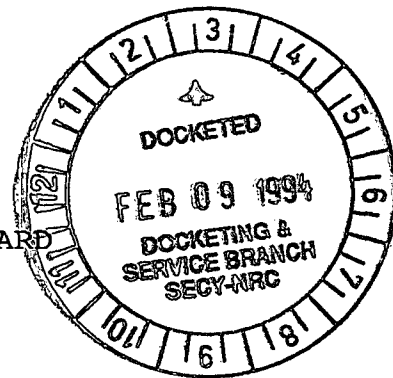


UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD



In the Matter Of )

Sequoyah Fuels Corporation )  
and General Atomics )

(Gore, Oklahoma Site Decontamination )  
and Decommissioning Funding) )

Docket No. 40-8027EA  
Source Materials  
License No. SUB-1010

**NATIVE AMERICANS FOR A CLEAN ENVIRONMENT'S  
SUPPLEMENTAL PETITION TO INTERVENE**

Pursuant to 10 C.F.R. § 2.714(b), Native Americans for a Clean Environment ("NACE") hereby submits the following contentions in this enforcement proceeding. These contentions are supported by the attached affidavit of Dr. Arjun Makhijani (Attachment 1).

**1) The NRC has enforcement authority over General Atomics.**

**Basis:** General Atomics ("GA") argues that the Nuclear Regulatory Commission ("NRC" or "Commission") lacks authority or jurisdiction over GA, that GA is not a licensee, that GA lacks the day-to-day operational control over Sequoyah Fuels Corporation ("SFC") which would provide a basis for liability for decommissioning costs, and that GA has not made promises to finance the decommissioning of the SFC site which were relied upon by the NRC. GA's Answer and Request for Hearing at 19-20 (November 2, 1993) (hereinafter "GA Answer"). However, the NRC is clearly acting within its jurisdiction and authority in ordering GA to provide decommissioning funding for SFC.

SECY-037

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a. First, as the Commission has explained, the NRC's statutory enforcement authority is "not limited to its licensees," but rather is "extremely broad, extending to any person (defined in section 11s to include, e.g., any individual, corporation, federal, state and local agency) who engages in conduct within the Commission's subject matter jurisdiction." Final Rule, Revisions to Procedures to Issue Orders; Deliberate Misconduct by Unlicensed Persons, 56 Fed. Reg. 40,664, Col. 3 (August 15, 1991). Thus, for example, the Commission has enforcement authority over contractors and subcontractors, although these individuals or entities are not technically licensees. Id.

In this case, GA's control over SFC, through its 100% ownership, clearly brings it within the NRC's subject matter jurisdiction. In Safety Light Corp. (Bloomsburg Site Decontamination), ALAB-931, 31 NRC 350 (1990), the Appeal Board found, inter alia, that the NRC had jurisdiction over a non-licensee parent corporation, based in part on the parent corporation's total control of the subsidiary licensee. One hundred percent ownership of a corporation "necessarily" conveys "the ultimate decisional authority on all matters pertaining to the use of the license." 31 NRC at 366. Whether or not GA exercises its right to "assert dominion" over SFC's licensed activities, "that right is dispositive of the jurisdictional question." Id. at 367, note 53 (emphasis in original). In addition, the numerous SFC licensed activities in which GA is directly involved, as described in section (b) below,

establish that GA is actively engaged in conduct within the NRC's subject matter jurisdiction.

b. The Atomic Energy Act, in Section 161(b), allows the NRC to "establish by rule, regulation, or order, such standards and instructions to govern the possession and use of special nuclear material, source material, and byproduct material as the Commission may deem necessary to desirable to promote the common defense and security or to protect health or to minimize danger to life or property." 42 U.S.C. § 2201(b) (emphasis added). This provision provides the NRC with authority to take necessary enforcement action against GA, as the owner of SFC.

NACE is aware of no NRC case directly addressing the question of the extent of GA's liability for decommissioning funding. However, in Safety Light, the Appeal Board suggested that the degree of actual involvement by the parent corporation in the affairs of the subsidiary would be a relevant consideration. In this case, GA has had significant involvement and control in SFC's operations, dating from its 1988 purchase of the SFC plant, through its holding company, Sequoyah Holding Corporation ("SHC").

In the 1988 Safety Evaluation Report ("SER") approving the transfer of SFC to SHC, the NRC specifically noted that "corporate oversight and audit responsibilities" designated by SFC's license to Kerr-McGee were being assumed by GA. Safety Evaluation Report at 2 (October 28, 1988) (Attachment 2). Moreover,

GA's oversight responsibility and significant involvement in SFC's operations are clearly established by the terms of the SFC license. For instance:

The chain of ownership of SFC is explicitly acknowledged in § 1.1 of the license:

Sequoyah Fuels Corporation is a wholly-owned subsidiary of Sequoyah Fuels International Corporation, which is a wholly-owned subsidiary of Sequoyah Holding Corporation, which is a wholly-owned subsidiary of General Atomics, which is a wholly-owned subsidiary of General Atomic Technologies Corporation. General Atomic Technology Corporation is controlled by James N. Blue, a United States citizen.

Had the relationship between these corporations (and their owner, James Blue) been unimportant, there would have been no reason to mention SHC, SI, and GA in the license. By describing their relationship in the chain of total control over SFC, the license recognizes their responsibility for the actions of SFC.

Senior GA personnel are also identified as the responsible parties for key health and safety duties at SFC. GA's Manager for Health Physics is responsible for "establishing corporate radiation health and safety standards and procedures, and coordinating them with managers and executives directly affected." § 2.1. See also § 2.7.3. GA's Corporate Director for Licensing, Safety, and Nuclear Compliance is responsible for reviewing "the radiation health and safety practices of Sequoyah Fuels Corporation," in order to "ensure compliance with the current company radiation health and safety standards and procedures, applicable federal and state regulations, and license conditions." These

reviews must be documented, with recommendations for "new or revised standards and procedures," and submitted to high level GA officials, including GA's Corporate Vice President for Human Resources. § 2.1.

The responsibilities of the GA's Corporate Director for Licensing, Safety, and Nuclear Compliance also include directing quarterly audits at SFC "to evaluate and verify compliance" with applicable federal and state standards and NRC license conditions. § 2.2. GA's audit responsibilities are described in more detail in § 2.8. Not only must GA conduct quarterly audits to "evaluate and verify compliance" with applicable standards and license conditions, but they must be followed up "to ensure corrective actions is being taken in a timely manner." § 2.8.

GA's Corporate Manager, Health Physics, is responsible for "the preparation of detailed corporate standards dealing with the control of radiation, spread of radioactive contamination, and the monitoring of personnel and nuclear facilities." He or she is also "responsible for auditing procedures and plant operations in the health physics area." § 2.2. This person reports to the GA Corporate Director, Licensing, Safety and Nuclear Compliance. He or she also chairs the ALARA [As Low as Reasonably Achievable] Committee, which is responsible for conducting and evaluating the results of quarterly ALARA audits, and making recommendations to SFC for measures to reduce radiation exposures. § 3.2.2. SFC must respond in writing to these recommendations. Id.

SFC's license also contains a separate section entitled "Safety Review," which describes the "independent overview functions carried out under GA's Corporate Vice President, Human Resources." § 2.3. These functions include

- establishing corporate standards for contamination control and radiation protection,

- establishing corporate standards for safe operations procedures, conducting periodic inspections against these criteria

- maintaining "technical liaison with regulatory agencies, of local, state, and federal government,"

- offering "expert professional advice and counsel to corporate [GA] and Sequoyah Facility Management in health and safety matters, and

- procuring "special audit services, inspections, or calculational capability" from GA "when it appears that an adequate solution definition exceeds the capability of the staff." Id.

SFC's license also establishes "personnel education and experience requirements" for GA personnel having a role in the oversight of SFC's operations. For example, the Corporate Vice President of Human Resources "shall have a minimum of five years of nuclear industry management experience of high level general management nature." § 2.5. Educational and training requirements are also established for GA's Corporate Director, Licensing, Safety and Nuclear Compliance, who must also "be capable of providing authoritative advice and counsel in matters related to

NRC licensing, regulations and procedures." Id. Similarly, minimum educational and experience requirements are established for GA's Corporate Manager, Health Physics and the Corporate Manager of Industrial Safety. Id.

Thus, SFC's license contains numerous prescriptions for GA's extensive involvement in and oversight of SFC's day-to-day operations, thus demonstrating its liability for decommissioning costs.<sup>1</sup> The extent of that liability is a matter that should be determined in the evidentiary hearing.

c. GA claims that it is not now, and never has been, a licensee of the SFC facility; and thus the NRC has no authority over it. However, while GA is not specifically named as the "licensee," its 100% ownership, through its holding company, is recognized in the SFC license; and the license gives GA many responsibilities for the oversight and management of SFC's operation. Given the degree of involvement and control that GA has over the operations of SFC, as established in SFC's license, GA may be found to constitute a constructive or de facto licensee.

The determination of whether GA constitutes a de facto licensee may also be affected by the Licensing Board's consideration of whether the NRC's statutory purpose of protecting public health and safety and the environment has been wrongfully "frus-

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<sup>1</sup> NACE also adopts and incorporates by reference Section V of the NRC's October 15, 1993, enforcement order against GA and SFC, which provides further evidence of SFC's control over and involvement in SFC's operations, including the creation of the ConverDyn Corporation.



trated through the use of separate corporate entities," thus calling for it to "pierce the corporate veil." Safety Light, 31 NRC at 368, quoting Capital Telephone Co. v. FCC, 499 F.2d 734, 738 n. 10 (D.C. Cir. 1974). If the purpose of distancing GA from SFC through the creation of separate holding companies was to avoid liability for contamination known to GA or reasonably foreseeable by GA, then GA cannot be allowed to shield itself from liability through the corporate structuring of its business venture. There is significant evidence that GA knew, or should have known, that the SFC site was severely contaminated when it was purchased in 1988.

For example, "sandwells" near the solvent extraction ("SX") building were used to monitor levels of uranium contamination from 1976 through 1989, and showed levels which routinely extended to hundreds of thousands of micrograms per liter ("ug/l")<sup>2</sup>. Moreover, the data clearly indicate that "uranium contamination had migrated away from the SX building." EA 91-067 at 17 (October 3, 1991). In 1976, SFC also installed a standpipe in the floor of the Main Process Building ("MPB"). The standpipe, known as the "subfloor process monitor," was attached to a pump and piping that connected to the process. According to EA 90-158 (November 5, 1990), "[s]ince 1976, the operator had recog-

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<sup>2</sup> This historical data is summarized in Roberts/Schornick's Final Environmental Investigation ("FEI") Report, Table 78 (July 31, 1991). The highest level reported was 1.2 million ug/l.

nized that contaminated liquid was escaping to the ground beneath the process building floor and periodically pumped liquid from the subfloor process monitor back into the process." Id. at 12. Data recorded in the Roberts/Schornick report shows that in the 1987-89 timeframe, uranium levels in the millions of ug/l, and extending as high as 62 million ug/l, were measured from this subfloor monitor.<sup>3</sup> Problems such as these would have been evident to GA if it conducted an environmental audit or investigation prior to purchasing the SFC plant, as standard business practice dictates in these sorts of transactions.

Rather than investigating and taking responsibility for the contamination, GA attempted to shield itself from liability, and ceased efforts to follow up on these disturbing test results. Directly after GA's subsidiary bought SFC, SFC discontinued the sandwell monitoring in 1989, and failed to report the sandwell monitoring data in its 1990 license renewal application. EA 91-067 at 26. The subfloor process monitor was never recorded on any plant drawings or plant procedures;" nor is it referred to in SFC's decommissioning file records. Id. Moreover, SFC's 1990 license renewal application made no mention of this source of groundwater contamination, as it was required to. Environmental Report at 4-22. As a result, the contamination of the site was probably exacerbated, thus increasing the costs. Accordingly, GA

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<sup>3</sup> FEI Report, Table 27. 62 million ug/l were measured on June 8, 1989.

cannot be allowed to use its corporate structure to hide from liability for the decommissioning of the SFC site.

d. As discussed in Section V of the NRC's October 15, 1993, enforcement Order, and incorporated by reference herein, GA committed in writing to guarantee sufficient funding for the decommissioning of the SFC site, in exchange for the NRC's consent to resume operation. (While SFC and GA argue that this guarantee was not a condition for restart, GA's commitment clearly was a consideration in the NRC's general decision to allow SFC to resume operation.) In making this commitment, GA put itself in the position of a guarantor, a responsibility that cannot be unilaterally relinquished.

Moreover, the NRC relied to its detriment on GA's commitment to guarantee sufficient funding for the decommissioning of the SFC plant when it allowed the SFC Facility to resume operation in the spring of 1992. Thus, under well-established precedent, GA is estopped from denying its liability to fund decommissioning of the SFC site. See Federal Deposit Insurance Corp. v. Jones, 846 F.2d 221 (4th Cir. 1988) and cases cited therein ("It is settled law that when a party induces another to take action prejudicial to his interests in reliance on a promise of that party, such party cannot later disavow his promise and obligation.") Accordingly, GA must be required to fulfill its commitment.

**2) Guaranteed decommissioning financing by GA is required by NRC regulations, and is necessary to provide adequate protection to public health and safety.**

**Basis:** SFC and GA claim that they are not legally required to satisfy the requirement of 10 C.F.R. § 40.36 to provide guaranteed decommissioning funding. SFC's Answer and Request for Hearing (hereinafter "SFC Answer") at 7, 9, 12, 15-16; GA Answer at 7. Moreover, GA and SFC both assert that SFC has satisfied the requirements of 10 C.F.R. § 40.42(c)(2)(iii)(D). For a number of reasons, neither of these assertions is correct.

First, both § 40.36 and par. 22 of SFC's license (see Amendment 19 (April 9, 1993)) required SFC to submit a decommissioning funding plan at the time of its license renewal application. Neither of these provisions qualify this requirement by stating that it only applies if SFC continues to prosecute the license renewal application. SFC's decommissioning funding plan "came due" at the time its license renewal application was filed, and its failure to comply with the applicable regulation and license term constitutes an enforceable violation.

Second, even accepting SFC's and GA's argument that SFC is governed by § 40.42(c)(2)(iii)(D), SFC has not complied. Section § 40.42(c)(2)(iii)(D) requires a licensee which has not submitted a renewal application to submit a proposed decommissioning plan which includes an "updated detailed cost estimate for decommissioning, comparison of that estimate with present funds set aside

for decommissioning and plan for assuring the availability of adequate funding for completion of decommissioning." However, the decommissioning cost estimate submitted by SFC in its Preliminary Plan for Completion of Decommissioning (PPCD") is by its own terms "preliminary," and has almost no "detail." For instance, the PPCD is uncertain about two major issues bearing on the decommissioning of the millions of cubic feet of contaminated soil at the site: the standard to which the site will be decontaminated, and the method for disposing of the soil (i.e., onsite or offsite). Thus, SFC has provided little or no basis for a reasonable decommissioning cost estimate.

Moreover, as discussed by the NRC in its enforcement order, SFC's current plans for funding the decommissioning of the SFC site are inadequate to "assur[e] the availability of adequate funds for completion of decommissioning," as required by § 40.42(c)(2)(iii)(D). For instance, as noted by the NRC,

Estimates of income from the ConverDyn arrangement are necessarily uncertain because they are based upon assumptions about the market for UF6 conversion services over the next ten years, ConverDyn's ability to keep existing customers or to obtain new customers, and the costs of business operations, and because they are based upon some speculative assumptions about whether SFC will receive the maximum possible amount in fees, in view of the system of priorities for payments to be made under the ConverDyn arrangement.

58 Fed. Reg. at 55,089, Cols. 1-2.

The NRC also observes that "there are a number of other claims on ConverDyn revenues that have higher payment priority than payments to SFC." Id., Col. 2. For instance, it is unclear

whether these claims include SFC's liability for cleanup costs under the Consent Decree which SFC entered into with the U.S. Environmental Protection Agency on July 26, 1993. There is no indication in the PPCD that SFC expects to receive any other revenues through 2003, other than the \$89 million described in Table 10-2 of the PPCD. If not, then SFC must pay for both the NRC cleanup and the EPA cleanup out of the same revenues.<sup>4</sup> Thus, this is another reason why a guaranteed decommissioning fund is necessary to protect public health and safety.

Moreover, as the NRC notes,

SFC's estimate of the amount of revenue projected to be derived from the ConverDyn arrangement is based upon the unsubstantiated assertion that ConverDyn's fixed costs of operation will steadily decline after 1994. Revenue estimates also assume that ConverDyn will operate at a 100% capacity utilization rate continuously through the year 2003. Finally, there is uncertainty concerning SFC's projected decommissioning costs. The proposed decommissioning plan has not yet been submitted to NRC, although a preliminary plan (PPCD) has been submitted. SFC's cost estimate for decommissioning is based on assumptions as to acceptable decommissioning alternatives. If more costly decommissioning alternatives are required by NRC as a result of its review of SFC's decommissioning plan, the \$89 million

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<sup>4</sup> According to the Consent Decree, by letters of April 23 and 30, 1993, SFC "submitted to EPA commercial and financial information under a claim of confidentiality and on which a determination by EPA regarding confidentiality is pending." According to EPA, in these documents, SFC "establishes its financial capability and intent to complete the provisions and requirements" of the Consent Decree. Consent Decree at 14, U.S. EPA Docket No. VI-005-(h)93-H. (The section of the Consent Decree which addresses financial assurances is included as Attachment 3). SFC is also required to submit quarterly and annual reports regarding the financing of its cleanup efforts. Id. NACE has not been able to obtain these documents.

in revenues from the ConverDyn arrangement and other sources are unlikely to be sufficient.

58 Fed. Reg. at 55,089, Col. 2 SFC and GA "den[y] the implication" that the \$89 million in expected revenues from the Converdyn arrangement "are unlikely to be sufficient." SFC Answer at 12, GA Answer at 8. However, as discussed above, SFC's PPCD does not provide enough information to support such a statement. Moreover, what little information is provided indicates that decommissioning costs will be far higher than estimated by SFC. With respect to disposal of contaminated soil, for example, SFC estimates that there are 2 to 4 million cubic feet of contaminated soil (PPCD at 10-1), whose excavation and disposal will cost \$2 million. PPCD, Table 10-1. (SFC does not provide a cost estimate for transportation of the soil, should it choose to dispose of the soil offsite.) SFC's cost estimate is far below even the lowest estimate that NACE was quoted by Envirocare, a low level waste repository in Utah.<sup>5</sup> In a telephone conversation on February 7, 1994, an Envirocare official informally quoted a disposal price of \$10 to \$15 per cubic foot of soil. This would bring the cost of soil disposal alone, excluding excavation and transportation, to between \$20 and \$60 million. The NRC itself has cited an estimate of \$30 per cubic foot, which could bring

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<sup>5</sup> Other than Barnwell North Carolina, which is due to stop accepting waste from outside the Southeast compact area in the summer of 1994, the Envirocare is the only site currently available for disposal of low-level contaminated soil from commercial facilities.

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the high end estimate to \$120 million for soil disposal alone. In contrast, SFC has estimated only \$2 million for this item. SECY-92-200, Memorandum from James M. Taylor to the Commissioners at 9 (May 29, 1992) (Pages 9-11 are included as Attachment 4). Thus, since SFC appears to have grossly underestimated the costs of decommissioning the site, the \$86 million required by the NRC constitutes the bare minimum that should be set aside for the decommissioning of the facility.

For these reasons, and all other relevant reasons stated in the October 15 Order, the decommissioning measures required by the October 15 Order are required in order to satisfy the NRC's regulations for decommissioning financing, and to provide reasonable assurance that the contaminated condition of the SFC facility will not pose an undue risk to the public health and safety in the future.

Respectfully submitted,



Diane Curran  
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(301) 270-5518

February 8, 1994



UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter Of

Sequoyah Fuels Corporation  
and General Atomics

(Gore, Oklahoma Site Decontamination  
and Decommissioning Funding)

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) Docket No. 40-8027EA  
) Source Materials  
) License No. SUB-1010  
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**AFFIDAVIT OF ARJUN MAKHIJANI**


1) My name is Arjun Makhijani. I am President of the Institute for Energy and Environmental Research. I am an expert in the field of nuclear engineering and radioactive waste disposal. A statement of my professional qualifications is attached.

2) I am familiar with the environmental conditions at the Sequoyah Fuels facility. I am also familiar with various publicly available reports concerning the extent of environmental contamination at the SFC site, including the Final Environmental Investigation prepared by SFC's consultants, Roberts/Schornick (July 31, 1991), and SFC's Preliminary Plan for Completion of Decommissioning ("PPCD").

3) I assisted in the preparation of Native Americans for a Clean Environment's Contention (1) and (2) in this proceeding. The factual statements in those contentions and their bases regarding the extent of contamination at the SFC site, the costs of decommissioning, available offsite locations for contaminated soil disposal, and the inadequacies in the PPCD, are true and correct to the best of my knowledge.

  
Arjun Makhijani

Subscribed and sworn to before me this 8<sup>th</sup> day of February, 1994.

  
Notary Public  
Comm. Exp. 7/1/96

## ARJUN MAKHIJANI

Institute for Energy and Environmental Research  
6935 Laurel Avenue  
Takoma Park, MD 20912  
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### *Education:*

Ph.D. (Engineering - dissertation area: controlled nuclear fusion), University of California, Berkeley, 1972.  
M.S. (Electrical Engineering - thesis area: ionospheric wave propagation), Washington State University, Pullman, Washington, 1967.  
Bachelor of Engineering (Electrical), University of Bombay, Bombay, India, 1965.

### *Current Positions:*

President, Institute for Energy and Environmental Research, Washington, D.C.  
Senior Fellow, Systems Research Institute, Pune, India.

### *Professional Societies:*

American Association for the Advancement of Science  
Institute of Electrical and Electronics Engineers  
American Geophysical Union  
American Institute of Physics  
American Chemical Society

### *Awards:*

The John Barlow Martin Award for Public Interest Magazine Journalism of the Medill School of Journalism, Northwestern University, 1989, with Robert Alvarez.

*Professional Reports and Publications*

1. "Further Comparison of Spread-F and Backscatter Sounder Measurements," with G.L. Hower, *Journal of Geophysical Research*, vol 74, no. 14, July 1, 1969; p. 3723.
2. "Multiple Mirror Confinement of Plasmas," with B. Grant Logan and others, *Physical Review Letters*, vol. 28, 1972; p. 144.
3. An Assessment of Energy and Materials Utilization in the U.S.A., with A.J. Lichtenberg, University of California Electronics Research Laboratory, Berkeley, 1971. Also published as "Energy and Well Being" in *Environment*, June 1972.
4. "Plasma Confinement in Multiple Mirror Systems: Theory," with A.J. Lichtenberg and others, *Physics of Fluids*, vol. 17, 1974; p. 1291.
5. One of several co-authors of the final report of the Ford Foundation Energy Policy Project, *A Time to Choose: America's Energy Future*, Ballinger, Cambridge, 1974.
6. *Energy and Agriculture in the Third World*, with Alan Poole, Ballinger, Cambridge, 1975.
7. *Investment Planning in the Energy Sector*, with Ed Kahn and others, Lawrence Berkeley Laboratory, Berkeley, 1976.
8. *Energy Policy for the Rural Third World*, International Institute for Environment and Development, London, 1976.
9. "Energy Policy for Rural India," *Economic and Political Weekly*, vol. XII, Special Number, Bombay, 1977.
10. "Solar Energy for the Rural Third World," *Bulletin of the Atomic Scientists*, Chicago, May 1977.
11. "Some Questions of Method in the Tennessee Valley Authority Rate Study, report to the Tennessee Valley Authority, Chattanooga, 1978.
12. *The Economics and Sociology of Alternative Energy Sources*, Economic and Social Commission for Asia and the Pacific, 1979.
13. "An Evaluation of the January 1982 TVA Review of Load Growth and Capacity," report submitted to the meeting of the Board of Directors of the Tennessee Valley Authority, Knoxville, February 17, 1982.
14. *Bubble, Bubble, Toil, and Trouble: Reprocessing Nuclear Spent Fuel*, Health and Energy Institute, Washington, D.C., 1982.
15. *Energy Use in the Post-Harvest Component of the Food Systems in Ivory Coast and Nicaragua*, Food and Agriculture Organization of the United Nations, Rome, 1982.

30. Reducing the Risks: Policies for the Management of Highly Radioactive Nuclear Waste, Institute for Energy and Environmental Research, Takoma Park, May 1989.
31. Managing Municipal Solid Wastes in Montgomery County, Prepared for the Sugarloaf Citizens Association, May 1990
32. To Reprocess or Not to Reprocess: The Purex Question - A Preliminary Assessment of Alternatives for the Management of N-Reactor Irradiated Fuel at the U.S. Department of Energy's Hanford Nuclear Weapons Production Facility, (with Scott Saleska) July 1990.
33. Bhopal Trajedy's Health Effects: A Review of Methyl Isocyanate Toxicity, (with P.S. Mehta, A.S. Mehta, & S.J. Mehta), JAMA, December 1990.
34. Radioactive Heaven and Earth: The Health and Environmental Effects of Nuclear Weapons Testing In, On, and Above the Earth, (co-author with many others) May 1991

Languages: English, French, Hindi, Sindhi, and Marathi.

Personal Information: Age 46; married; two children.

References upon request.

OCT 28 1988

DOCKET NO: 40-8027

LICENSEE: Sequoyah Fuels Corporation (SFC)

FACILITY: Sequoyah Facility,  
Gore, Oklahoma

SUBJECT: SAFETY EVALUATION REPORT, AMENDMENT APPLICATION DATED  
OCTOBER 18, 1988, RE CHANGE OF OWNERSHIP AND ORGANIZATIONAL  
AND ADMINISTRATIVE CHANGES

### BACKGROUND

Sequoyah Fuels Corporation is a subsidiary of Kerr-McGee Corporation. By separate letters dated August 15, 1988, Sequoyah Fuels Corporation and Kerr-McGee Corporation stated that they have entered into an agreement to sell, subject to NRC approval, the outstanding stock of Sequoyah Fuels Corporation to Sequoyah Holding Corporation (SHC) and support the submittal of an amendment application by SHC to reflect a change of ownership.

By application dated October 18, 1988, Sequoyah Holding Corporation (SHC), on behalf of SFC, requested a license amendment to reflect a change of ownership and to incorporate proposed organizational and administrative changes to the current license. The submittal also included changes to the safety demonstration section in support of the application.

In accordance with License Condition 21, SFC submitted the Comprehensive Radiological Solid Waste Management Plan dated November 13, 1986. By letter dated March 31, 1988, SFC requested a license amendment to reflect organizational changes. The subject application withdraws the request dated March 31, 1988, and incorporates the proposed changes and the Comprehensive Radiological Solid Waste Management Plan by reference.

Also, by letter dated October 18, 1988, SHC submitted a request for NRC consent to the transfer of control of SFC to SHC. A separate assessment has been prepared for this request.

### DISCUSSION

#### A. Corporate Information

The applicant has proposed changes to the current license to reflect the transfer of ownership of SFC from Kerr-McGee Corporation to Sequoyah Holding Corporation. SHC is a wholly-owned subsidiary of General Atomics (GA) which is itself a wholly-owned subsidiary of General Atomic

OCT 28 1968

Sequoyah Fuels Corporation

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Technologies Corporation (GATC). GATC is controlled by Mr. James N. Blue, a United States Citizen. The principal office of SFC will be moved from Oklahoma City, Oklahoma, to the Sequoyah Facility near Gore, Oklahoma.

The application makes no changes to the possession limits or the location where licensed material will be used. In the application, all references made to Kerr-McGee Corporation have been replaced with General Atomics. References to Kerr-McGee standards, policies, and procedures have also been removed.

## B. Organization

### Corporate

The current license designates corporate oversight and audit responsibilities to staff positions of Kerr-McGee Corporation. The applicant has proposed changes to these corporate positions in the application to reflect the transfer of Kerr-McGee's corporate responsibilities to corporate staff of GA. Figure 1 shows the Kerr-McGee positions with license identified responsibilities and the corresponding GA positions. The Kerr-McGee Corporate Hydrologist will be replaced with a consultant retained by SFC.

The SFC positions of Sequoyah Fuels Operations General Manager and Sequoyah Facility General Manager will be merged. The surviving position will be renamed Sequoyah Fuels General Manager and will assume the responsibilities of both positions. The Sequoyah Fuels General Manager will report to the President, Sequoyah Fuels Corporation.

### Sequoyah Facility

The Manager of Administration and Services is currently responsible for providing administrative services to support the safe and efficient operation of the facility. This responsibility includes such programs as labor relations, procedure development, security, procurement, and training. The Manager of Procedures and Training reports to the Manager of Administration and Services and together they are responsible for maintaining the Technical Training Center and the facility training program.

The applicant proposes to change the responsibility of the Manager of Administration and Services to include the programs for labor relations, nuclear material accountability, procurement, and material control. Responsibility for the security program will be transferred to the Manager, Health Physics and Industrial Hygiene. The Manager of Procedures and Training will assume the responsibility for managing the facility's procedures system and training program and will report directly to the Sequoyah Fuels General Manager.

OCT 28 1988

FIGURE 1

Kerr-McGee Corporation

President

Vice-President and Director  
Environmental and Health  
Management Division

Corporate Medical Director

Director, Nuclear Licensing and  
Regulation

Director, Safety Services

Director, Regulatory Compliance

Staff Health Physicist

Corporate Hydrologist

Sequoyah Fuels Operations  
General Manager

General Atomics

Chairman & Chief Executive Officer

Vice President Human Resources

Manager, Health Physics

Manager, Licensing, Safety and  
Nuclear Compliance

Manager, Industrial Safety

Manager, Licensing, Safety  
and Nuclear Compliance

Manager, Health Physics

None

Sequoyah Fuels General Manager  
(SFC position)

Existing License Condition 29 requires the presence and participation of the Manager of Health, Safety and Environment and the Manager of Administration and Services in the training certification process. The applicant has revised the condition to replace the Manager of Administration and Services with the Manager of Procedures and Training. The revised condition has been incorporated into the responsibility descriptions of the application for the Manager of Health, Safety and Environment and the Manager of Procedures and Training.

Figure 2 shows the proposed reporting channels for the General Atomics and Sequoyah Fuels Corporation positions discussed above.

The applicant has proposed other organizational changes including the replacement of the Area Manager responsible for the the UF<sub>6</sub> to UF<sub>4</sub> facility with the new Manager of DUF<sub>4</sub> and Process Engineering and the removal of the Area Superintendents in the UF<sub>6</sub> production areas. The Manager of DUF<sub>4</sub> and Process Engineering will have responsibilities similar to that of the current Area Manager and will report to the Manager of Operations. The Area Superintendent of the UF<sub>6</sub> to UF<sub>4</sub> facility, who currently reports to the Area Manager, will report to the Manager of DUF<sub>4</sub> and Process Engineering. The Shift Supervisors in the UF<sub>6</sub> production areas, who currently report to the Area Superintendents, will report directly to the Area Managers.

#### C. Personnel Selection and Qualification Requirements

Because the responsibilities of the Sequoyah Fuels Operations General Manager will be transferred to the Sequoyah Fuels General Manager, the latter position shall approve personnel selection for onsite safety-related SFC positions.

The educational and experience requirements of the Sequoyah Fuels Operations General Manager and Sequoyah Facility General Manager have been assigned to the position of Sequoyah Fuels General Manager. The applicant proposes to reduce the requirement for management experience in chemical or nuclear materials manufacturing facilities from 3 years to 2 years.

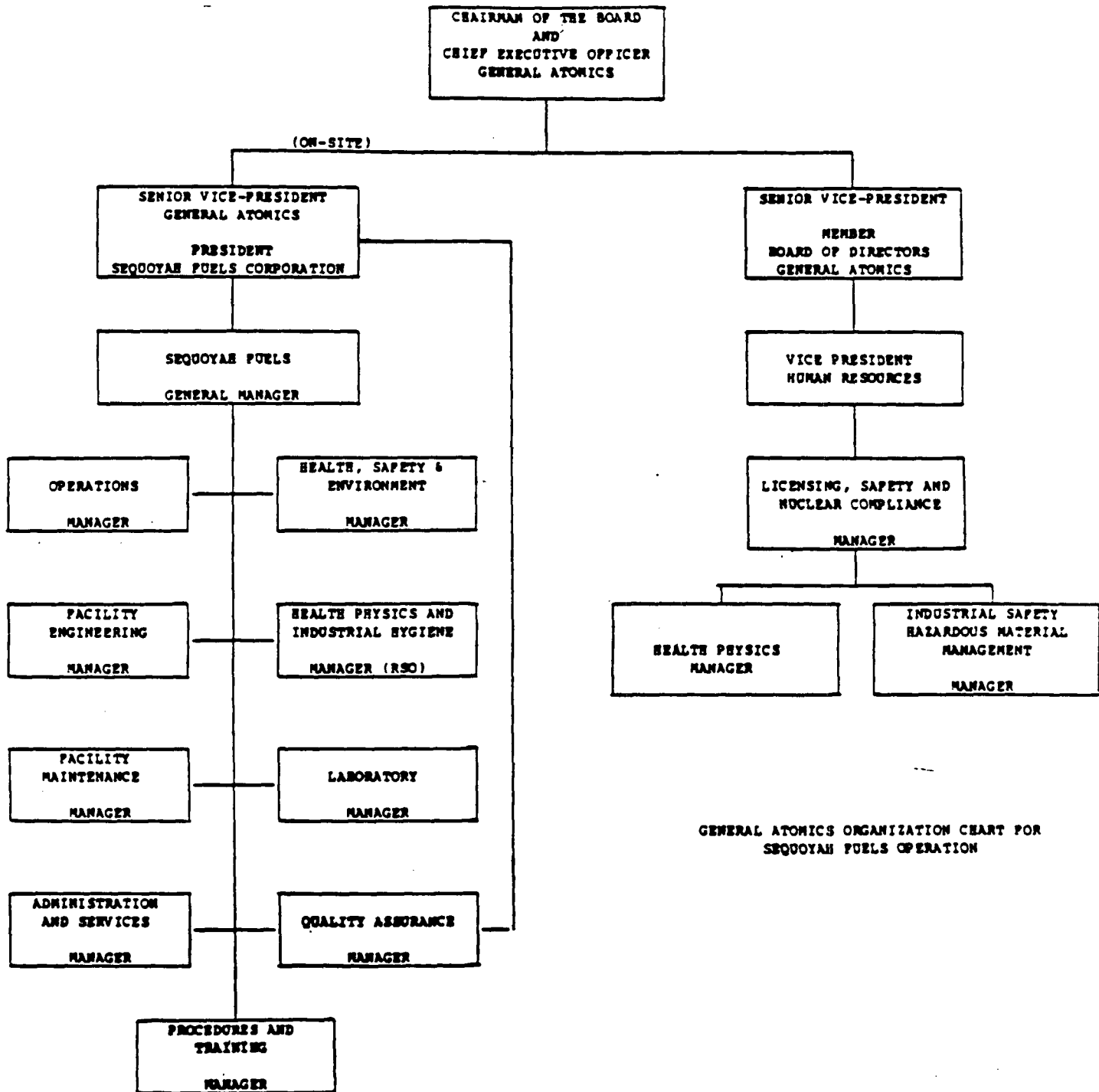
The application states that GA's Manager of Licensing, Safety and Nuclear Compliance will have the same experience and educational requirements as Kerr-McGee's Director of Nuclear Licensing and Regulation. The applicant has proposed minimum experience and educational requirements for the other GA corporate positions which will assume the oversight and audit responsibilities of the Kerr-McGee corporate positions. The current license does not provide experience and educational requirements for these positions.

The amendment application provides minimum educational and experience requirements for the proposed position of Manager of DUF<sub>4</sub> and Process Engineering that are the same for Area Managers. Qualification requirements are also stated for the Manager of Procedures and Training that are not provided in the current license. The proposed requirements are equivalent to those required of the Manager of Administration and Services.



FIGURE 2

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Staff believes that the proposed educational and experience requirements are adequate for the new positions. The revised safety demonstration section of the application excludes Kerr-McGee employees and incorporates the qualifications of the GA corporate staff and new SFC positions. Staff has reviewed their qualifications and concludes that the individuals assigned to the new positions meet the proposed educational and experience requirements.

Existing License Condition 27 had also been incorporated to establish minimum qualification requirements for the Manager of Quality Assurance.

D. Training

Existing License Condition 28 requires that the licensee ensure that each employee receives and understands the information necessary to safely perform his function. Each employee shall sign a statement indicating the receipt of training and committing to following corporate policy and procedures. Supervisory personnel shall document that all employees under their supervision are aware of and understand changes made in procedures affecting the performance of their job functions.

The applicant has incorporated the condition into the application.

E. Audits and Inspections

Existing License Condition 31 requires that the minimum frequency established by the licensee for audits of operations and safety-related activities that are a part of the ongoing Quality Assurance Program not exceed 12 months. A report of the areas audited shall be made quarterly to the General Manager, Sequoyah Facility.

The applicant has replaced the General Manager, Sequoyah Facility, with the Sequoyah Fuels General Manager and incorporated the revised condition into the application.

F. Records

Existing License Condition 33 requires that the licensee maintain all documentation, records, and tests required as a part of the license for a minimum of 5 years or longer if the regulations so require.

The applicant has incorporated the condition into the application.

G. ALARA Committee

The license states that an ALARA Committee shall be established for the Sequoyah Facility. Committee membership includes positions from both the Kerr-McGee Corporation and Sequoyah Fuels Corporation. In the application, Kerr-McGee personnel have been replaced with GA corporate positions to assume the responsibilities of the Committee.

#### H. Solid Waste Disposal

The Comprehensive Radiological Solid Waste Management Plan submitted by SFC on November 13, 1986, contains commitments for solid waste handling and offsite disposal at licensed facilities and supersedes the plan previously submitted on May 25, 1985, which sought authorization under 10 CFR 20.302 to dispose of contaminated materials at the Sequoyah Facility. The former plan was the subject of a proceeding before the Atomic Safety and Licensing Board (ASLB). By letter dated November 2, 1987, the ASLB declared its decision to terminate the proceeding based on SFC's commitment to dispose of contaminated sludges and refuse by transfer to other licensees authorized to receive them under 10 CFR 40.51(b)(5).

In the license, the applicant proposes to remove statements regarding the request for onsite burial and to incorporate by reference the Comprehensive Radiological Solid Waste Management Plan dated November 13, 1986. In addition, the applicant commits to handle in a similar manner as described in the Plan the contaminated wastes resulting from the operation of the UF<sub>6</sub> to UF<sub>4</sub> facility.

#### I. Decommissioning Plan

By letter dated October 26, 1978, <sup>with</sup> Kerr-McGee Corporation committed SFC to create and to fund a reserve for decommissioning and reclamation expenses. This commitment is currently in the license. The applicant proposes to delete the Kerr-McGee commitment. However, in accordance with the letter dated October 18, 1988, requesting NRC consent to the transfer of control of SFC to SHC, SHC commits SFC to maintain the reserve and to submit a decommissioning funding plan at the time of the submittal of the SFC renewal application. Moreover, the letter giving NRC consent to the transfer of ownership is subject to the SHC commitment being made a condition in the license. Accordingly, staff recommends the following condition:

The licensee shall submit a decommissioning funding plan as described in Section 40.36 of 10 CFR Part 40 at the time of the submittal of the renewal application.

#### J. Contingency Plan

Existing License Condition 22 requires the licensee to implement, maintain, and execute an NRC approved Radiological Contingency Plan. The applicant has incorporated the condition into the application with the exception of the requirements for the licensee to maintain records of changes that are made to the Plan and Implementing Procedures that are made without prior NRC approval for a period of 2 years and for the submittal of reports describing changes to the Plan and summaries of the types of changes to the Implementing Procedures to the appropriate NRC Regional Office. Because the revised condition requires the submittal of

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Sequoyah Fuels Corporation

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these reports and summaries to the NRC Headquarters Office, staff believes the exclusion of the above requirements will not adversely affect the intent of the condition.

#### CONCLUSION/RECOMMENDATIONS

Based on the discussion, staff concludes that approval of the amendment application to authorize organizational and administrative changes resulting from a change in ownership will not adversely affect the protection provided for the health and safety of the employees and public or the environment. Therefore, staff recommends that License Condition 2 be revised with the new owner's address, License Condition 9 be revised to incorporate the date of October 18, 1988, and a condition be added to the license as stated above in Section I.

Staff also concludes that Conditions 22, 27, 28, 29, 31, and 33 have been adequately incorporated into the application and, therefore, recommends their deletion in the license.

Because the application is subject to the transfer of ownership of SFC, staff recommends that the amendment authorizing the application become effective at the time the transaction is consummated. In accordance with SHC's consent request, SHC will notify the NRC of the completed transfer.

The amendment application was discussed with Region IV on October 28, 1988, and they have no objection to this proposed licensing action.

Original Signed By:

W. Scott Pennington  
Uranium Fuel Section  
Fuel Cycle Safety Branch  
Division of Industrial and  
Medical Nuclear Safety, NMSS

Original Signed By:

Approved by:

George H. Bidinger, Section Leader

UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY  
REGION 6

IN THE MATTER OF:

SEQUOYAH FUELS CORPORATION  
SOUTH HIGHWAY 10  
GORE, OKLAHOMA 74435

RESPONDENT

EPA LD. NO. OKD051961183

ADMINISTRATIVE  
ORDER ON CONSENT

U.S. EPA DOCKET NO.  
VI-005-(h)93-H

PROCEEDING UNDER SECTION  
3008(h) OF THE RESOURCE  
CONSERVATION AND RECOVERY  
ACT, AS AMENDED, 42 U.S.C.  
Section 6928(h).

(60) days prior to the destruction of any such documents. All employees of Respondent and all persons, including contractors, who engage in activity under this Order, shall be available to and shall cooperate with the EPA.

## XII. FINANCIAL ASSURANCE

1. On April 23, 1993, and April 30, 1993, respectively, Respondent submitted to EPA commercial and financial information under a claim of confidentiality and on which a determination by EPA regarding confidentiality is pending. In the above information, Respondent establishes its financial capability and intent to complete the provisions and requirements of the Order herein. Until a confidentiality determination is issued by EPA, said information will be treated as confidential information by EPA.
2. No later than forty-five (45) calendar days from the effective date of this Order, Respondent shall submit to EPA, for its review and approval, a Financial Assurance Plan, the purpose of which will demonstrate that required corrective action activities are being and/or will be properly funded by Respondent. The final financial assurance plan approved by EPA shall remain in effect during the pendency of the IM, RFI, CMS, and CMI unless EPA and Respondent agree to an alternative financial assurance mechanism.

The above plan shall consist of:

- a. A Financial Assurance Budget to be submitted to EPA no later than January 31 of each year. This report shall consist of the following information:
  1. A description of specific corrective action activities and associated costs planned to be conducted in the coming year;
  2. The nature and amount of all revenues projected to be received in the coming year;
  3. The planned extent (in terms of actual amount and percent) to which projected revenues received by Respondent in excess of general and administrative costs will be made available to conduct projected corrective action activities; and
  4. The minimum extent (in terms of actual amount and percent) to which actual revenues received by Respondent in excess of general and administrative costs will be utilized for conducting projected corrective action activities.
- b. A Financial Assurance Quarterly Report to be submitted to EPA no later than thirty (30) days of the end of each fiscal quarter (i.e. 1st quarter - January through March, 2nd quarter - April through June, 3rd quarter - July through September, and 4th quarter - October through December). The report shall consist of the following information for the previous quarter:
  1. A description of specific corrective action activities conducted;
  2. The nature and amount of all revenues received by Respondent;
  3. The extent (in terms of percent and amount) to which actual revenues received by Respondent were used to conduct corrective action activities.

- c. A quarterly Financial Statement (of the Respondent) to be submitted to EPA no later than thirty (30) days of the end of each fiscal quarter (i.e. 1st quarter - January through March, 2nd quarter - April through June, 3rd quarter - July through September, and 4th quarter - October through December).
  - d. Information Respondent deems necessary to demonstrate that required corrective action activities are being or will be properly funded by Respondent.
- 3. Events beyond the control of Respondent that cause actual revenues to fall short of expected revenues shall constitute Force Majeure and shall be reported in accordance with Section XXIII. A determination of Force Majeure will be made by EPA.
  - 4. If information becomes available to Respondent of future or upcoming events that would cause a reduction or cessation of Respondent's future revenue sources, Respondent shall notify EPA in writing of such events.
  - 5. This Order in no way negates Respondent's obligation to establish and/or maintain, if required, financial assurances for closure and post-closure care under 40 CFR §265.143 and §265.145.

### XIII. DISPUTE RESOLUTION

- 1. The Parties agree that the procedures contained in this section are the sole procedures for resolving disputes arising under this Order.
- 2. If Respondent disagrees, in whole or in part, with any EPA disapproval, modification, other decision, or directive made by EPA pursuant to this Order, Respondent's Project Coordinator shall notify the EPA Project Coordinator of the dispute in writing within ten (10) business days of receipt of EPA's decision or directive.
- 3. Upon the notification in paragraph 2, the Parties shall use their best efforts to informally and in good faith resolve all disputes or differences of opinion within a period of time not to exceed twenty-one (21) calendar days. During the twenty-one day period, the schedule(s) associated with the disputed issue will be extended by the total number of days utilized to rectify the dispute, and stipulated penalties will not accrue.
- 4. If Respondent continues to disagree, in whole or in part, with any EPA disapproval, modification, other decision, or directive made by EPA pursuant to this Order after the informal period stated in paragraph 3, Respondent shall notify EPA of its objections and the basis therefore in writing no later than ten (10) business days from the completion of the informal negotiation period. Said notice shall set forth: (1) the specific points of the dispute; (2) the position Respondent is maintaining should be adopted as consistent with the requirements of this Order; (3) the basis for Respondent's position; and (4) any matters which it considers necessary for EPA's determination. Within ten (10) business days of EPA's receipt of such written notice, EPA shall provide to Respondent its decision on the pending dispute.
- 5. EPA's decision pursuant to paragraph four (4) of this Section shall be binding upon both Parties to this Order, unless Respondent within ten (10) business days, after receipt of EPA's decision described in paragraph 4, notifies EPA in writing of its continued objection(s) and requests the Hazardous Waste Management Division Director for Region 6, to convene an informal conference for the purpose of discussing Respondent's objections and the reasons



## **POLICY ISSUE**

(Information)

May 29, 1992

SECY-92-200

For: The Commissioners

From: James M. Taylor  
Executive Director  
for Operations

Subject: UPDATED REPORT ON SITE DECOMMISSIONING MANAGEMENT PLAN

Purpose: To provide the Commission with a status report on the actions that the staff has been taking toward cleanup of the sites in the Site Decommissioning Management Plan (SDMP) and to provide the Commission with Revision 2 of the SDMP (see Enclosure 1), which formally updates the April 1991, version of the SDMP provided to the Commission in SECY-91-096.

Summary: The staff continues to implement the SDMP to effectively use available staff resources to resolve decommissioning policy and regulatory issues and to prompt or compel, as necessary, timely decommissioning at SDMP sites. Since the last update of the SDMP report, in April 1991, program management has been enhanced and intensified to better ensure that priority attention is placed on the timely resolution of issues and timely site decommissionings.

Progress continues to be steady, but slower than desired, and to suffer from various obstacles and difficulties stemming from circumstances beyond the control of the staff. These obstacles include, for example, the lack of firm residual radioactivity criteria for cleanup, the presence of mixed

Contact:  
David Fauver, NMSS  
504-2554

NOTE: TO BE MADE PUBLICLY AVAILABLE  
IN 10 WORKING DAYS FROM THE  
DATE OF THIS PAPER



UNC, Wood River Junction

At the UNC, Wood River Junction site, decontamination activities have been completed. However, ground water sampling continues to show strontium-90 (Sr-90) and nitrate concentrations above EPA's current drinking water standards. EPA has proposed, but not yet adopted, a higher drinking standard for Sr-90 which exceeds the highest detected Sr-90 level at the UNC site. A draft environmental evaluation for this site has been given to the State of Rhode Island. Based on this information, the State believes that it cannot agree with terminating the license unless certain conditions, including continued monitoring, are agreed to by the licensee. NRC met with the State, on May 6, 1992, to resolve these concerns. No resolution was reached with the State. NRC staff intends to proceed with decommissioning and will seek approval of OGC and the Commission considering the State's opposition. It is possible that this effort can be completed in 1992.

B. Specific Issues in SDMP Implementation

Most of the issues impinging on SDMP implementation have been comprehensively discussed in recent staff papers on SDMP matters (e.g., cleanup criteria and decommissioning timeliness). However, the staff wishes to bring the following selected topics to the Commission's attention.

1. High-Volume Wastes

Very large volumes of soil or tailings, generally containing low levels of uranium and thorium contamination, are present at about 20 sites listed in the SDMP. An NRC specific license is required for possession of uranium and thorium in concentrations greater than one-twentieth of 1 percent by weight, unless it is exempted or subject to general licensing under 10 CFR Part 40. For example, waste volume at each of the following sites is expected to total 1 million cubic feet or more: B&W Apollo; Chemetron; Dow Chemical; Shieldalloy, Cambridge; and Whittaker. A number of other SDMP sites have somewhat less, but still huge quantities of waste requiring disposal. Given current disposal costs at commercial low-level waste (LLW) disposal facilities, which exceed \$100 per cubic foot, commercial disposal of these high-volume wastes could force many of the licensees into bankruptcy. Costs for bulk disposal at the Envirocare facility in Utah are estimated to be \$30 per cubic foot.

Options for disposal of such high-volume waste are limited. In the B&W Apollo case, the licensee would like to ship waste by rail to the Envirocare facility near Clive, Utah. Significant funding from DOE will enable B&W to accomplish this. (In one case, i.e., ALCOA, over a thousand cubic feet of waste were shipped to Envirocare at a total cost of about 60 dollars per cubic foot; about half the total cost was for transportation.)

Another potential disposal option for the high-volume, low-activity waste found at many SDMP sites, is bulk transport and placement in a uranium mill tailings impoundment. A 1988 guidance document for evaluating and determining NRC action on requests for such disposals was revised and forwarded to the Commission on August 7, 1991, in SECY-91-243. The revisions addressed the issues of: (1) dual NRC and EPA regulation of the tailings site, and (2) DOE taking custody of the tailings site, on termination of the operator's source material license. An SRM dated September 20, 1991, directed the staff to make two revisions and prepare the document for public comment. An SRM dated February 7, 1992, concurred on the proposed changes to the Federal Register notice and directed that it be combined with the guidance in SECY-91-347. The combined Federal Register notice was submitted to the Commission on March 27, 1992. The guidance, as proposed, would allow, under certain conditions, the disposal of low-activity source material that is not byproduct material, as defined in Section 11e.(2) of the Atomic Energy Act of 1954, as amended. Some examples of conditions to be imposed are: the material to be disposed of is not regulated under the Resource Conservation and Recovery Act, and the material would not adversely affect the stability of the tailings impoundment.

If disposal at an existing offsite disposal facility is not feasible, licensees may apply to the Commission for approval to dispose of licensed material in accordance with 10 CFR 20.302. Staff continues to evaluate uranium and thorium disposals performed under 10 CFR 20.302 on a case-specific basis. Absent general residual contamination criteria, the staff is applying a technical position published in 1981 (46 FR 52061) for evaluating licensee proposals to dispose of uranium and thorium contamination under 10 CFR 20.302. This technical position provides four "options," which vary in activity concentration and corresponding radiological dose. However, as directed in

the Commission's April 6, 1992, staff requirements memorandum, only the lower-activity concentration limits and disposal methods provided in Options 1 and 2 of the technical position can be applied as criteria for the release of a site for unrestricted use.

The Option 2 concentration limits are based on a dose, from the human intruder pathway, of 170 mrem/yr to the critical organ. For soluble uranium, the critical organ is the bone. For insoluble uranium, the critical organ is the lung. For thorium, both soluble and insoluble, the critical organ is the whole body.

However, the dose of 170 mrem/yr to the whole body, from Option 2 concentrations of thorium, via the human intruder pathway, may be unacceptably high. Further, this 170 mrem/yr whole body dose assumes a 0.8 occupancy factor and a 0.5 shielding factor. If the occupancy and shielding factors are set to 1, the dose from thorium may be as high as 420 mrem/yr to the whole body. For this case, the 10 CFR 20 limit of 100 mrem/yr may be the appropriate unrestricted use release limit. The intruder exposure pathway could possibly be ignored when disposal makes the chance of future human access very remote, such as via deep disposal, or disposal by mine backfill.

When applying Option 2 of the technical position, the groundwater pathway is also evaluated, in addition to the human intruder pathway, when necessary because of site specific hydrogeological features and groundwater use. Dose from the groundwater pathway should not exceed 3 mrad/yr to the bone. Groundwater evaluations of Option 2 disposals of depleted or enriched uranium include the dose from uranium decay product buildup for a period of 1000 years. A more detailed discussion of this technical position is provided in Enclosure 2 of SECY-91-334.

## 2. Previous 10 CFR 20.304 Disposals

Before 1981, an unknown number of licensees disposed of licensed material under the provision of 10 CFR 20.304, which did not require Commission approval before disposal. Some of these burials included long-lived uranium and thorium wastes. Once identified, previous 10 CFR 20.304 burials must be evaluated, to determine if the burial site is suitable for unrestricted use.

CERTIFICATE OF SERVICE

I certify that on December 30, 1993, copies of the foregoing  
NATIVE AMERICANS FOR A CLEAN ENVIRONMENT'S SUPPLEMENTAL PETITION  
TO INTERVENE were served by first-class mail or as otherwise  
indicated below on the following:

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\*Administrative Judge Jerry R. Kline  
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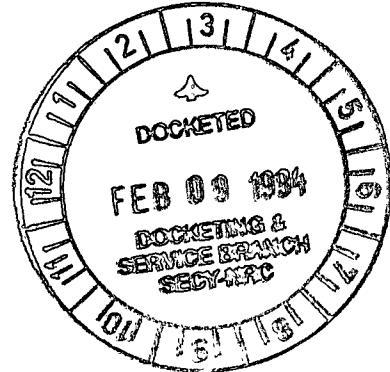
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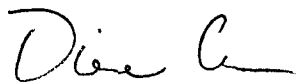
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