



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VI
1201 ELM STREET
DALLAS, TEXAS 75270

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September 28, 1979

Mr. Cubia Clayton
Chief, Statewide Services Bureau
New Mexico Environmental Improvement
Division
P.O. Box 2348, Crown Building
Santa Fe, New Mexico 87501

Dear Cubia:

As the result of our meeting with federal and state agencies regarding the United Nuclear Corporation tailings spill, my Division has compiled a docket of all available information pertaining to the spill. For your information, I have enclosed a copy of the index to the docket. If you have any questions, comments or additions, please contact Kirk Sniff at (214) 767-2760. You can also make arrangements with Kirk to obtain copies of certain documents in the docket.

Thank you once again for your cooperation and assistance.

Sincerely,

Diana Dutton
Director
Enforcement Division (6AE)

Enclosure a/s

9804020295 790928
PDR ADOCK 04008907
C PDR

UNITED NUCLEAR CORPORATION SPILL DOCKET

A. MEMORANDA

1. Memo to file dated July 16, 1979
2. Record of Communication - Kenneth Huffman to Hank May, dated July 17, 1979, subject: Dike break at tailings pond, United Nuclear, Church Rock Operation
3. Record of Communication - Kirk Sniff to Ed Jeffrey, dated July 17, 1979, subject: Tailings spill in Rio Puerco, N.M.
4. Memo - Oscar Ramirez, Jr. (6ASA) to James E. Stiebing (6AEE), dated July 24, 1979, subject: United Nuclear Corp., Tailings Pond Release, July 16, 1979
5. Memo - Oscar Ramirez, Jr. (6ASA) to Don Hendricks, Office of Radiation Programs, Las Vegas, subject: Analysis of United Nuclear Samples
6. Memo - Clayton E. Lake, Advanced Systems Branch, AMS, to Hank May, Region 6, dated July 31, 1979, subject: AMD 7979, United Nuclear - Churchrock Mill FINAL DELIVERY
7. Memo - Allyn M Davis (6AAHP) to Clayton E. Lake (AMS) subject: Additional copies of United Nuclear Homestake Mill Photos, dated August 3, 1979
8. Memo - dated August 16, 1979, Chronic Diseases Division, Bureau of Epidemiology to Director, Center for Disease Control, subject: Uranium Mill Tailings Spill, Church Rock, New Mexico
9. Record of Communication - Don Hendricks, Director Radiation Programs, Las Vegas to Hank May, dated August 20, 1979, subject: UNC Churchrock Uranium Tailings Liquor Spill
10. Memo - R. L. Douglas, Chief, Field Studies Branch, Las Vegas facility to John Henderson, Chief, 6ASBE, dated August 22, 1979

A. MEMORANDA (continued)

11. Memo - Diana Dutton (6AE) to 6AAH, 6AW, and 6ASA, dated September 17, 1979, subject: United Nuclear Corporation Information Docket
12. Record of Communication - Myron Knudson (6AW) to Barbara Goetz (6AA), dated September 19, 1979, subject: Congressional Hearing, United Nuclear Corporation
13. Memo - Paul B. Smith, Region 8 to Henry D. May, Region 6, subject: United Nuclear Corporation Letter, dated September 19, 1979
14. Memo to file, prepared by Norm Dyer re Health Effects concerning Molybdenum and Vanadium

UNITED NUCLEAR CORPORATION SPILL DOCKET

B. CORRESPONDENCE

1. Letter dated June 1, 1979, Linda M. Tucker, Chief, Water Supply Branch (6AWS) to Mr. Thomas Baca, Director, NMEID with copy of MOU between The Navajo, Phoenix, Sacramento, and Tucson Areas Indian Health Service and EPA Region 9
2. Press Release from NMEID dated July 16, 1979
Press Release from NMEID dated July 17, 1979
3. Letter dated July 18, 1979, S. E. Reynolds, State Engineer, Natural Resources Department to D. D. Turberville, Vice President, United Nuclear Corp., Mining and Milling Division
4. Press Release from NMEID dated July 18, 1979
5. Letter dated July 20, 1979, Allyn M. Davis, Director (6AAH) to Mr. Karl Seyfrit, Director U.S. Nuclear Regulatory Commission
6. Press Release from NMEID dated July 23, 1979
7. Letter dated July 27, 1979, Karl V. Seyfrit to Allyn M. Davis (6AAH)
8. Press Release dated July 27, 1979 from NMEID
9. Letter dated August 8, 1979, S. E. Reynolds, New Mexico State Engineer to D. D. Turberville, Vice President, UNC Mining and Milling
10. Letter dated August 13, 1979, Thomas E. Baca, NMEID to D. D. Turberville, Vice President, UNC Mining and Milling
11. Letter dated August 15, 1979, Terry L. Stumph, Chief, Water Branch, S&A, Region 9 to Jack Womack, Chief, Environmental Health Branch, Indian Health Service

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B. CORRESPONDENCE (continued)

12. Magnafax of letter dated August 15, 1979, Peter MacDonald, Chairman, Navajo Tribal Council to EPA Region 9
13. Newspaper article, Dallas Times Herald, dated August 26, 1979, entitled Nuke waste spill raises Navajo fear
14. Letter dated August 27, 1979, G. Stanley Crout, Attorney representing UNC Mining and Milling to D. D. Turberville, UNC Mining and Milling
15. Letter dated August 29, 1979, Adlene Harrison, Regional Administrator, Region 6 to Peter MacDonald, Chairman, The Navajo Nations
16. Telegram dated August 30, 1979, Adlene Harrison Regional Administrator, Region 6 to Peter MacDonald, Chairman, The Navajo Nations
17. Letter dated September 4, 1979, G. Stanley Crout, Attorney for UNC to Richard Amber re Administrative Order Docket No. VI-79-139
18. Letter dated September 4, 1979, Thomas E. Baca, NMEID to Honorable Stephen W. Kennedy, State Representative, New Mexico
19. Letter dated September 19, 1979, Adlene Harrison, Regional Administrator to D. D. Turberville, UNC
20. Magnafax of telegram re comments on proposed joint EPA/Navajo Nation statement dated September 16, 1979
21. Letter dated September 7, 1979, Suzanne Dandoy, Director, Arizona Department of Health Services, to D. D. Turberville, UNC Mining and Milling

UNITED NUCLEAR CORPORATION SPILL DOCKET

C. DATA

1. Spill Report Form, Oil and Hazardous Substances, dated July 16, 1979
2. Map showing location of United Nuclear Spill, Church Rock, N.M., dated July 16, 1979
3. Memo transmitting Final Report, Uranium Tailings Spill, John J. Henderson (6ASAE) to Adlene Harrison (6A), dated July 20, 1979
4. Geotechnical Investigation Report - Stability and Integrity Assessment, Church Rock Tailings Dam, Church Rock, New Mexico

Volume 1 - July 20, 1979

Volume 2 - History (undated)

Volume 3 - Breach Investigation, August 31, 1979.

Volume 4 - Existing Dam Stability, September 4, 1979

Prepared by Sergent, Hauskins, & Beckwith,
Consulting Soil and Foundation Engineers
SHB Job No. E79-1096

The above listed four volumes are located in the
Engineering Branch, Enforcement Division, EPA
Region 6, in the office of Rick Amber

5. Memo transmitting report entitled Embankment Failure Investigation, Church Rock Uranium Tailings Basin, prepared by Stephen W. Dmytriw, Civil Engineer, U.S. Department of Labor, Mine Safety and Health Administration, dated July 27, 1979
6. Status Report on Sampling Program to Determine the Environmental Impact of the United Nuclear Corporation Mill Tailings Spill, prepared by the Environmental Improvement Division, State of New Mexico, dated July 30, 1979
7. Draft briefing paper, UNC Church Rock Mill Dike Failure of July 16, 1979, dated July 30, 1979

C. DATA (continued)

8. Report entitled Evaluation of Probable Cause of July 16, 1979 Failure and Evaluation of the Integrity of the Remaining Starter Dam and Present Divider Dike, prepared by Jacobs Engineering Group Inc. and Wahler Associates, dated August 1979
9. Status Report entitled United Nuclear Corporation Dam Breakage and Spillage dated August 2, 1979, prepared by Harold W. Tso, Director, Environmental Protection Commission; The Navajo Nation
10. Technical Services Report, Environmental Monitoring Systems Laboratory, Las Vegas, dated August 8, 1979
11. Briefing on the United Nuclear Corporation Tailings Dam Failure, prepared by the Regional Water Supply Task Force, Region 9, dated August 8, 1979
12. Draft Report, Dose Assessment for Cleanup Criteria for Uranium Mill Tailings Spill, prepared by Eberline Instrument Corporation for UNC Mining and Milling, dated August 15, 1979

The document listed at No. 12. above is located in the Engineering Branch, Enforcement Division, EPA Region 6, in the office of Rick Amber
13. Status Report on Sampling Program to Determine the Environmental Impact of the United Nuclear Corporation Mill Tailings Spill, prepared by the Environmental Improvement Division, New Mexico Health and Environment Department, dated August 20, 1979
14. Report on crystallized salt samples taken July 18, 1979, transmitted by letter from R. D. Wooten, Jr., Radiation Safety Coordinator, UNC Mining and Milling to Thomas E. Baca, Director, NMEID, dated August 22, 1979
15. Fact Sheet dated August 23, 1979 from UNC
16. Interim T.A.T. Report #1, T.D.T #6-7907-6, dated August 24, 1979

C. DATA (continued)

17. Tailings Breach Follow-Up Report, week of August 10, 1979, through August 16, 1979, Todd Miller, Manager of Environmental Operations, UNC, to Dr. Ted Wolff, NMEID, dated August 24, 1979
18. Analysis of the possibility of diverting all mine water into the San Juan Basin from Todd Miller, UNC, to Thomas E. Baca, NMEID, dated August 24, 1979
19. Draft UNC Church Rock Spill Chronology, prepared by Hank May, dated August 29, 1979
20. Analyses of Water and Sediment Samples, Rio Puerco River, August 29, 1979
21. Modified stream sediment sampling program and guidance on conversion of sediment results from percent to micrograms per gram as transmitted by letter dated August 30, 1979, Todd Miller to Thomas Baca
22. Tailings Breach Follow-Up Report, week of August 24, 1979, through September 6, 1979, Todd Miller, UNC to Dr. Ted Wolff, NMEID, dated August 31, 1979
23. Tailings Breach Follow-Up Report, week of August 31, 1979, through September 6, 1979, Todd Miller, UNC to Dr. Ted Wolff, NMEID, dated September 7, 1979
24. United Nuclear Corporation Tailings Spill Chronology through September 10, 1979
25. EMSL-LV Technical Services Report, transmittal memo dated September 10, 1979, James G. Payne, Jr. to Hank May, Region 6
26. Summary of Radiological Data dated September 11, 1979
27. Background Sheet, United Nuclear Corporation Tailings Spill, dated September 11, 1979
28. Analysis of Radiological Impacts Following the UNC Church Rock Uranium Mill Tailings Spill of July 16, 1979, dated September 11, 1979

C. DATA (continued)

29. Agenda, Environmental Protection Agency, Regions 6 and 9, Las Vegas, Nevada, September 13, 1979
30. United Nuclear Briefing Package Meeting of Regulatory Agencies, September 14, 1979 (contents page only)
31. Agenda for September 14, 1979, Las Vegas Meeting with list of attendees
32. Impact Evaluation, UNC Mining and Milling, September 21, 1979, 1 p.m., EID Building, Santa Fe, New Mexico (This document is in a separate notebook)
33. Mining Operations located on or near Indian Reservation Land (undated)
34. United Nuclear Mine Tailings Spill Hydrologic Assessment (undated)
35. Sampling Program(s) Summary (undated)
36. Pool Survey (undated)
37. UNC Mining & Milling Sediment Cleanup & Sampling Locations (2 maps)
38. Three colored maps and charts entitled Sediment Samples, Surface Water Samples, and Well Samples
39. Map showing the location of Uranium Mines, dated March 1978
40. New Mexico Water Quality Standards, United Nuclear Corporation, and the Rio Puerco, prepared by the Water Program Branch (undated)
41. UNC's responses to Item #1, Cause of Breach; Item #2, Environmental Impact; Item #3, Analysis of the Necessary Remedial Actions; Item #4, NMEID's request for a clean-up plan; and Item #5, a quantitative description of the material which escaped the tailings and entered the arroyo (undated)

C DATA (continued)

42. Chemical Analyses, Water Year October 1976 to September 1977, Puerco River at Gallup, N.M.
43. Notes from Hank May (undated)
44. Sampling Analyses for United Nuclear Corporation, effluent sampled from North Tailings Pond; Kerr-McGee Church Rock Mine I, outfall from last settling pond; and United Nuclear Corporation NE Church Rock mine discharge from pipe
45. Miscellaneous graphs on Radiological parameters (undated)

UNITED NUCLEAR CORPORATION SPILL DOCKET

D. ADMINISTRATIVE DOCUMENTS

1. Authorization to Discharge Under the National Pollutant Discharge Elimination System (NPDES) permit, No. NM0020401 effective January 28, 1975
2. Order issued by the State of New Mexico, signed by Cubia Clayton for Thomas E. Baca, Director, NMEID, dated July 16, 1979
3. Order issued by the State of New Mexico, signed by Thomas E. Baca and dated July 18, 1979
4. Order issued by the State of New Mexico, signed by Thomas E. Baca and dated August 13, 1979
5. Administrative Order issued by the Environmental Protection Agency, Region 6, Docket No. VI-79-139 dated August 9, 1979, signed by Diana Dutton, Director, Enforcement Division
6. Letter dated September 12, 1979, H. J. Abbiss, P.E., Vice President, Environmental and Safety Services, UNC Mining and Milling transmitting documents in answer to the Administrative Order, Docket No. VI-79-139, issued August 9, 1979
7. Transmittal letter dated September 4, 1979, G. Stanley Crout, Attorney, to Richard Amber re two documents connected with the spillage at United Nuclear's Church Rock mill.