD		MGMT. SYSTEMS:	R. Tucker	SAIC			E. McNamee	BPM	
PROJECT SUPPORT GRP:	J. Hart	FSRD			C. Helle	SAIC		CONSTRUCTION		BFC	
	S. Oldham	FSRD			K. Rantre	SAIC		ENGINEERING & TECHNOLOGY		BET	
	G. Hartman	FSRD		SECRETARY:	S. Hapinistaff	SAIC		ENGINEERING		BET	
	L. Marz	FSRD		TECH DEV:	W. McNeill	SAIC		ENVIR TECH		BET	
PRGM ANALYST:	B. Hughlett	FSRD						DATA MANAGEMENT		BET	
SECRETARY:	M. Selber/M. Dyke	FSRD		<i>P.R. Dulier</i>			1	GEOTECH		BET	
FSRD CHRON FILE			1					ESH & WASTE MGMT		BEH	
FSRD NOTEBOOKS								SAFETY & HEALTH		BEH	
READING FILE								ENVIR COMPLIANCE		BEH	
DOE/P&CD:	French/Sistrunk	DCO						WASTE MGMT		BEH	
DOE/HO:	J. Wagener	DHO						PROCUREMENT		BPO	
								PROJECT ADMINISTRATION		BPA	
				TMA/EBERLINE		BET		TECHNICAL RE.ORTS		BTR	
ANL:	A.J. Dvorak	ANL		SITES: 158 NFSS				PROJECT AUTOMATION		BAU	
	A. Geisler	ANL		TONAWANDA INFO CTR				PROJECT CONTROLS		BPC	
	G. Maraman	ANL		137 WISS				COMMUNITY RELATIONS		BCR	
	D. Dunning	ANL		138 MISS/INFO CTR				QUALITY ASSURANCE		BOA	
	J. Wing	BNL		139 COLONIE (CISS)				ADMIN RCD/INFO REPOSITORY			
ORISE:		ORISE		140 / 153 LATTY AVE/SLAPS				PDCC READ FILE TO FROM DOE			1
ORNL:		ORNL						PDCC: SENSITIVE/CHRON FILE			1

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II

JACOB K. JAVITS FEDERAL BUILDING 1993 JUL -1 PM 1:32

NEW YORK, NEW YORK 10278

12 4 JUN 1993

Mr. Paul D. Grimm
 Acting Assistant Secretary
 Environmental Restoration and Waste Management
 Department of Energy
 Washington, DC 20545

Dear Mr. Grimm:

This is in response to William Seay's May 10, 1993 letter to Kathleen Callahan, my Acting Deputy Regional Administrator, regarding installation of a final cap on the Waste Containment Structure at the Niagara Falls Storage Site (NFSS), in Lewiston, New York. Although we appreciate the Department of Energy's (DOE) desire to initiate a final remedial action for the radioactively contaminated material at the NFSS, we have several major concerns regarding permanent storage of a portion of the waste material at the facility.

There are two very different and segregated waste materials at the NFSS. Specifically, there are 15,000 cubic yards of material referred to as "residues," containing 870 Curies (Ci) of radium-226, and 240,000 cubic yards of material referred to as "wastes," containing 7.8 Ci of radium-226. The residues represent about 6% of NFSS material by volume, yet contain 99% of the radium-226 at the site. While we are not opposed to the long-term on-site management of the NFSS wastes, we believe that long-term on-site management of the residues would be inappropriate.

As you know, despite repeated correspondence between DOE and the Environmental Protection Agency (EPA) Region II, we have not yet resolved definition of appropriate standards to be used for long-term on-site management of the residues. In particular, DOE has indicated that it considers the K-65 residues, which contain radium-226 with a half-life of 1,600 years and activity levels ranging from 117,800 to 355,680 picocuries per gram (pCi/g), to be naturally occurring radioactive material. As such, it has asserted that 40 CFR Part 192, Health and Environmental Protection Standards for Uranium and Thorium Mill Tailings, would be suitably protective of human health and the environment.

The K-65 residues are similar in activity and half-life to transuranic waste (high-level radioactive waste), which is regulated under 40 CFR Part 191, Environmental Radiation Protection Standards for Management and Disposal of Spent Nuclear Fuel, High-Level and Transuranic Radioactive Wastes.

Specifically, radium-226 exhibits levels of activity at 100 to 1,000 times that of uranium mill tailings and is capable of generating dose rates in excess of 1,000 rem per year. Such doses could result in an incremental cancer risk on the order of one in two beyond its 1,600 year half-life. In addition, the K-65 residues clearly exceed the criterion of 100,000 pCi/g for qualification in the Nuclear Regulatory Commission's highest category of waste eligible for near surface disposal. The 40 CFR Part 192 regulations were not promulgated with such material in mind.

While we agree that, as stated in Mr. Seay's letter, "neither of these regulations are strictly applicable (legally) to the residues," we believe that the standards embodied in 40 CFR Part 191 are the most appropriate for management of the K-65 residues. Accordingly, it is EPA's position that the disposal of K-65 and other residues should be conducted in compliance with 40 CFR Part 191 standards.

Moreover, EPA does not anticipate that the NFSS can comply with the 40 CFR Part 191 Subpart B requirements for on-site disposal. In particular, although DOE has indicated that contamination is not expected to reach the site boundary within 1,000 years of waste emplacement with the final capping, EPA does not believe that the NFSS can prohibit migration of contaminants for the 10,000 years required by 40 CFR Part 191 Subpart B. With this in mind, EPA believes that the only viable long-term action for the K-65 and other residues (i.e., L-30, L-50, etc.) at NFSS is removal to a permitted high-level radioactive waste repository, when such a facility becomes available.

In April 1986, DOE issued the Final Environmental Impact Statement on Long-Term Management of the Existing Radioactive Wastes and Residues at the Niagara Falls Storage Site (FEIS). In this document, DOE identified long-term, "in-place management of wastes at the NFSS, with modified containment" as the preferred alternative. However, because of the lack of detailed technical, engineering/design, and ground water data available at the time of the FEIS, EPA found it inadequate for the purposes of determining the environmental acceptability of on-site management for the residues and/or contaminated soils. Accordingly, in our June 25, 1986 comment letter, we objected to the project because the FEIS did not present sufficient information to support the selection of the preferred alternative.

In response to EPA's comments, DOE's Record of Decision (ROD) for the project stated that DOE would "provide EPA with assurance that the selected option will meet applicable standards and/or guidance and will be environmentally acceptable." Additionally, DOE indicated that subsequent project documents would be subject to review pursuant to the National Environmental Policy Act (NEPA). Unfortunately, the DOE has met neither of these commitments. Accordingly, we strongly recommend that DOE prepare appropriate NEPA documentation assessing the impacts of the proposed action on human health and the environment.

In a related matter, the NFSS was listed in the Federal Agency Hazardous Waste Compliance Docket in November 1988; it has not been listed on the National Priorities List. Accordingly, Section 120 of CERCLA/SARA requires state concurrence with the final remedial action at the NFSS. As yet, DOE has not documented the State of New York's concurrence with long-term management of the wastes at the NFSS as the site's final remedial action. Therefore, until both the New York State Departments of Environmental Conservation and Health concur with DOE's preferred alternative, EPA does not believe that it can be implemented as the site's final remedial action.

In conclusion, EPA has several significant concerns about DOE's preferred remedial action for the NFSS. In particular, we do not believe that DOE has demonstrated that this alternative is adequately protective of human health and the environment. In addition, EPA does not believe that DOE has satisfied the commitments made in the project's NEPA ROD regarding the implementation of the preferred alternative. Lastly, DOE has not secured the State of New York's concurrence with its preferred alternative as the final remedial action for the NFSS.

With respect to the DOE's proposal to add additional capping material at the NFSS, EPA agrees that this approach may provide additional protection in the short-term. However, since the existing interim cap was designed to exceed RCRA specifications, there is no immediate need to add additional capping material at the NFSS. Accordingly, we believe that the funds for the placement of the additional capping material could be put to better use elsewhere. With this in mind, EPA cannot agree with DOE's current course of action for the NFSS. Further, we request that the DOE provide a written commitment that the residues will be moved to a permitted high-level radioactive waste repository when such a facility becomes available.

I believe that a meeting between our respective agencies, as well as appropriate state agencies, should be held as soon as possible to discuss EPA's outstanding concerns with DOE's preferred remedial action for the NFSS. Towards this end, my staff will contact your office to arrange for such a meeting. In the interim, if you need additional information, please call me at (212) 264-2525, or have your staff contact Robert W. Hargrove, Chief, Environmental Impacts Branch, at (212) 264-1892.

Sincerely,



William J. Muszynski, P.E.
Acting Regional Administrator

cc: P. Ziemer, DOE-ESH
W. Seay, DOE-FUSRAP
R. Kirk, DOE-FUSRAP
P. Merges, NYSDEC
K. Rimawi, NYSDOH