

June 12, 2002

Mr. Stephen A. Romano
President and Chief Operating Officer
American Ecology Corporation
805 W. Idaho, Suite 200
Boise, Idaho 83702

SUBJECT: CLASSIFICATION OF FUSRAP MATERIAL AT MAYWOOD, NEW JERSEY

Dear Mr. Romano:

I am responding to your December 3, 2001, and March 8, 2002, and April 22, 2002, letters addressing my letter of September 20, 2001, to Envirocare of Utah regarding the classification of the Formerly Utilized Sites Remedial Action Program (FUSRAP) material at the Maywood, New Jersey, site. My September letter concluded that the tailings from the entire site are 11e.(2) byproduct material. You disputed the basis for the U.S. Nuclear Regulatory Commission (NRC) position in your December 3rd letter and requested NRC to review the Maywood classification matter again. In your view, there is no law or regulation that compels tailings that are not in the three licensed pits to be disposed of at an 11e.(2) licensed facility.

In my September letter, I explained the basis for the 11e.(2) classification. Specifically, I stated:

As stated in the January 26, 2001, letter, the tailings material in the three pits identified in NRC materials license STC-1333, issued to Stepan Chemical Company at the Maywood site is 11e.(2) byproduct material. This byproduct material is regulated pursuant to 10 CFR 40.2a.(b) as that material was possessed by a licensee at an inactive site which was licensed both before and after 1978. The Commission's regulatory authority, as explained in the December 30 [sic], 2000, Director's Decision, at page 19, "under UMTRCA only extends to tailings produced or possessed by a person licensed by the NRC as of the effective date of UMTRCA or thereafter." It is our understanding that the tailings in the three licensed pits were produced in the same processes that produced the tailings possessed by the licensee throughout the rest of the Maywood site and that the tailings on the site have essentially the same radiological characteristics. In 1954, the entire site was in essence licensed as the licensee was licensed to possess unlimited quantities of thorium at the Maywood site. By 1978, the licensee was limited to underground storage of a specified amount of material. A broader license could have been issued given the material on the site. In fact, notwithstanding that the license only addressed material in the pits the NRC took the position in a November 1, 1982, letter from R. Haynes, Regional Administrator, Region 1, to J. Stuart, Mayor of Maywood, New Jersey, that NRC continued to have regulatory responsibility for the thorium on the property. In light of the above, it is our view that the tailings from the entire site are 11e.(2) byproduct material.

The premise for your December 3rd letter, citing page 19 of the December 13, 2000, Director's Decision, DD-00-06, is that NRC lacks authority to regulate uranium or thorium mill tailings not under license before the effective date of the Uranium Mill Tailings Radiation Control Act of 1978 (UMTRCA). However, that decision, as set out in my September letter, states that the NRC authority over mill tailings provided by UMTRCA "extends to tailings produced or possessed by a person licensed by the NRC as of the effective date of UMTRCA or thereafter." This is consistent with 10 CFR 40.2a, which provides that the Commission will regulate byproduct material as defined in 10 CFR Part 40 "located at a site where milling operations are no longer active," if such site is not covered by Title I of UMTRCA, which is not applicable to the Maywood site. As noted in the Director's decision at page 17, this regulation implements Section 83(a) of the Atomic Energy Act and ensures "that sites which continue to hold an NRC license, but which have ceased engaging in milling operations, meet the decommissioning and decontamination standards required by section 83(a)." Thus, the fact that the license explicitly addresses only the three pits is not controlling, since the tailings at the Maywood site are possessed by a person licensed as of 1978 to possess material at the site. This position is supported by the unique circumstances at the Maywood site, which were addressed in my September letter and set out, above, concerning the breadth of the original license at the site, the derivation of the tailings, the presence of source material outside the pits, and NRC's previous view of its responsibility for the site.

Fundamental to a determination that material is 11e.(2) byproduct material is that the material must result from the processing of ore primarily for its source material. Your December 3rd letter states that the material outside the pits resulted from extraction of lanthanum, not source material. We understand that the tailings material is the result of extraction of thorium and lanthanum from the monazite sands. Thorium was first extracted from the monazite and the lanthanum was then extracted from the tailings resulting from thorium processing. (The monazite waste from processing thorium was apparently used during World War II because of the war restrictions on monazite imports.) The fact that the tailings came from the lanthanum processing does not prevent the tailings from being characterized as 11e.(2) byproduct material, since the feedstock for the lanthanum processing was the tailings resulting from processing the monazite for thorium. Illinois v. Kerr-McGee Chemical Corp., 903 F.2d 1,7 (D.C. cir 1990). Thus, in this case, the tailings meet the statutory definition of 11e.(2) byproduct material.

In our view, the tailings at this site result from processing ore for its thorium content and given the circumstances of this case, including the license in effect in 1978, NRC still believes that the tailings were properly classified as 11e.(2) byproduct material. NRC recognizes that pre-1978 uranium and thorium mill tailings with low activity can safely be disposed in landfills that are designed to accept limited amounts of radiologically contaminated materials and permitted under the Resource Conservation and Recovery Act. However, since the tailings are classified as 11e.(2) byproduct material, they must be processed as such and disposed of in a licensed 11e.(2) facility.

Your March 8, 2002, and April 22, 2002, letters also suggested that NRC does not have statutory authority over remediation activities at FUSRAP sites. We agree with your assertion; however, the question put before us dealt with the disposal of NRC regulated material off site of the Maywood FUSRAP site, not the remediation activities conducted on site.

As to the use of the September 20, 2001, letter at other sites, (e.g., the Shattuck Chemical site in Denver), NRC considers the September letter to be a site-specific determination for the waste at Maywood. Similarly, the classification of material at other sites will be made on a case-by-case basis. As noted in the enclosed letters from the U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers to Envirocare, there is nothing in the September letter that would cause the material at Shattuck to be considered 11e.(2) byproduct material. I trust that my reply has responded to your concerns. If you have any further questions, please contact Robert Pierson at (301) 415-7213, or by e-mail at rcp@nrc.gov.

In accordance with 10 CFR 2.790 of NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at the Public Electronic Reading Room (<http://www.nrc.gov/NRC/ADAMS/index.html>).

Sincerely,

/RA/

Martin J. Virgilio, Director
Office of Nuclear Material Safety
and Safeguards

Docket Nos. 40-8989 and 40-8610
License Nos. SMC-1559 and STC-1333

Enclosure:

1. EPA November 2, 2001,
Letter to Envirocare
2. USACE November 5, 2001,
Letter to Envirocare

cc: W. Sinclair, Utah Division of Radiation Control
T. Brown, EPA, Region 8, Denver, CO
A. Wright, Army Corps of Engineers
J. MacEvoy, Army Corps of Engineers
T. McDaniel, Army Corps of Engineers

June 12, 2002

As to the use of the September 20, 2001, letter at other sites, (e.g., the Shattuck Chemical site in Denver), NRC considers the September letter to be a site-specific determination for the waste at Maywood. Similarly, the classification of material at other sites will be made on a case-by-case basis. As noted in the enclosed letters from the U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers to Envirocare, there is nothing in the September letter that would cause the material at Shattuck to be considered 11e.(2) byproduct material. I trust that my reply has responded to your concerns. If you have any further questions, please contact Robert Pierson at (301) 415-7213, or by e-mail at rcp@nrc.gov.

In accordance with 10 CFR 2.790 of NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at the Public Electronic Reading Room (<http://www.nrc.gov/NRC/ADAMS/index.html>).

Sincerely,
/RA/

Martin J. Virgilio, Director
Office of Nuclear Material Safety
and Safeguards

Docket Nos. 40-8989 and 40-8610
License Nos. SMC-1559 and STC-1333
Enclosure:

1. EPA November 2, 2001,
Letter to Envirocare
 2. USACE November 5, 2001,
Letter to Envirocare
- cc: W. Sinclair, Utah Division of Radiation Control
T. Brown, EPA, Region 8, Denver, CO
A. Wright, Army Corps of Engineers
J. MacEvoy, Army Corps of Engineers
T. McDaniel, Army Corps of Engineers

DISTRIBUTION:

NMSSr/f FCLBr/f CCain/RIV
JMuszkiewicz WTravers ACNW
PTressler FCSS r/f NMSS Dir.Off. r/f

Accession #: ML021560081

Sburns KCyr EMerschhoff/RIV

C:\ORPCheckout\FileNET\ML021560081.wpd

OFC	FCLB		FCLB		FCLB		OGC		FCLB	
NAME	MFliegel		MLayton*		GJanosko*		JLieberman*		MLeach (GJ)*	
DATE	6/05/02		3/29/02		3/29/02		3/27/02		3/29/02	
OFC	Tech Ed.		DWM		FCSS		NMSS			
NAME	EKraus*		LCamper*		MWeber*		MVirgilio			
DATE	2/7/02		3/29/02		4/02/02		6/12/02			

*See previous concurrence

OFFICE RECORD COPY