



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6

1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

May 7, 2001

40-8907

Robert Lawrence, Esq.
Davis, Graham & Stubbs L.L.P.
370 Seventeenth Street, Ste. 4700
Denver, Colorado 80202

Re: United Nuclear Corporation Superfund Site, Church Rock, New Mexico

Dear Mr. Lawrence:

The U.S. Environmental Protection Agency (EPA) appreciates the comments on remedial issues and requirements for the United Nuclear Corp. (UNC) Superfund Site, Church Rock, New Mexico, that you presented in your letter dated May 18, 2000 addressed to Mr. Greg Lyssy, EPA Remedial Project Manager (RPM) for the UNC Site. Recently, EPA received a letter from Mr. Charles de Saillan, Assistant General Counsel for the New Mexico Environment Department (NMED), dated April 11, 2001 (copy enclosed), that is responsive to the arguments that you raised. The letter from Mr. de Saillan followed a number of discussions between EPA and NMED on site remediation issues under the Comprehensive Environmental Response, Compensation & Liability Act (CERCLA), 42 U.S.C. § 9601 et seq.

The EPA has reviewed the letter of Mr. de Saillan; and we are in agreement with the positions and arguments he set forth in his analysis, including those on the issue of the CERCLA Technical Impracticability (TI) Waiver and the CERCLA applicability or relevance of certain New Mexico State environmental standards, as well as other Applicable or Relevant and Appropriate Requirements (ARARs). We also agree with his conclusion that the ultimate determination of the practicability of achievement of site ARARs should await comprehensive analysis of the data obtained throughout the ongoing study of groundwater quality that is being undertaken during the cessation of operation of the UNC ground water extraction system.

We look forward to working with you and UNC in conjunction with the U.S. Nuclear Regulatory Commission, NMED, and the Navajo Nation to ensure a protective cleanup at UNC. Since the EPA and UNC are adverse parties in this matter, it would be more appropriate for future communications from UNC counsel to be addressed to the undersigned than to the RPM. If you have any questions, please do not hesitate to call me at (214) 665-3159.

Sincerely yours,

James L. Turner
Senior Attorney (6RC-S)

Nmss01public

Enclosure

cc: Ken Hooks, NRC
Charles de Saillan, NMED
J. Brent Moore, Navajo EPA



GARY E. JOHNSON
Governor

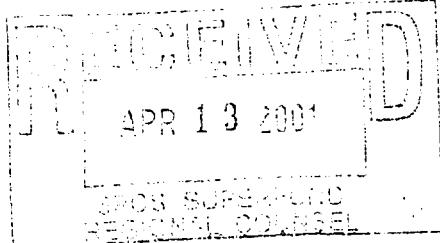
State of New Mexico
ENVIRONMENT DEPARTMENT
Harold Runnels Building
1190 St. Francis Drive, P.O. Box 26110
Santa Fe, New Mexico 87502-6110



PETER MAGGIORE
Secretary
PAUL R. RITZMA
Deputy Secretary

OFFICE OF GENERAL COUNSEL
PHONE: 505-827-2990
FAX: 505-827-1628

April 11, 2001



Greg J. Lyssy
Superfund Division (6SF-LT)
United States Environmental Protection Agency
Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

Re: UNC Mining and Milling Facility, Church Rock, New Mexico

Dear Mr. Lyssy:

This letter is in response to the May 18, 2000 letter to you from Robert Lawrence, with the law firm of Davis Graham & Stubbs, on behalf of United Nuclear Corporation ("UNC"). In the May 18 letter, UNC sets forth its procedural proposal for waiving groundwater cleanup requirements at the UNC Churchrock facility (the "Site") in McKinley County, New Mexico. While the New Mexico Environment Department ("NMED") recognizes that it may not be technically feasible to attain numerical cleanup standards for all groundwater contaminants at the Site, NMED strongly disagrees with some of UNC's conclusions in its May 18 letter.

1. Technical Impracticability Waiver

The Site is a former uranium milling facility at which uranium mill tailings have been disposed, resulting in ground water contamination. The facility is closing pursuant to a license issued by the Nuclear Regulatory Commission ("NRC"). The Site is also listed on the National Priorities List and is undergoing a remedial action pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), 42 U.S.C. §§ 9601 through 9675. Under the 1988 Record of Decision ("ROD") by which EPA selected the remedial action to be implemented at the Site under CERCLA, UNC is required to clean up ground water contamination to meet specified standards. For most contaminants, these cleanup standards are federal maximum contaminant levels established under the Safe Drinking Water Act. For other contaminants, the standards are State numerical water quality standards established by the New Mexico Water Quality Control Commission ("WQCC") under the New Mexico Water Quality Act ("WQA"), NMSA 1978 §§ 7-6-1 through 7-6-17, or approved background concentrations where background concentrations exceed the numerical standards.

In the May 18 letter, UNC focuses in particular on three of the ground water contaminants, total dissolved solids ("TDS"), sulfate, and manganese. Because the Site background concentration of each of these contaminants exceeds the numerical State water quality standard, the cleanup levels have been set at background. Thus, the background concentration is the applicable State standard for each of these contaminants. *See* 20 NMAC 6.2.3103. Accordingly, the ROD requires cleanup to the background concentration.

UNC anticipates that it will be technically impracticable to attain even the background concentrations of these contaminants at the Site. In its letter, UNC concludes that a waiver of the cleanup requirements due to technical impracticability under section 121(d)(4)(C) of CERCLA, 42 U.S.C. § 9621(d)(4)(C), is appropriate for the Site. UNC recognizes that any such waiver must be approved by EPA, in accordance with EPA guidance and procedures. *See* EPA, GUIDANCE FOR EVALUATING THE TECHNICAL IMPRACTICABILITY OF GROUND-WATER RESTORATION (Sept. 1993).

At this time, NMED expresses no opinion on whether a technical impracticability waiver under CERCLA is appropriate for the Site. NMED recognizes that it may not be practicable to attain each of the numerical groundwater cleanup standards listed in the ROD. If UNC demonstrates such impracticability, then a technical impracticability waiver under CERCLA, or alternate abatement standards under the WQA, may be appropriate. However, NMED currently does not have adequate data or other information to support such a determination. In November 2000, UNC shut down the groundwater extraction system at the site and is monitoring groundwater quality to determine the effects of the shut-down. Only after these data have been collected for a sufficient period of time can a determination be made on the practicability of achieving cleanup standards. NMED is willing to work with EPA, the Navajo Nation, and UNC in evaluating incoming data and determining how best to proceed with the groundwater cleanup based on that data.

2. Applicability of State Standards

Nevertheless, NMED wishes to clarify the issue of the applicability of State groundwater cleanup standards, an issue that UNC muddles in its May 18 letter. UNC "assumes" for the limited purpose of its discussion, but apparently does not acknowledge, that unless a waiver is granted background levels of TDS, sulfate, and manganese must be attained as applicable State cleanup standards. Although UNC tries to skirt the issue – assuring EPA that it "does not desire to revisit this CERCLA issue now" – UNC devotes considerable space to critiquing the initial determination that New Mexico water quality standards for TDS, sulfate, and manganese, which have been set at background concentrations, are applicable. It concludes that "there is no EPA or NRC regulatory requirement that we could identify that requires attainment of background levels for these constituents." NMED strongly disagrees with UNC's conclusion on this issue. UNC's legal analysis is flawed, and its conclusion is incorrect.

Under section 121(d)(2)(A) of CERCLA, a remedial action must require "a level or standard of control for [any] hazardous substance pollutant or contaminant which at least attains

[any] legally applicable or relevant and appropriate standard, requirement, criteria, or limitation." 42 U.S.C. § 9621(d)(2)(A). Such applicable or relevant and appropriate requirements ("ARAR's") include "any standard, requirement, criteria, or limitation under a State environmental or facility siting law that is more stringent than any Federal standard, requirement, criteria, or limitation, . . . and that has been identified to [EPA] by the State in a timely manner." 42 U.S.C. § 9621(d)(2)(A)(ii). Likewise, the National Contingency Plan ("NCP"), which governs the selection and implementation of CERCLA response actions, provides that "compliance with ARAR's" is a "threshold requirement that each [remedial] alternative must meet in order to be eligible for selection." 40 C.F.R. § 300.430(f)(1)(i)(A).

Under the WQA, the New Mexico WQCC has established standards for ground water cleanup in New Mexico, including standards for TDS, sulfate, and manganese. 20 NMAC 6.2.3103. These standards apply to all state ground water having a background TDS level of 10,000 milligrams per liter or less. 20 NMAC 6.2.4103.B. NMED identified the WQCC regulations as applicable cleanup criteria for the Site in a timely manner. Letter from Richard Mitzelfelt, NMED, to Allyn M. Davis, EPA (Sept. 29, 1988). EPA correctly listed the New Mexico standards as ARAR's in the ROD for the site. "Record of Decision: United Nuclear Corporation Groundwater Operable Unit" (Sept. 1988), App. C at 2-3. Indeed, EPA specifically considered the State ARAR question when it issued the ROD, in response to a comment from UNC. In the Responsiveness Summary, an attachment to the ROD, EPA reiterated that the New Mexico water quality standards are applicable and that such standards will be included in the Site action requirements for ground water contamination. ROD, App. H, Resp. Cat. 9 at 1.

In NMED's view, it is very clear that the New Mexico water quality standards for TDS, sulfate, and manganese, which have been set at background, are both applicable, and relevant and appropriate, to the UNC Churchrock remedial action. NMED does not understand how UNC can conclude otherwise. In its letter, UNC purports to raise several issues with the initial ARAR determination. However, none of these issues has any relevance to that determination.

First, UNC argues that because the ground water at the Site is "not an historic or current drinking water source, . . . the potential for health risks and harm to wildlife caused by exposure to elevated concentrations of groundwater constituents is currently negligible." The fact that the ground water at the Site is not a current drinking water supply, however, is irrelevant. Section 121(d)(1) of CERCLA provides that remedial actions must attain a degree of cleanup "which assures protection of human health *and the environment*." 42 U.S.C. § 9621(d)(1) (emphasis added). Section 101(8) of CERCLA expressly defines "environment" to include any ground water. 42 U.S.C. § 9601(8). The ground water at the Site, therefore, is protected under CERCLA regardless whether it is a current source of drinking water.

Furthermore, the ground water at the Site is protected under New Mexico law as a potential future source of drinking water. The express purpose of the New Mexico WQCC Regulations is "to protect all ground water of the state of New Mexico which has an existing concentration of 10,000 mg/l or less TDS, for present *and potential future use* as domestic and agricultural water supply. 20 NMAC 3101.A (emphasis added), *see also* 20 NMAC 6.2.4101.A(1). UNC maintains that ground water at the site "is very unlikely to be used as a

drinking water supply in the future," and it inexplicably cites the ROD in support of this proposition. However, the ROD states, quite to the contrary, that "EPA considers the groundwater at the UNC site to be . . . ground water that is potentially available for drinking water." ROD, App. H. Resp. Cat. 9, at 2. NMED unreservedly agrees with this statement. It must be remembered that New Mexico is an arid state with limited water resources, yet it is developing very rapidly. The State's limited water resources must be protected, whether or not they are currently being used.

Second, UNC argues that the ground water contaminants at issue, TDS, sulfate, and manganese, "are not, by definition, hazardous." In the first place, it is not clear what "definition" UNC is referring to. One of the contaminants, manganese, is a hazardous air pollutant under section 113 of the Clean Air Act, 42 U.S.C. § 7413, and is consequently a "hazardous substance" under section 101(14) of CERCLA. 42 U.S.C. § 9601(14); 40 C.F.R. § 302.4, Table 302.4. By those definitions, and the CERCLA definition is the most pertinent, manganese is "hazardous." UNC goes on to note that the substances are not on EPA's list of hazardous constituents under 40 C.F.R. pt. 261, App. VIII – which applies to cleanup of hazardous waste facilities – and are not on the NRC's list of hazardous constituents under 10 C.F.R. pt. 40, App. A, Criterion 13. UNC further notes that TDS, sulfate, and manganese are not toxic pollutants under the WQCC Regulations, and that the standards for those contaminants are not "health-based." Again, these points are irrelevant. As noted above, CERCLA remedial actions must protect human health and the environment, and ground water is part of the environment. Ground water at the Site is degraded by these substances so that it is not fit for use as a drinking water supply or for other uses. EPA guidance expressly recognizes that certain environmental standards or requirements may be ARAR's even if they are not designed to protect human health. Thus, for example, secondary drinking water regulations, based on the aesthetic qualities of drinking water, may be ARAR's. EPA, CERCLA COMPLIANCE WITH OTHER LAWS MANUAL: DRAFT GUIDANCE 4-8 (Aug. 1988).

Third, UNC asserts that "the ROD references 40 C.F.R. Pt. 192 as the principle [sic] basis of the ARAR's." UNC then points out that these regulations do not address TDS, sulfate, or manganese. Once again this point is irrelevant, and it is also inaccurate. The EPA regulations at 40 C.F.R. pt. 192, which set standards for uranium and thorium mill tailings, are correctly listed in the ROD as ARAR's. ROD, App. C at 3. However, they are not the only ARAR's listed, nor are they the principal ARAR's listed. A CERCLA remedial action must meet all ARAR's, including state ARAR's, as discussed above. Thus, the ROD lists maximum contaminant levels under the federal Safe Drinking Water Act, water quality standards under the New Mexico WQA, and EPA uranium and thorium mill tailing standards as contaminant-specific ARAR's. ROD, App. C at 1-4. Although the EPA regulations for uranium and thorium mill tailings do not address TDS, sulfate, or manganese, the State water quality standards certainly do.

Finally, UNC states that because TDS and sulfate are not hazardous substances under CERCLA,¹ ARAR's for these contaminants "are not strictly appropriate." As UNC notes, however, section 121(d)(2)(A) of CERCLA provides that ARAR's apply "with respect to any hazardous substance, pollutant, or contaminant that will remain on-site." 42 U.S.C. §

¹ As noted above, and as UNC implicitly acknowledges, manganese is a "hazardous substance" under CERCLA.

9621(d)(2)(A) (emphasis added). Although UNC may be correct in asserting that neither TDS nor sulfate is a "hazardous substance" as defined in section 101(14) of CERCLA, each is clearly a "pollutant or contaminant" as defined in section 101(33) of CERCLA. 42 U.S.C. § 9601(14) and (33). Thus, ARAR's for these contaminants are strictly appropriate.

Moreover, it is NMED's position that UNC is liable under CERCLA for cleanup of the TDS and sulfate ground water contamination at the Site. Under section 107(a) of CERCLA, liability for cleanup is predicated on the release of a hazardous substance. 42 U.S.C. § 9607(a). UNC has, for example, disposed of mill tailings at the Site, and these tailings contained sulfuric acid added during the milling process. Sulfuric acid is a hazardous substance under CERCLA. See 40 C.F.R. § 302.4, Table 302.4. Releases of sulfuric acid from the tailings have, in turn, caused elevated levels of TDS and sulfate in Site groundwater. CERCLA liability therefore attaches to the TDS and sulfate contamination at the Site.

Thus, NMED finds UNC's discussion of ARAR's for the Churchrock site to be flawed, and UNC's conclusions on this issue to be incorrect. NMED agrees with EPA's evaluation of the ARAR's set forth in Appendix C of the 1988 ROD.

If you have any questions on this matter, please call me at (505) 827-2985.

Sincerely,



Charles de Saillan
Assistant General Counsel

cc: Marcy Leavitt
Beiling Liu
James Turner, EPA Region 6
George Padilla, Navajo EPA
Robert Lawrence, Davis Graham & Stubbs