

MEMORANDUM FOR: JoAnn Resner, Acting Chief
Technical Publication Section
Regulatory Publications Branch

JAN 28 1991

THRU: Michael Tokar, Section Leader
Technical and Special Issues Section
Low-Level Waste Management Branch
Division of Low-Level Waste Management
and Decommissioning, NMSS

FROM: Joseph D. Kane
Technical and Special Issues Section
Low-Level Waste Management Branch
Division of Low-Level Waste Management
and Decommissioning, NMSS

SUBJECT: REQUEST FOR PUBLICATION OF NUREG/CR-5432

As a follow-up to our previous conversation, I am forwarding completed forms (NRC Form 426A and 335) and the mailing labels for the requested publication of NUREG/CR-5432. Camera-ready copies of the three volumes that make up the subject NUREG/CR report have been separately provided to the Regulatory Publications Branch.

Any questions that you may have on the attachments may be directed to me on extension 23449. We appreciate your cooperation and support in the publication and distribution of the subject report which should prove to be widely requested and of keen interest to other governmental agencies.

Joseph D. Kane
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Low-Level Waste Management Branch
Division of Low-Level Waste Management
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Enclosures: As stated

Distribution: Central File # _____ NMSS r/f
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SUBJECT ABSTRACT: REQUEST FOR PUBLICATION OF NUREG/CR-5432

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NUREG/CR-5432
 Vols. 1, 2 and 3

**RELEASE TO PUBLISH UNCLASSIFIED NRC CONTRACTOR,
 CONSULTANT, OR CONFERENCE PROCEEDINGS REPORTS**

(Please Type or Print)

Obtain from the Technical Publications
 Section on 492-7963

2. TITLE AND SUBTITLE (State in full as shown on document)

Recommendations to the NRC for Soil Cover Systems Over Uranium
 Mill Tailings and Low-Level Radioactive Wastes
 Volume 1: Identification & Ranking of Soils for Disposal Facility Covers
 Volume 2: Laboratory & Field Tests for Soil Covers
 Volume 3: Construction Methods & Guidance for
 Sealing Penetrations in Soil Covers

3. FIN OR GRANT NUMBER
 (Do not list DOE contract number)

Covers Fin No. D1095

4. AUTHORS (If more than three, name first author followed by "and others")

R. D. Bennett, Raymond C. Horz and Allen F. Kimbrell

5. CONTRACTOR

U.S. Army Engineer
 Waterways Experiment Station

MAILING ADDRESS (Number and Street, City, State and ZIP Code)

P. O. Box 631
 Vicksburg, MS 39180-6199

TELEPHONE NUMBER

(601)634-3974

6. TYPE OF DOCUMENT (Check appropriate box)

A. TECHNICAL REPORT

FORMAL

LETTER REPORT

B. CONFERENCE PAPER (If so, complete items (1), (2), and (3) below)

(1) TITLE OF CONFERENCE PAPER:

(2) DATE(S) OF CONFERENCE:

(3) LOCATION OF CONFERENCE:

C. OTHER (Indicate type of item)

7. DISTRIBUTION (List NRC distribution codes. Provide mailing labels for special distribution not covered by NRC codes. If NRC staff, provide name and mail stop only. If external, provide complete mailing address.)

Mailing labels will be provided.
 Send Notice of Availability to WL list.
 Please have the three volumes distributed to the CY, CJ, CO and CC listings.

8. CERTIFICATION (ANSWER ALL QUESTIONS)

A. REFERENCE AVAILABILITY - Is all material referenced in this report available to the public either through a public library, the Government Printing Office, the National Technical Information Service, or the NRC Public Document Room?
 If no, list the specific availability of a referenced document with the reference listing below.

SPECIFIC AVAILABILITY

B. COPYRIGHTED MATERIAL - Does this report contain copyrighted material?
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 If yes, does it comply with the standards in NRC Manual Chapter 0904, "Planning and Control of Automatic Data Processing (ADP) Resources"?

D. PATENT CLEARANCE - Does this report require patent clearance?
 If yes, the NRC Patent Counsel must signify clearance by signing below.

NRC PATENT COUNSEL (Type or Print Name): SIGNATURE DATE

E. INFORMATION REQUESTS - Does this report contain any questionnaires, surveys, or data collection requests?

F. LICENSING REQUIREMENTS - Does this report impose requirements on licensees?

9. AUTHORIZATION

A. DOE LAB AUTHORIZING OFFICIAL (if applicable) SIGNATURE DATE
 (Type or print name)

B. NRC RESPONSIBLE STAFF MEMBER SIGNATURE OFF/DIV TELEPHONE MAIL STOP DATE
 (Type or print name)

Joseph D. Kane

Joseph D. Kane

NMSS/LLWM 492-3449 5E-2 1/02/91

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NUREG/CR-5432
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U.S. Army Engineer
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P. O. Box 631
Vicksburg, MS 39180-6199

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Division of Low-Level Waste Management and Decommissioning
Office of Nuclear Material Safety and Safeguards
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

10. SUPPLEMENTARY NOTES

None

11. ABSTRACT (200 words or less)

The U.S. Army Engineer Waterways Experiment Station (WES) provides recommendations to the U.S. Nuclear Regulatory Commission (NRC) for the selection, placement, compaction, testing, and acceptance of soils proposed to be placed in cover systems over uranium mill tailings and low-level radioactive wastes. The recommendations from WES are contained in three volumes of NUREG/CR-5432. Volume 1 identifies the various soil types and engineering properties that are needed to fulfill important soil cover functions. The identified soils are then ranked according to their capability to perform the low-permeability and filter and drainage functions. Volume 2 provides recommendations for conducting pertinent laboratory and field tests to ensure acceptable soil cover performance. Volume 3 covers recommendations from WES on proper field construction methods including guidance on quality control testing and inspections. Recommendations are given for sealing penetrations (e.g., observation wells) that are required to penetrate covers for environmental monitoring or disposal facility performance.

12. KEY WORDS/DESCRIPTORS (List words or phrase that will assist researchers in locating the report.)

Low-level waste, uranium mill tailings, soil covers over radioactive wastes, waste cover functions, long-term stability, infiltration, erosion resistance, cover subsidence and biointrusion.

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Volume 2: Laboratory and Field Tests for Soil Covers

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