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Mr. Jerome D. Faltzman, Acting Director
Office of Strategic Planning and
International Programs
Office of Civilian Radioactive Waste
Management, RW-4
1000 Independence Ave, SW
U.S. Department of Energy
Washington, D.C. 20585

NOV 03 1993

Dear Mr. Faltzman:

SUBJECT: REVIEW OF U.S. REPORT, "SAFE AND ENVIRONMENTALLY SOUND MANAGEMENT OF RADIOACTIVE WASTES" TO THE UNITED NATIONS COMMISSION

This letter is in response to the request from William Danker of your office for review of the subject report by the Nuclear Regulatory Commission. The Division of High-Level Waste Management (HLWM) staff has conducted a partial review of the referenced document, consisting of those sections only applicable to the area of high-level waste management. Revisions to this report in the area of low-level waste management are being handled separately through the Division of Low-Level Waste Management. "Enclosure 1" is a hand written, line-in/line-out mark-up of this report. "Enclosure 2" is composed of inserts for sections of the report that required substantial revisions to the original text. Revisions to the document were made on pages 1-3, and on pages 5-8.

In the future, it is requested that all correspondence of this nature be addressed to the Repository Licensing and Quality Assurance Project Directorate of HLWM within NRC, to ensure proper dissemination and timely response from the staff.

If you have any questions concerning this subject, please contact Robert D. Carlson of my staff. He can be reached at (301) 504-2435.

Sincerely,

/S/

B. J. Youngblood, Director
Division of High-Level Waste Management
Office of Nuclear Material Safety
and Safeguards

Enclosures: As stated

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ENCLOSURE 1

Attached is the draft of Chapter 22 of Agenda 21, "Safe and environmentally sound management of radioactive wastes," which is to be a portion of the U.S. report to the UN Commission on Sustainable Development.

The plan is to circulate this draft for review, incorporate review comments into a second draft, and circulate the second draft for yet another review. Hopefully this will not only yield a draft which is acceptable to all, but is a process which can be completed by the end of October.

Under the guidelines which were developed for this project, the current draft is slightly too long. We have been asked to try keep chapters to seven pages of single-spaced text, and not to exceed ten pages.

If a new copy of Agenda 21 or other 'guideline' materials are needed for reviewing this draft, please contact Terry Caine at 202/646-6727 [DOE/OCRWM Technical Support Team].

FAX (202) 863-2220

Draft Ver ZZC.51

RECENT DEVELOPMENTS IN U.S. RADIOACTIVE WASTE MANAGEMENT

United States policy emphasizes the safe storage of radioactive wastes, the development of permanent solutions to radioactive waste disposal and the present generation's accountability for current radioactive waste inventories. While programs for implementing these policies have been evolving since the 1950's, this review describes developments and accomplishments within U.S. radioactive waste management since mid-1992. These include the passage of legislation, changes in administration policy, progress in ongoing domestic program activities, and new international activities.

The review of these changes is preceded by a synopsis of policy and programs which includes the legislative basis of U.S. radioactive waste management and a description of radioactive waste management activities.

SYNOPSIS OF RADIOACTIVE WASTE MANAGEMENT IN THE U.S.

U.S. radioactive waste policy and program missions are mandated by the U.S. Congress. The major legislation includes the:

- Atomic Energy Act of 1954; / Energy Reorganization Act of 1974
- Department of Energy Organization Act of 1977;
- Uranium Mill Tailings Radiation Control Act of 1978;
- Low-Level Radioactive Waste Policy Act of 1980 (amended 1985)
- Nuclear Waste Policy Act of 1982 (amended 1987); and the
- Resource Conservation and Recovery Act of 1989.
- Energy Policy Act of 1992

Through this legislation, the storage and disposal of most commercially generated Low-Level-Waste is assigned to the States, and all other wastes, including Low-Level-Waste of noncommercial origin and all Greater-Than-Class-C Low Level Waste, are the responsibility of the Federal Government. The Federal Agencies which are assigned radioactive waste management responsibilities include the Department of Energy (DOE), which is generally responsible for storing, transporting, and disposing radioactive waste; the Nuclear Regulatory Commission (NRC), which is responsible for regulating and licensing certain waste management facilities; and the Environmental Protection Agency (EPA) which is responsible for setting environmental protection standards.

Management Activities by Radioactive Waste Classification

The 1985 Amendments to the Low Level Radioactive Waste Management Act make the States responsible for the disposal of commercial Class A, B, and C Low-Level-Waste and encourage the States to form interstate Low-Level-Waste management Compacts. Most States and Compacts are expected to have near-surface disposal facilities ready within a few years. Until that time, most Low-

Level-Waste is being stored above ground at the point of generation.

The Federal Government is responsible for the disposal of Greater-than-Class-C Low-Level-Waste. Most Greater-than-Class-C Waste comes from the decommissioning of nuclear reactors. Another source is sealed radioactive sources. These waste are usually stored in engineered facilities where they will be maintained until permanent disposal facilities are available.

Tailings present few waste management problems today, but in 1978 when the Uranium Mill Tailings Radiation Control Act was enacted, seepage and wind erosion at tailings sites were a growing concern. The Act makes the DOE responsible for stabilizing or remediating inactive sites, defines the NRC's authority to regulate active sites, and requires that any groundwater contaminated by radioactive seepage from tailings piles be remediated to EPA standards.

DOE is planning to initiate Transuranic Waste disposal at the Waste Isolation Pilot Plant (WIPP). The WIPP is the only repository in the United States which is specifically designed and constructed for the disposal of Transuranic waste. The WIPP repository is built deep below the ground in bedded rock salt.

The 1982 Nuclear Waste Policy Act and the Act's 1987 Amendments make the DOE responsible for siting and developing a geologic repository for the permanent disposal of Spent Nuclear Fuel, and other high-level waste. This legislation also authorizes the DOE to site and develop a Monitored Retrievable Storage facility for Spent Fuel storage.

The DOE's ~~Spent Fuel~~ repository program has focused primarily on the characterization of a proposed repository site at Yucca Mountain in the State of Nevada. The goal of this research is to determine if the Yucca Mountain candidate site can permanently isolate radioactive materials with geologic and manmade barriers.

High-Level-Waste is also managed by DOE and will be disposed of with Spent Fuel. Most High-Level-Waste in the U.S. has been generated by defense related activities. In addition, there is a small amount of High-Level-Waste which was generated by the sole U.S. commercial nuclear fuel reprocessing facility which shut down in 1972. Because High-Level-Waste is usually in a liquid form, and the planned repository will only accept solid waste for disposal, most of this waste will be converted to one or more glass forms. The first of three new waste vitrification facilities planned for this purpose should begin operations in the near future.

Mixed-Wastes contain radioactive and hazardous materials. A Mixed-Waste, therefore, may be a subcategory of High-Level-Waste, Transuranic Waste, or Low-Level-Waste and is regulated through both radioactive waste legislation and the Resource Conservation

and Recovery Act (RCRA). The RCRA is the basic law guiding the management and treatment of hazardous wastes.

The management of commercial Class A, B, and C Low-Level-Mixed-Wastes is the responsibility of the States, but the storage and disposal of all other Mixed-Wastes is the responsibility of the DOE. The DOE is engaged in a massive research and development program which focuses on mixed waste management and the remediation of sites contaminated by mixed wastes. An in-situ vitrification process for Mixed-Wastes is also under development.

RECENT DEVELOPMENTS IN U.S. RADIOACTIVE WASTE MANAGEMENT

Since the middle of 1992, radioactive waste management activities have been impacted by new legislation and changes in the administration following the recent national elections. The DOE, as the Agency directly responsible for most Federal storage and disposal activities, has been especially affected by these developments. In addition, there has been continuing progress in ongoing waste management program activities.

New Legislation Affecting Radioactive Waste Management

Three Acts affecting radioactive waste management were passed by the Congress and enacted into law in October, 1992.

The Comprehensive National Energy Policy Act (EnPA) of 1992 contains several provisions relevant to radioactive waste management. Section 801 of the Act requires the EPA to ~~develop new standards for the protection of the public from releases of radioactive materials at the proposed Yucca Mountain repository for Spent Fuel.~~ See Insert A
Section 803 of the Energy Policy Act directs the Secretary of Energy to report on the adequacy of current program plans for managing the radioactive waste which could be generated by nuclear power plants constructed and licensed after October 24, 1992. The Energy Policy Act also extends the term of the Office of the Waste Negotiator, an independent office tasked with finding a volunteer community to host a centralized Monitored Retrievable Storage facility for Spent Fuel.

The WIPP Land Withdrawal Act withdraws public lands for WIPP use and establishes a new regulatory framework for WIPP involving the EPA. Once the provisions of the law are met, possibly at the end of 1993, the DOE will ship Transuranic Waste to the WIPP for facility testing.

The Federal Facility Compliance Act contains numerous provisions which affect the management of Mixed-Wastes. Among these is a requirement that the DOE, within three years, prepare treatment plans for all Mixed-Wastes in the Department's possession. The Act also requires the development of a national inventory of Mixed-Wastes and treatment capacity.

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New Administrative Guidance

The newly appointed U.S. Secretary of Energy, Hazel R. O'Leary, has reviewed the DOE's program strategy and issued guidelines which include continuing past administration commitments but increase DOE emphasis in Spent Fuel management areas.

The new guidelines include continuing DOE efforts to improve waste management technology, quicken the clean-up of Federal Government sites, accelerate the development of radioactive waste disposal capabilities, and increase Departmental interactions with the public. DOE is to proceed, as planned, with site-characterization activities at the Yucca Mountain site. DOE is to proceed with an evaluation of Multiple Purpose Canisters (MPC) for Spent Fuel storage, transportation, and disposal. External views are to be sought on the DOE's options for Spent Fuel storage. DOE is to establish a process for ensuring the serious involvement of program stakeholders and the public in shaping decisions within the Spent Fuel program. The Secretary is also committed to creating a position for a Chief Scientist to oversee scientific investigation at Yucca Mountain.

The DOE also implemented in 1992, under the former Secretary, a waste minimization policy to reduce the amount of radioactive waste and pollution generated through the Department's radioactive materials and waste management activities. The key elements of this policy include avoiding or reducing the generation of waste, recycling or reusing waste which cannot be eliminated, and treating the remaining waste to reduce volume and toxicity.

Developments in Storage, Transportation, Disposal & Remediation

The following summary reflects current progress across all areas of radioactive waste management in fulfilling program missions and implementing new legislative directions and administration policy since mid-1992. This list also reflects the increased concern with public consultation and review.

Low Level Waste Management

During 1993, several states have made substantial progress toward developing Low Level Waste disposal capabilities. The Texas Low-Level Radioactive Waste Disposal Authority expects to submit its final license application to the State's licensing authority by the end of 1993. The State of California has approved the application of a commercial firm to build and operate a Low Level Radioactive Waste facility.

The DOE is also investigating metal melting, decontamination, and recycling as a strategy for reducing demand for Low-Level Waste disposal facilities. The recycled metal would be used within the DOE complex.

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Greater-Than-Class C Waste Management

The DOE expects to complete several analyses of economic and management issues relating to Greater-Than-Class C disposal options during 1993. On the basis of the findings, DOE will focus its Greater-Than-Class C efforts during 1994 on providing technical assistance to the States and Compact Regions, and on increasing the DOE's capacity to accept Greater-Than-Class C waste at the Department's facilities.

Tailings Management

DOE's Uranium Mill Tailings Remedial Action Project has been conducting surface and near surface remedial activity since 1983. During 1993 DOE began work on eight of the 14 sites waiting to be remediated, and plans to start work on the remaining six sites in 1994. A groundwater remediation plan which will affect a number of these sites will be issued in 1994.

Transuranic Waste Management

The WIPP facility for Transuranic Waste is maintaining a readiness to accept limited quantities of Transuranic Waste for in situ testing. The DOE anticipates that this testing will be initiated in 1994.

Spent Fuel and High Level Waste Management Developments

In response to recent legislation, the DOE has assessed the adequacy of current Spent Fuel management planning to accommodate future storage and disposal needs. The report concludes that it is too early to predict either the future impact of waste treatment and reduction technologies or the actual extent of growth in Spent Fuel inventories which may be caused by the construction of new power plants.

The ground breaking for the Exploratory Studies Facility (ESF) at Yucca Mountain began the end of November, 1992. The ESF is an underground laboratory which will house test facilities for underground studies of Yucca Mountain's suitability for a Spent Fuel and High-Level-Waste repository.

~~In January, 1993, the Secretary of Energy proposed that a phased repository licensing strategy be considered for the proposed repository at the Yucca Mountain site. The proposed strategy would permit licensing issues to be resolved in phases, allowing the NRC to make formal findings periodically based on site-specific and materials-specific data.~~ See Insert B

The DOE also submitted a report to the NRC in March, 1993 on erosion studies at Yucca Mountain. The report is the first of several planned topical reports to the NRC as part of an issue-resolution process between the two Agencies. The report

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concludes that there is no evidence of ~~any~~ the potentially adverse of extreme erosion condition ~~affecting repository development~~ at the Yucca Mountain Site.

Advanced conceptual waste package design work began in October, 1992. The purpose of this work is to evaluate seven alternative design concepts for ~~containing repository~~ isolating radioactive waste within engineered barriers ~~until most of the radioactivity has fallen to levels below regulatory concern~~ in accordance with established regulatory limits.

The DOE has begun assessing the feasibility of designing and developing a Multiple-Purpose-Container (MPC) system to receive, store, transport, and eventually dispose of Spent Fuel. This plan could facilitate the safe storage of Spent Fuel at reactor sites, reduce the amount of Spent Fuel the DOE would need to accept at an MRS facility, and simplify handling, transportation, and disposal.

DOE is also evaluating the possible use of actinide-burning reactors to minimize high-level radioactive waste. In addition, the National Academy of Sciences (NAS) has undertaken an evaluation of the potential effects of partitioning and transmutation technologies on the DOE's High-Level-Waste management program. The NAS is expected to complete its report in 1994.

Among new developments in waste transportation, the DOE and the Commercial Vehicle Safety Alliance conducted a pilot course in August, 1992, to train state commercial vehicle inspectors in new procedures for the inspection of Spent Fuel and High-Level-Waste shipments. In November, 1992, the DOE also issued an outline of the Department's plans to provide planning, monitoring, and emergency response assistance to Local Governments along Spent Fuel and High Level Waste transportation routes. The draft Transportation Plan will be issued and working groups formed to develop route-selection methodologies by the end of 1993.

The DOE also established an environmental audit program for the Yucca Mountain project which is being implemented in 1993. The purpose of this plan is to assure that site characterization activities at Yucca Mountain proceed with minimal negative impact on the physical, human, plant, and animal environment.

Mixed Wastes Management

In keeping with recent waste minimization policy developments, the DOE is funding extensive research in Mixed-Waste treatment technologies. As part of this effort, Lawrence Livermore National Laboratory is presently developing an engineering and design facility to test and evaluate experimental mixed waste treatment technologies.

In response to recent legislation, the DOE has also developed a national inventory of Mixed-Waste and of Mixed-Waste treatment capacity. This report was issued in April, 1993.

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Public Interactions & Education Across All Waste Management Areas

The DOE is making a concerted effort to make information on the Department's programs available for public comment and review, and to solicit the views of stakeholders on new developments within all of DOE's radioactive waste management programs. In August and September, 1993, the DOE invited program stakeholders and interested members of the public to workshop meetings to present their views on the current public consultative process and on steps they believe DOE should take to improve the process. DOE reports summarizing these workshops will be issued before the end of 1993.

The DOE also participates in educational programs designed to increase scientific and waste management literacy. In July, 1992, the Department began a nationwide distribution of a new DOE resource curriculum on nuclear wastes for high school students. The DOE also held two teleconferences on the curriculum for teachers which were downlinked at sites throughout the entire country.

In addition, the DOE recently announced a new cooperative agreement with a consortium of universities to establish an environmental restoration and waste management education pilot center in the State of South Carolina. The purpose of the center is to increase scientific and engineering study and research opportunities for college undergraduate and graduate students interesting in careers in environmental restoration and waste management.

In the area of public information, the League of Women Voters will publish an updated version of its Nuclear Waste Primer at the end of 1993. The primer is an introduction to radioactive waste management which covers all waste classifications. The publication is written and produced by the League of Women Voters, a nationwide citizens organization, but published with funds from the DOE.

Developments in Regulation & Oversight

The EPA is continuing its programs to develop or refine environmental standards and criteria applicable to radioactive waste management program activities. Supplemental standards for inactive mill tailings sites are being finalized by the EPA for release in 1993. The EPA is also preparing cleanup standards for radioactively contaminated Federal Agency sites which are to be released in 1994. In addition, the EPA is developing information on the sources and risks from the use or disposal of certain Naturally Occurring Radioactive Materials (NORM). A final report will be issued before the end of 1993.

As a consequence of legal challenges brought by public interest groups in recent years, the courts have ~~overturned some~~ environmental protection standards affecting repository development. The remanded aspects of the

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EPA is expected to complete, in 1993, the repromulgation of individual and groundwater protection standards and regulatory criteria applicable to the WIPP Transuranic Waste repository. ~~New EPA ground-water standards and criteria applicable to the potential Yucca Mountain site will, at the direction of Congress, be based on findings and recommendations by the National Academy of Sciences (NAS).~~ The NAS is expected to release its recommendations in ~~early~~ late 1994. See Insert C

The NRC is continuing to ~~revise~~ evaluate its regulations affecting radioactive waste management programs to ensure uniformity, clarity and completeness. In addition, the NRC ~~has increased its activities affecting site characterization and~~ potential repository development at Yucca Mountain. See Insert D

The NRC revised its ~~1993~~ 1994 standards for worker radiation exposure, effective January ~~1994~~. Because NRC licensees are required to ensure that radiation doses be kept as low as reasonably possible, most NRC licensed facilities in the U.S. are already in compliance with the new rules.

The NRC recently issued revised guidelines for determining classifications of Low Level Waste. The purpose of these guidelines is to develop consistent classifications for use among the States and Federal Agencies. After receiving additional comments, the NRC will issue a final technical position document.

The NRC has continued to take steps to ensure that the regulations governing High-Level-Waste disposal are clear and complete. ~~NRC has prepared proposed rule making regarding accident conditions and controlled use areas, and modifying its definition of "important to safety."~~ Public comment is being collected and summarized at this time. See Insert E

Two final NRC Staff Technical Positions were issued in the second half of 1992 to provide regulatory guidance to DOE. These documents identify the geologic fault displacement hazards and seismic hazards which the NRC expects to be used in regulatory assessments, and identify the modeling methodology the NRC believes should be used in evaluating thermal load design, at the Yucca Mountain site.

The NRC has also begun preparing the License Application Review Plan (LARP) which is guidance to the NRC staff for reviewing the DOE's Spent-Fuel and High-Level-Waste repository licensing application. The NRC expects to complete the development of its review strategies during 1993 ~~and to~~ issue the first LARP draft in 1994 and complete the final document in 2001.

INTERNATIONAL ACTIVITIES

U.S. radioactive waste management programs also participate in international information exchange and cooperative activities.

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International activities are viewed as important because of their potential contribution to developing consensus in radioactive waste management, cost savings and improved program performance through cooperative technology development and sharing of technical information, and broadening the experience base for decision making.

The United States is a member of the International Atomic Energy Agency (IAEA), and participates in several IAEA activities including the Radioactive Waste Safety Standards (RADWASS) program, the International Radioactive Waste Management Advisory Committee (INWAC), the Packaging and Transportation of Radioactive Materials (PATRAM) symposium, and the coordinated research program in the behavior of spent fuel and storage facility components during long term storage (BEFAST). The DOE also supports the activities of the Waste Management Advisory Program (WAMAP) which provides technical assistance to developing countries. In addition, both the DOE and EPA participate in other IAEA activities on a case by case basis.

As a proactive participant in IAEA activities, the U.S. supports efforts to develop safety standards, guidelines and codes of practice regarding Spent Nuclear Fuel and High-Level-Waste transportation, storage, and disposal (the RADWASS program documents). These guidelines include program support for the principle that each generation and country which produces radioactive waste should accept responsibility for the safe management and disposal of that waste. This principle has generally been interpreted to mean that countries may not, either through neglect or intentional policy, subject the people of other countries or future generations to those hazards. Currently, the U.S. position on how such guidelines and principles should be applied to the London Convention of 1972, which deals with ocean dumping of radioactive wastes, is under consideration.

In addition to the above, the U.S. is also engaged in one cooperative project with the IAEA, and several proposals for other cooperative projects are under consideration. The current cooperative project is an EPA and IAEA radon exposure assessment which is expected to be completed in 1994. The proposed projects include a joint EPA, DOE and IAEA environmental radiation remediation and risk management assistance to the former Eastern Block and Soviet Union countries. A second calls for cooperation among the same agencies in assessing the risks posed by radioactive waste packages and decommissioned nuclear reactors dumped in the Kara and Barents Seas. A third proposal calls for EPA, IAEA, and the Institute of Hygiene and Epidemiology in Prague to cooperate in a radiological survey in the Czech Republic.

The DOE also routinely exchanges information with other countries on radioactive waste management program activities and actively promotes international understanding and consensus on radioactive

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waste issues through cooperative and bilateral agreements with other countries and international organizations.

DOE international activities over the past two years include the following agreements. In December, 1992, the DOE and Sweden finalized an agreement to conduct joint experimental and analytical development activities at Sweden's underground Hard Rock Laboratory. Progress under this agreement was reviewed at a bilateral meeting in October, 1993. Also in December, 1992, the DOE and Spain's Nuclear Waste Management Company (ENRESA) announced a bilateral agreement which allows for information exchange on geologic site characterization, repository design, and radioactive storage. The DOE and Japan's Power Reactor and Nuclear Fuel Development Corporation also formed an agreement to cooperate on radionuclide transport research pertaining to repository development issues. The U.S. and Canada held a bilateral meeting under the eighth cooperative agreement, in April, 1993 to review progress in task areas including site characterization, field and laboratory testing, and performance assessment. The U. S. and Switzerland also a held a bilateral meeting in November, 1992 to review progress in cooperative agreement tasks covering joint site characterization research at the Grimsel Pass underground research facility.

In addition, DOE is presently funding an exchange program under a Memorandum of Cooperation with Russia which commits the two countries to developing technical exchange and other relationships. The new program will permit universities in each country to host researchers from the other country during 1994 to engage in research in environmental restoration, the management of radioactive wastes of all types, waste minimization, and geologic disposal.

The EPA is also actively engaged with other programs in cooperative international activities. Current and newly proposed EPA activities are directed toward participation in international policy activities concerned with radiation protection and waste management issues, impact assessment and remediation assistance, demonstration projects for clean-up technologies, and research into environmental effects of low level radiation and the movement and partitioning of radionuclides in groundwater.

The U.S. also participates in the activities of the Nuclear Energy Agency (NEA). The NEA's goals include the initiation and coordination of international cooperative work in radioactive waste management. The U.S. has been particularly active in the Radioactive Waste Management Committee (RWMC) which reviews and gives direction to NEA project activity, and provides a forum for discussion and consensus development in all areas of radioactive waste management. U.S. participation includes RWMC advisory groups of relevance to geologic disposal including the Performance Assessment Advisory Group (PAAG) and the Coordinating Group on Site Evaluation and Design of Experiments for Radioactive Waste (SEDE). U.S. participation also includes the

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Committee on Radiation Protection and Public Health (CRPPH) which is a mechanism for consulting with the International Conference on Radiation Protection (ICRP) on radiation standards. In addition, the U.S. participates in the work of the Public Information Working Group which exchanges information on the experiences of member countries in responding to the public's concerns.

ENCLOSURE 2

NRC PROPOSED REVISIONS TO CHAPTER 22 OF AGENDA 21, "SAFE AND ENVIRONMENTALLY SOUND MANAGEMENT OF RADIOACTIVE WASTES" OF THE U.S. REPORT TO THE UNITED NATIONS COMMISSION ON SUSTAINABLE DEVELOPMENT

(Note: Revised text is off-set with quotation marks " ".)

1.) Insert A - **Page 3, para. 4, revise 2nd sentence with the following:** Section 801 of the Act requires the EPA to ..."set generally applicable health and safety standards for the Yucca Mountain Site, based upon and consistent with the findings and recommendations of the National Academy of Sciences (NAS). Furthermore, the EnPA also requires NRC to amend its technical requirements and criteria to be consistent with EPA standards."

2.) Insert B - **Page 5, para. 6, replace entire para. with the following:** "In January 1993, the Secretary of Energy proposed that a phased repository licensing strategy be considered for the proposed repository at the Yucca Mountain Site. One aspect of this strategy would seek a construction authorization and a license to receive and possess at the same time. However, the proposed strategy needs to be modified to satisfy NRC's regulation 10 CFR Part 60.41(a), requiring that the surface facilities be substantially complete before a license to receive and possess can be issued. Furthermore, the proposed strategy would permit licensing issues to be resolved in phases, allowing the NRC to make formal findings periodically by issuing Topical Reports based on site-specific and materials-specific data. However, formal findings resulting from topical report reviews do not bind the NRC staff, the Commission, or any Licensing Review Board, should new data effecting the topic of the report be generated."

3.) Insert C - **Page 8, para. 1, revise 2nd sentence with the following:** "EPA was directed by congress in the EnPA of 1992 to set generally applicable standards for the Yucca Mountain Site,"... based on findings and recommendations by NAS.

4.) Insert D - **Page 8, para. 2, revise 2nd sentence with the following:** In addition, the NRC ..."is continuing its pre-licensing consultations with DOE related to site characterization and"... potential repository development at Yucca Mountain.

5.) Insert E - **Page 8, para. 5, replace 2nd sentence with the following:** "NRC has prepared a proposed rulemaking clarifying requirements for the investigation and evaluation of potentially adverse conditions and their relationship to evaluations of repository performance."