Enclosure 3

NUCLEAR REGULATORY COMMISSION

DOCKET NO. PRM-20-7

NATURAL RESOURCES DEFENSE COUNCIL, INC.

Notice of Denial of Petition for Rulemaking

Please take notice that the Nuclear Regulatory Commission (NRC) has denied a petition for rulemaking submitted by letter dated August 6, 1976 by the Natural Resources Defense Council, Inc. (NRDC), 2345 Yale Street, Palo Alto, California, 94306. The petition requested that the NRC immediately adopt interim regulations setting standards for shallow land disposal of transuranic (TRU) and other low-level radioactive waste as well as prepare a broad programmatic generic environmental impact statement (GEIS) on low-level waste disposal.

A notice of filing of the petition, Docket No. PRM-20-7, was published in the Federal Register on September 23, 1976 (41 FR 41759) and the public was invited to file comments on the petition within 60 days of publication of the notice. (The comment period was later extended to 90 days.) The fifteen responses from industry and the States that were received by the NRC generally (with one exception) recommended denial of the petition. In addition, the original petitioner (NRDC) filed an "analysis" and comments on the other comments received by the Commission.

Upon analysis of the issues and points raised by the petition at the time the petition was reviewed, the NRC staff concluded that no compelling potential health and safety hazard existed to warrant immediate NRC

reassumption of regulatory authority from Agreement States, or immediate implementation of interim regulations as proposed by the petitioner. A broad, flexible program for the orderly development of comprehensive regulations governing the management and disposal of low-level radioactive waste by shallow land burial or other alternative methods was announced in the Federal Register on December 7, 1977 (42 FR 61904) and this program is currently in progress. The regulations and supporting environmental impact statements are scheduled to be issued within the next few years and will address disposal of all nuclides, including transuranic nuclides. The Commission believes that a separate GEIS on low-level waste disposal is neither required by the National Environmental Policy Act of 1969 (NEPA) nor necessary for the development of the NRC program. It is intended that the environmental impact statements and other technical documentation being developed to support the forthcoming regulations will be of sufficient scope to make a separate GEIS unnecessary.

Petition

Briefly, the regulations proposed by the petitioner would have required the following:

Long-Lived Transuranic-Contaminated Waste

-- The transfer of regulatory authority over long-lived transuranic waste from Agreement States to NRC;

-- An immediate end to disposal by burial of long-lived transuranic waste with only retrievable storage permitted;

-- Payment of fees by persons who produce transuranic waste to finance adequately safe permanent disposal;

-- Establishment of a reporting and inspection system operated by NRC (with on-site, unannounced inspection by NRC inspectors) to assure accurate classification of transuranic waste;

Other Low-Level Radioactive Waste

-- The suspension of licensing of new or enlarged burial sites until NRC establishes site selection criteria, radioactive release standards setting maximum permissible migration rates for radionuclides away from disposal sites, minimum standards for environmental monitoring programs, and standards for long-term care with mechanisms to finance such care;

-- Establishment of minimum fees to be paid (effective immediately) for each cubic foot of waste buried at existing sites to assure adequate funds for long-term care;

Solidification of Low-Level Radioactive Waste Before Shipment

-- The solidification of all radioactive waste before shipment to reduce the potential for release to the environment either through accident or sabotage.

The petitioner also requested that the Commission immediately prepare a GEIS on the Commission's program for disposal of low-level radioactive waste. The petition stated that a national program for disposal of low-level waste by shallow land burial represents a major programmatic decision that must be examined in an appropriately broad programmatic GEIS and that separate statements on individual sites would have difficulty considering the generic questions involved since the present need is to establish criteria for adequate disposal practices, for acceptable sites, and for the type of material such sites can properly handle.

The petition was accompanied by an appendix suggesting regulation language as well as a "Memorandum of Points" discussing the basis for the petition. A summary of the Memorandum was included in the petition in the form of ten allegations of fact (petitioner's wording). The appendix also included suggestions for the scope and development of the proposed GEIS.

A copy of the petition (Docket No. PRM-20-7) with attachments is available for public inspection in the Commission's Public Document Room (PDR) located at 1717 H Street, N.W., Washington, D.C. 20555. Copies of comments on the petition are also available for inspection in the PDR.

Summary of Public Comments

Overall response to the petition was that it not be adopted as proposed. Of the 15 commenters (all industrial or state groups), only one consistently supported the petitioner's recommendations, as stated. In addition, the original petitioner (NRDC) filed comments and an "analysis of comments" on the other comments received by the Commission. Material in the analysis that was not directly linked to remarks by another commenter was treated by the NRC staff in the same manner as other comments on the petition.

Comments did not generally support the necessity of immediate adoption of interim regulations. With exception of the NRDC analysis of the comments, little rationale was given to support interim regulations. Ten commenters stated that there was no demonstrated public health and safety risk with present practices and thus there was no justification or legal basis for the interim regulations.

Comments on the necessity of a GEIS were more balanced, with one commenter supporting and three opposing. The supportive commenter felt that a GEIS should be done because low-level waste has significant environmental impacts and a comprehensive evaluation had not been done to date. Those opposing stated that there was no need or basis for a GEIS or thought that such a statement should be part of the waste management

GEIS being prepared by the Energy Research and Development Administration (ERDA). (On October 1, 1977, ERDA was combined with other government agencies to form the Department of Energy (DOE). DOE is continuing development of this GEIS).

Two of the commenters commented favorably on NRDC's proposed regulations for establishment of an inspection, enforcement, and reporting system for the classification of TRU waste. One stated that such a system is at least implicit in current regulations. One negative commenter stated that the NRC already has the authority to inspect against State-licensed operations.

The commenters were neutral or divided on NRDC's proposed regulations for an immediate end to non-retrievable TRU waste disposal, and for payment of fees by producers of waste for long-term care. Two of the commenters supported the proposed regulations, with one commenter noting the toxicity and long half-lives of TRU. One other commenter suggested than an amendment to the one disposal license permitting burial of TRU waste would be more workable than a rulemaking action. The two negative commenters believed that the toxicity and long half-lives of TRU nuclides required careful handling but there was no urgency to the matter. They stated that before regulations are promulgated, a study should be conducted to define TRU waste and the methods by which TRU waste would be disposed. The commenters generally agreed that the producers of waste should be responsible for the costs accrued, but that setting fees by regulation was unworkable.

The commenters were generally negative on NRDC's proposed regulations for transfer of TRU Licensing from the Agreement States to the NRC, for suspension of licensing of new or enlarged sites until certain site criteria were adopted, and for solidification of all low-level waste before shipment. The commenters felt that the uniformity allowed by Federal control was a good idea, but that there was no reason to disrupt the Agreement State program. The commenters also thought that suspension of licensing activities was unnecessary and might not be in the public interest. Seven commenters responded to the proposal for solidification requirements, stating that shipment of present quantities of liquid low-level waste is not a major risk and is already regulated. They also stated that many factors should be considered before NRC requires solidification of all waste--i.e., concentrations, quantities, probabilities of release, consequence, packaging, costs and benefits.

Each of the ten allegations of fact made by the petitioner in support of the petition generally received from one to four comments, not including the petitioner's analysis. The commenters remarked that seven of the allegations of fact were inaccurate or distorted. One allegation received no comments. Two of the allegations of fact - (1) ERDA has prohibited burial of government-TRU waste, and (2) the Atomic Energy Commission (AEC) proposed but did not finalize regulations for commercial-TRU waste burial - were accepted as true. All that commented on these two allegations of fact (except the petitioner) felt that the actions discussed provided insufficient justification for the petition.

Background - NRC Regulatory Development Effort

Issues related to Federal versus State regulation of commercial radioactive waste burial grounds were addressed in an NRC Task Force Report ("NRC Task Force Report on Review of the Federal/State Program for Regulation of Commercial Low-Level Radioactive Waste Burial Grounds," NUREG-0217, March 1977; NUREG-0217 Supplement 1, October 1977). These issues were raised by the General Accounting Office (GAO), the Joint Committee on Atomic Energy (JCAE), and the House Committee on Government Operations. The NRDC petition was received after the formation of the Task Force and referenced the issues raised by the above organizations. The petition--along with the publications and recommendations of a wide range of Congressional, technical, industrial, public, and governmental groups--provided input to the Task Force study and was referenced in the Task Force Report.

After concluding that the States through their regulatory programs have adequately protected the public health and safety, the Task Force made a number of recommendations regarding Federal versus State regulation and other related issues currently affecting commercial burial ground regulation and operation. These recommendations included accelerated development of a specific regulatory program for low-level waste disposal including regulations, standards, and criteria;

and studies to identify and evaluate the relative safety and impacts of alternative low-level waste disposal methods.

The staff subsequently published a program plan for low-level waste management entitled "NRC Low-Level Radioactive Waste Management Program" (NUREG-0240, September 1977), including technical studies to prepare a regulatory base, development of regulations, criteria, and supportive EIS's, and development of criteria and procedures for applicants to prepare license applications and for NRC to make uniform and timely licensing decisions. To formulate the program, the staff considered the Task Force recommendations; public comments on the Task Force Report; data gleaned from review of technical documents and participation in conferences, meetings, and discussions attended by industrial, state, and public organizations; and considerations of the points and recommendations contained in the petition, petition comments, and other correspondence and documents. Periodic updates of NUREG-0240 are planned and the first update is expected in late 1978. The progress made to date in NRC's program of technical study and regulation development will be summarized in the update and further refinements to the program discussed.

As noted in NUREG-0240, NRC plans to propose a radioactive waste disposal classification regulation which will stipulate the kinds and quantities of radioactive material that can be disposed of by various methods. NRC is now initiating a contractual effort to prepare an environmental impact statement (EIS) to guide and support the

waste classification regulation. An Advance Notice of Proposed Rulemaking is being published in the Federal Register to request advice, suggestions, and comments on the issues, scope, and content of the EIS used to guide the regulation.

As a starting point for the waste classification regulation and guiding EIS, NRC contracted a waste disposal classification system study which was initiated, in part, to address the public comments received on a rule proposed by the AEC in 1974 to prohibit the burial of TRU-contaminated commercial waste. In this proposed rule, commercial TRU waste in concentrations greater than 10 nanocuries per gram of material would have been consigned to retrievable storage facilities operated by the Federal government pending the development of a facility for the ultimate disposition of the waste. However, numerous problems (e.g., poor justification for the 10 nanocurie per gram limit, no cost-benefit analysis, no accompanying regulatory guides) were identified by persons commenting on the proposed rule, and the rule was never adopted by the AEC for commercial waste.

A ten nanocurie per gram TRU burial limit, however, was adopted by AEC in 1970 for government-produced radioactive waste and this limit is still in effect at sites operated by the Department of Energy (DOE). An investigation is currently in progress by DOE to redefine the concentration levels at which government-produced TRU nuclides may be disposed of by shallow land burial. It is expected that some

modification of the interim ten nanocurie per gram limit will result based on this investigation.

In the current waste classification study contracted by NRC, TRU waste is not classified as a separate waste category. Instead, concentrations of individual radionuclides, including TRU nuclides, are classified according to the disposal requirements of the radionuclide concentrations. Three categories of radioactive waste based on three generic modes of waste disposal have been identified:

1. Class A Waste, which due to high or persistent and significant radiotoxicity, requires isolation in a repository or other disposal facility providing a high degree of containment;

2. Class B Waste, which is acceptable for disposal in near-surface disposal facilities, such as shallow land burial grounds, providing confinement for a period of time with controlled, predictably low release rates; and

3. Class C Waste, which has such low levels of radioactivity that it can be disposed of in facilities, such as sanitary landfill facilities, used for disposal of non-radioactive trash.

A classification methodology was developed which involves identifying a set of exposure events at model waste disposal facilities, describing potential radionuclide transport to man, and calculating limiting concentrations or inventories of radionuclides in waste that may be placed in the model disposal sites to ensure that specified

dose guidelines are not exceeded. A status report on the waste classification methodology and applications has been published ("A System for Classifying Radioactive Waste Disposal--What Waste Goes Where?", NUREG-0456, June 1978). A Federal Register notice (43 FR 36722-36725) was issued to announce the availability of the document and to request public comments on the in-progress study. Comments received by the NRC will be incorporated into the further development of the classification system, the completion of the study, and the development of the waste classification regulation. An updated report on the classification system study is planned for publication in March 1979.

The licensing requirements for management and disposal of the types of waste defined by the waste classification regulation as well as the technical requirements for various disposal methods will be addressed in two other rule making actions. A proposed regulation (plus a supporting EIS) governing the management and disposal of high-level (Class A) waste is scheduled for publication in a draft form during 1979. Additionally, NRC is now initiating a contractual effort to prepare an EIS to guide and support the development of a proposed regulation governing the management and disposal of low-level (Class B and Class C) wastes. An Advance Federal Register Notice of Rulemaking is being issued to request public comments on the contents and scope of the EIS and proposed low-level waste regulation.

which are both expected to be published for public comment in 1980.

The proposed low-level waste regulation will require conformance with a set of minimal acceptable performance criteria while allowing flexibility in technical approaches. The body of the proposed regulation will provide the licensing requirement for management and disposal of low-level waste, including provisions on preparation of licensing applications, Commission actions on applications, license conditions, tests, inspections, license modifications, and enforcement. Institutional arrangements for low-level waste disposal facilities, including land ownership, facilities operation, financial liability, monitoring, decommissioning*, inspection, and long-term care* of waste disposal facilities will be addressed.

Appendices to the regulation will specify the technical requirements for licensing of shallow land burial and alternative disposal methods, and for unlicensed confinement by disposal to ordinary refuse channels or other options. Specifications regarding waste form/container performance, site selection and suitability, design and operation of sites, monitoring during and after site operations, and decommissioning* will be included.

---

*NRC efforts to develop institutional arrangements and technical standards for site decommissioning and long-term funding and care are further discussed in a following section.

The EIS used to guide and support the proposed low-level waste regulation will, in part, analyze shallow land burial in the context of alternative disposal methods for low-level waste. Input to the analysis is being provided by a NRC-contracted study of alternative disposal methods. This study is identifying viable alternative disposal methods and submitting to further detailed study alternative methods determined on the basis of a preliminary screening effort. Preliminary results of the study to date will soon be published in a status report entitled, "Screening of Alternative Methods for the Disposal of Low-Level Radioactive Waste" (NUREG/CR-0308).

The alternatives study may yield several acceptable alternative methods for low-level waste disposal. As part of the NEPA process, shallow land burial must be considered within the context of other alternatives and their technical uncertainties. However, technical criteria and requirements for disposal by shallow land burial are needed to meet regulatory requirements for existing and any new shallow land burial sites. As guided by the EIS, NRC plans to initially develop technical criteria and requirements for shallow land burial. Development of criteria for identified viable alternatives are programmed to follow shortly.

NRC Staff Position on Petition

To recapitulate and consolidate, the NRDC petition essentially requests five kinds of actions from NRC:

1. Reassert regulatory authority for TRU waste from Agreement States and limit TRU waste disposal to a retrievable form.
2. Invoke a moratorium on new or enlarged burial site licensing pending the establishment of certain requirements.
3. Establish a perpetual-care fund by regulation.
4. Restrict transportation of low-level waste in liquid form.
5. Prepare a generic environmental impact statement.

The NRC staff position on these areas, in which the Commission concurs, is as follows:

TRU Waste Disposal - Under Section 274 c (4) of the Atomic Energy Act of 1954, as amended, NRC must determine existence of a hazard or potential hazard prior to the reasseration of regulatory authority from Agreement States. A somewhat similar finding must be made for the immediate implementation of regulations governing low-level waste disposal or prohibiting TRU waste disposal by shallow land burial. The staff does not believe that current operation of burial grounds in Agreement States would justify the necessary finding that a hazard exists or potentially exists for exercise of this statutory authority. (Earlier NRC publications, such as the NRC Task Force Report, the Federal Register Notice announcing the Task Force Report (42 FR 13366, March 10, 1977), and the Federal Register

Notice announcing the NRC Low-Level Waste Management Program (42 FR 61904, December 7, 1977), have contained similar statements.) NRC has already initiated a comprehensive program for development of regulations governing the management and disposal of all types of radioactive waste, including TRU waste. Although it is conceivable that the NRC could initiate an effort to develop temporary "interim" rules as suggested by the petitioner, NRC staff believes that, as a practical matter, well planned "interim" rules could not be prepared on a schedule much different than current, ongoing schedules for regulations development. To do so would delay placing the broader, more comprehensive regulations currently under development into effect. It is for these latter regulations that there is a demonstrated need.

Nonetheless, an interim short-term period will elapse before executive and legislative decisions are made on the issues of management and disposal of radioactive waste and prior to the completion of the regulations currently under development by NRC. The NRC staff notes the concern of the petitioner, the public, and others regarding the safe disposal of TRU and other wastes and is currently investigating the incremental environmental effects of continued short-term TRU burial as well as possible alternatives--such as retrievable storage--to TRU waste burial. In any case, the staff believes that retrievable storage procedures similar to procedures used today by DOE for storage of TRU waste may be necessary for certain types of waste defined by the waste classification regulation when this regulation is adopted.

Today, only the site operated by the Nuclear Engineering Company, Inc. (NECO) and located in the center of the Hanford Reservation near Richland, Washington, accepts TRU-contaminated materials in concentrations greater than ten nanocuries per gram for burial in soil. The disposal site is located on land leased from the Federal Government to the State of Washington, who then subleases a portion of the leased land to the disposal site operator. At the commercial site, the disposal of special nuclear material (SNM), including plutonium, is regulated by NRC. As Washington is an Agreement State, the State of Washington regulates the disposal of source and byproduct material (including TRU isotopes other than plutonium).

The limited burial of TRU-contaminated waste in the middle of the Hanford Reservation minimizes any potential future problems since geohydrological, meteorological, and ecological factors regarding the Hanford Reservation are well investigated and documented; and extensive monitoring programs are conducted by DOE in addition to those conducted by NECO. No public health and safety problems have been identified with the operation of the commercial site. Quantities of TRU materials delivered to the commercial disposal site are currently small and, as executive decisions deferring reprocessing of spent power reactor fuel, should remain small for the next several years.

Additionally, total inventories of commercial TRU waste buried at the site as well as inventories that are expected to be delivered in the next few years are small compared to the inventories already existing on the surrounding Hanford Reservation.

Burial of plutonium-contaminated waste at the commercial disposal site is under independent review by the NRC licensing staff in considering the renewal of NECO's SNM disposal license at Hanford. A decision whether to allow or prohibit the burial of plutonium at that site will be made in connection with this licensing review. Discussions between DOE, the State of Washington, NECO, and NRC have been held regarding the feasibility of instituting a retrievable storage policy for commercially-generated TRU waste and the potential technical, administrative, and legal problems that could arise from such a policy.

An alternative action is acceptance for storage of commercial TRU waste by the Federal government (e.g., DOE), with a charge levied on the waste generator to cover costs of storage, retrieval, repackaging (if necessary), transport, and ultimate disposal. NRC staff also notes that Federal government responsibility for commercial TRU waste and the funding for such operations are currently under consideration by the Interagency Review Group for Radioactive Waste Management (IRG). The IRG is scheduled to recommend a national waste management policy and plan to the President in late 1978.

As noted earlier, the NRC is now developing a waste classification regulation to stipulate the concentrations of particular radionuclides that can be disposed of by various generic disposal methods. This regulation is scheduled to be published for public comment in 1979. As a result of the regulation, certain types of waste will require retrievable storage pending transfer to a repository for final disposal. It is expected that retrievable storage of such waste would be accomplished in a similar manner as that used today for the storage of government-produced TRU waste.

Licensing of New or Enlarged Burial Sites. The staff believes that licensing new or enlarged burial grounds on the basis of need is an option which, for continued assurance of protection of the public health and safety, should not be foreclosed. There is a continuing production of low-level waste at hospitals, universities, laboratories, reactors, etc., that requires disposal and the only currently available disposal method is shallow land burial. Until the regulations governing shallow land burial and alternative disposal methods are established, applications for new or enlarged disposal sites will be handled on a case-by-case basis. Any new licenses that are issued will be qualified by the provision that the licenses may be modified as new criteria and regulations are developed.

Long-Term Care and Funding. Issues related to long-term care and funding of commercial waste disposal sites are being addressed by NRC. The staff believes that such issues, some of which were discussed by the

petitioner, can be best resolved within the framework of the existing NRC low-level waste management and regulatory development program. In accordance with the program, NRC has initiated a number of studies to develop funding standards, procedures, and predictive tools.

One particular series of studies has been contracted to determine criteria and standards regarding safety and costs related to decommissioning nuclear fuel cycle facilities. To date, results of studies on a fuel reprocessing plant and a pressurized water reactor have been published. These reports, along with other ongoing studies on a boiling water reactor and facilities associated with the front end of the nuclear fuel cycle, will provide useful data to the regulatory development effort. Of more specific significance to the effort is a study underway to evaluate the safety and costs related to decommissioning a low-level waste burial site.

This study has a five-fold technical emphasis:

1. provide technical bases for the establishment of operating criteria for existing burial grounds;

2. identify long-term care requirements for burial grounds;

3. estimate future financial needs for the decommissioning of burial grounds and evaluate bases for the establishment of financial structures for long-term care of burial grounds;

4. evaluate potential record keeping needs; and

5. evaluate the environmental monitoring needs.

Another study is now being contracted to investigate the alternative institutional arrangements necessary to ensure adequate long-term care and funding. Also to be addressed in this study are alternative organizational roles involving low-level waste site regulation, site operation, site ownership, financial liability, decommissioning and inspection.

One of the alternative methods to provide long-term funding is, as recommended by the petitioner, the establishment of a special fund based upon a cubic foot charge by NRC regulation. (The NRC Task Force recommended a Federally-administered long-term care fund in NUREG-0217.) However, the establishment by NRC of a long-term care fund through fees based upon volume of materials buried poses difficult questions of law. Although fees for use of property may be established between landlord and tenant, as is currently the case, to order a fee per unit volume of waste by Commission regulation and to establish an earmarked fund would require Congressional authorization.

A federally mandated fee per unit volume of waste that is not a product of the landlord/tenant contract, would be in essence a tax requiring legislative enactment. (See Federal Power Commission vs. New England Power Co., 415 U.S. 345 [1974]; National Cable Television Association, Inc. vs. United States, 415 U.S. 336 [1974]). The establishment of a special fund based upon such a tax would also require special legislation.

Based on landlord/tenant (State/site operator) contracts authorized by State law, all six States containing commercial burial sites collect

disposal fees from the site operator on a per-cubic-foot basis and place the collected fees into a State fund established for long-term care of the sites. (A specific fund for long-term care was only established within the last year in Illinois. Illinois previously chose to assign the collected fees into the State general fund.) However, as noted in NUREG-0217, no national standards are available by which States can evaluate the adequacy of existing long-term care funds or collection rates, evaluate proposed changes to long-term care charges, or evaluate amounts that might be needed for corrective actions if major problems develop in site operations. Development of such standards is being addressed in the studies previously discussed as well as other staff efforts.

Transportation of Liquid Low-Level Waste. In the request for regulations prohibiting transportation of all liquid waste, the petitioner observes that the liquid form increases the potential mobility of the waste material. However, the existing regulations adopted by the NRC and the Department of Transportation (DOT)* specify the types and limiting concentrations of all radioactive material, including liquids, acceptable for shipment as well as the packaging requirements. As would be expected, materials of greater hazard or mobility are regulated more stringently than materials of lesser hazard or mobility.

*In the United States, the DOT and the NRC share primary regulatory authority for transport and packaging for transport of radioactive material. The DOT and the NRC partition their overlapping responsibilities by means of a Memorandum of Understanding, last issued in March 1973.

For example, liquid radioactive material in Type A quantities must be packaged in or within a leak-resistant and corrosion-resistant inner containment vessel. The packaging must be adequate to prevent loss or dispersal of the contents of the inner container vessel if the package was subjected to a prescribed 30-foot drop test. Either enough absorbent material must be provided to absorb at least twice the volume of the liquid contents or a secondary containment vessel must be provided to retain the radioactive contents under normal conditions of transporting, assuming the failure of the inner primary containment vessel. Quantities of radioactive material greater than Type A limits can be transported only in Type B packaging, which is designed to more stringent standards such as survivability under certain hypothetical accident conditions. Other, less stringent standards apply to material, such as low specific activity material, containing low concentrations of radioactivity.

The few cases of shipment of low-level liquid waste do not represent a hazard to the public health and safety. Policies in effect at the commercial disposal sites require that only solid waste material may be buried. Liquids, except for liquid scintillation vials, must be solidified before burial.

Liquid scintillation vials are typically small glass vials (about an inch in diameter by a few inches high) containing small quantities of radioactive material (microcuries per liter) in an organic solution.

The vials are transported to disposal sites in drums containing enough absorbent material to absorb at least twice the volume of the liquid contents. Additional processing prior to disposal may be performed at the disposal sites.

As part of a general review of the existing regulations and procedures for the packaging and transportation of radioactive materials, the NRC initiated in June 1975 the development of an "Environmental Impact Statement on the Transportation of Radioactive Material by Air and Other Modes." The final statement (NUREG-0170) was published in December 1977. The statement covered the transportation of all types of radioactive material--from spent fuel to low specific activity material--and indicated that transportation of radioactive material is being conducted under the present regulatory system in an adequately safe manner.

Based on this statement and the staff's continuing review of potential problems associated with transport of radioactive material, the staff concludes that no health and safety problem currently exists to warrant the immediate establishment of regulations prohibiting transporation of liquid waste. Present practices for disposal of radioactive waste, including on-site solidification of low-level liquid waste and disposal of special types of low-level waste such as scintillation vials, are being assessed as part of the ongoing NRC low-level waste program.

Low-Level Waste GEIS. The NRC staff believes that issuance of a separate programmatic GEIS is in this case neither required by NEPA nor necessary to conduct NRC's existing program for study and development of regulations for low-level waste disposal. The technical studies being conducted and environmental impact statements that will be prepared and published to guide and support NRC's regulatory development effort will form a sufficiently large informational and decisional base to obviate any need for a separate GEIS.

As discussed earlier, NRC is initiating efforts to prepare EIS's to guide development of (1) a waste classification regulation which will numerically define low-level waste, and (2) a regulation which will comprehensively define the administrative and institutional requirements as well as the technical requirements for disposal of low-level waste by shallow land burial and alternative methods. Advance Notices of Proposed Rulemaking are being published in the Federal Register to invite public comments and suggestions on the scope, content, and issues to be addressed in the respective statements.

Dated at Washington, D.C. this day of , 1978

For the Nuclear Regulatory Commission.

Samuel J. Chilk
Secretary of the Commission

ENCLOSURE 4