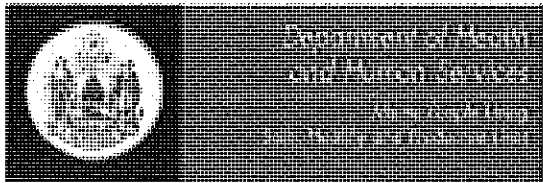


MAINE STATE LEGISLATURE

The following document is provided by the
LAW AND LEGISLATIVE DIGITAL LIBRARY
at the Maine State Law and Legislative Reference Library
<http://legislature.maine.gov/lawlib>



Reproduced from electronic originals
(may include minor formatting differences from printed original)



Paul R. LePage, Governor

Mary C. Mayhew, Commissioner

Department of Health and Human Services
Commissioner's Office
221 State Street
11 State House Station
Augusta, Maine 04333-0011
Tel.: (207) 287-3707; Fax (207) 287-3005
TTY Users: Dial 711 (Maine Relay)

November 16, 2012

MEMORANDUM

TO: Senator Kevin Raye, President of the Senate, and Representative Robert Nutting, Speaker of the House

FROM: Mary Mayhew, Commissioner
Department of Health and Human Services

SUBJECT: State Nuclear Safety Inspector's August 2012 Monthly Report to the Legislature on the Interim Spent Fuel Storage Facility in Wiscasset, Maine

Legislation enacted in the spring of 2008 requires the State Nuclear Safety Inspector to provide monthly reports to the President of the Senate, Speaker of the House, the U.S. Nuclear Regulatory Commission, and Maine Yankee. The report focuses on activities at the site and includes highlights of the national debate on storing and disposing the used nuclear fuel. For your convenience highlights of local and national events are included as a preface to the report.

The enclosed report provides the information required under Title 22 of the Maine Revised Statutes Annotated §666, as enacted under Public Law, Chapter 539, in the second regular session of the 123rd Legislature.

Should you have questions about its content, please feel free to contact Mr. Patrick J. Dostie, State Nuclear Safety Inspector, at 287-6721.

MCM/klv

Enclosures

- cc: Mark Lombard, U.S. Nuclear Regulatory Commission
- Monica Orendi, U.S. Nuclear Regulatory Commission, Region I
- James Connell, Site Vice President, Maine Yankee
- Katrin Teel, Senior Policy Advisor, Governor's Office
- Sheila Pinette, DO, Director, Maine Center for Disease Control and Prevention
- Patricia W. Aho, Commissioner, Department of Environmental Protection
- Richard Davies, Maine Public Advocate
- Lieutenant Anna Love, Special Services Unit, Maine State Police
- Nancy Beardsley, Director, Division of Environmental Health
- Jay Hyland, PE, Manager, Radiation Control Program

State Nuclear Safety Inspector Office
Maine CDC – DHHS

August 2012 Monthly Report to the Legislature

Executive Summary

As part of the State's long standing oversight of Maine Yankee's nuclear activities, legislation was enacted in the second regular session of the 123rd and signed by Governor John Baldacci requiring that the State Nuclear Safety Inspector prepare a monthly report on the oversight activities performed at the Maine Yankee Independent Spent Fuel Storage Installation facility located in Wiscasset, Maine.

The report covers activities at the storage facility, including the State's on-going environmental radiation surveillance and the national debate over the licensing and construction of a geologic repository for the disposal of spent nuclear fuel at Yucca Mountain in Nevada. The report's highlights assist readers to focus on the significant activities that took place during the month, both locally and nationally.

LOCAL:

- The Nuclear Regulatory Commission (NRC) responded to Maine Yankee's exemption requests from specific requirements of the physical protection requirements to prevent radiological sabotage. The NRC granted one exemption and denied the remaining requests since they were determined to be either not applicable to the Maine Yankee ISFSI facility or already met by Maine Yankee's current program. Since the information was security-related no information was available for public disclosure.
- The Nuclear Regulatory Commission (NRC) responded to Maine Yankee's response that it disagreed with the NRC's position that it had violated NRC's regulations on foreign ownership, control and domination. The NRC stated...."An applicant is considered to be foreign owned, controlled, or dominated whenever a foreign interest has the "power", direct or indirect, *whether or not exercised*, to direct or decide matters affecting the management or operations of the applicant." The NRC noted that Maine Yankee was "owned, controlled, or dominated by three foreign corporations – Iberdrola, based in Spain (38percent); National Grid, based in the United Kingdom (24percent); and Emera (*based in Canada*) (12 percent)." Since there was no negation plan in affect to counteract any foreign influence at the time of the merger between Northeast Utilities and NSTAR, which increased the overall foreign ownership to 74%, the NRC determined that Maine Yankee was in violation of its Part 50 requirements and assessed it its lowest violation category, a Severity Level 4.
- At the request of the three Yankee decommissioned sites, the Department of Energy (DOE) and its contractor, Sandia National Laboratory, visited Maine Yankee's ISFSI to get a sense of what transportation infrastructure existed at the site, what enhancements would have to be made to upgrade the infrastructure, and how long it would take to accomplish those enhancements. The visit was part of a DOE effort to lay the groundwork for future implementation of consolidated storage and transportation of used nuclear fuel from shutdown sites. According to Maine Yankee the DOE and contractors were very interested in Maine Yankee's barge slip as a potential option to ship the used fuel. The DOE and contractors conducted similar visits to Connecticut Yankee and Yankee Rowe in Massachusetts.

The national highlights primarily focused on proposed legislation, Court and federal orders as noted below:

National:

- New Mexico Senator Bingaman introduced S.3469, The Nuclear Waste Administration Act, to manage the nation's used nuclear fuel and defense related wastes. The bill closely tracked the recommendations from the Blue Ribbon Commission's (BRC) report issued last January. However, the bill did depart from the BRC's recommendation of a federal corporation, similar to the Tennessee Valley Authority, to administer the nation's nuclear waste stockpile. The bill instead recommended a new, independent executive branch agency. Although the bill would allow for one pilot storage facility to be built before a host community agreed to a repository, the bill did require "an agreement for a repository before allowing the new agency to store nuclear waste at other storage facilities." The other three senior senators, who assisted in drafting the legislation, parted ways on the issue of storage facilities. Since they wanted to move faster with storage, they expressed concern the legislation's insistence on prior congressional approval for a repository location as delaying progress for decades in the moving of spent nuclear fuel to consolidated storage facilities.
- The U.S. Court of Appeals for the District of Columbia Circuit issued an order to hold in abeyance its final decision until December 14th on the petition to compel the Nuclear Regulatory Commission to reopen its licensing proceedings on the Yucca Mountain nuclear waste repository in Nevada. Two of the three judges agreed that the Nuclear Regulatory Commission was in violation of the Nuclear Waste Policy Act. However, two of the three judges opted to wait for further clarification from pending congressional appropriation deliberations before issuing the Court's decision.
- The Nuclear Regulatory Commission (NRC) voted unanimously not to issue any final decisions on granting licenses to build new nuclear power plants and issuing 20 year license renewals to existing power plants, pending resolution of the agency's waste confidence rule overturned by an Appeals Court on June 8th. The NRC's Waste Confidence Rule stated that the Commission had reasonable assurance that spent fuel could be safely stored for at least 60 years beyond a reactor's license expiration. According to the DC Circuit the NRC's Rule amounted to a major federal action necessitating an environmental impact statement or a finding of no significant environmental impact. After the Court's ruling multiple environmental organizations filed a petition with the Commission to postpone its final decisions until it had completed an environmental review of its waste confidence rule. The NRC's order impacted eight license renewals, nine applications for new reactor construction, one current operating license and one early site permit.

Introduction

As part of the Department of Health and Human Services' responsibility under Title 22, Maine Revised Statutes Annotated (MRSA) §666 (2), as enacted under Public Law, Chapter 539 in the second regular session of the 123rd Legislature, the foregoing is the monthly report from the State Nuclear Safety Inspector.

The State Inspector's individual activities for the past month are highlighted under certain broad categories, as illustrated below. Since some activities are periodic and on-going, there may be some months when very little will be reported under that category. It is recommended for reviewers to examine previous reports to ensure connectivity with the information presented as it would be cumbersome to continuously repeat prior information in every report. Past reports are available from the Radiation Control Program's web site at the following link: www.maineradiationcontrol.org and by clicking on the nuclear safety link in the left hand margin.

Commencing with the January 2010 report the glossary and the historical perspective addendum are no longer included in the report. Instead, this information is available at the Radiation Control Program's website noted above. In some situations the footnotes may include some basic information and may redirect the reviewer to the website. In October 2011 the format of the report was changed to include an executive summary which replaced the official memorandum to the legislative leadership transmitting the report. To further streamline

efforts, beginning in August of 2012, the report featured hyperlinks as opposed to copies of documents attached to the report for those readers who wished to review the documentation that was cited.

Independent Spent Fuel Storage Installation (ISFSI)

During August the general status of the ISFSI was normal, with no instances of spurious alarms due to environmental conditions.

There was one fire-related impairment for the month and it occurred on August 18th. During routine checks a conference room door was found not latching reliably. The closing mechanism was adjusted and retested satisfactorily.

There were no security-related impairments for the month. However, sixteen security events were logged. Fifteen of the sixteen events were related to transitory and environmentally related camera issues. One event was due to routine maintenance.

There were twenty condition reports¹ (CR) for the month of August and they are described below.

- 1st CR: Was written to track open items from a monthly security drill.
- 2nd CR: Was written to track open items from the transition of security firms.
- 3rd CR: Was written to track open items from recommendations made after visiting other sites.
- 4th CR: Documented a person taking site photos from Ferry Road.
- 5th CR: Documented the fire door impairment noted above.
- 6th CR: Documented the issue of security equipment not being inspected as per the established schedule.
- 7th CR: Was written to track open items from the equipment inspection.
- 8th CR: Addressed the review of a new document not being completed within the expected time frame.
- 9th CR: Documented open items from a review of a planned storage relocation project.
- 10th CR: Documented minor damage to a lawn mower.
- 11th CR: Was written to document a minor cut to a security officer's finger.
- 12th CR: Addressed a breaker on a man-lift tripping repeatedly.
- 13th CR: Documented a very minor spill of diesel fuel to the pavement. The amount was less than a teaspoon and was immediately wiped up.
- 14th CR: Was written to document the disposal of the spill clean-up material.
- 15th CR: Addressed potential weakness in site access controls.
- 16th CR: Documented one in-process background check returned with missing data.
- 17th CR: Was written to document one expired site badge.
- 18th – 19th CRs: Were written to track open items from two separate surveillance activities.
- 20th CR: Documented the issue of site posting not having the mandated federal statutory citation on the sign.

Other ISFSI Related Activities

1. On August 6th the Nuclear Regulatory Commission (NRC) responded to Maine Yankee's exemption requests from specific requirements of the physical protection requirements to prevent radiological sabotage. The NRC granted one exemption and denied the remaining requests since they were determined to be either not applicable to the Maine Yankee ISFSI facility or already met by Maine

¹ A condition report is a report that promptly alerts management to potential conditions that may be adverse to quality or safety. For more information, refer to the glossary on the Radiation Program's website.

Yankee's current program. Since the information was security-related no information was available for public disclosure.

2. On August 9th the Nuclear Regulatory Commission (NRC) responded to Maine Yankee's response that it disagreed with the NRC's position that it had violated NRC's regulations on foreign ownership, control and domination. The NRC stated that even though Maine Yankee's Part 50 license does not authorize Maine Yankee to operate an electric power production facility, it still must abide by all of the requirements of the NRC's Part 50 requirements unless it is specifically exempted. According to the NRC's standard review plan"An applicant is considered to be foreign owned, controlled, or dominated whenever a foreign interest has the "power", direct or indirect, *whether or not exercised*, to direct or decide matters affecting the management or operations of the applicant." The NRC noted that Maine Yankee was "owned, controlled, or dominated by three foreign corporations – Iberdrola, based in Spain (38 percent); National Grid, based in the United Kingdom (24 percent); and Emera (*based in Canada*) (12 percent)." Since there was no negation plan in affect to counteract any foreign influence at the time of the merger between Northeast Utilities and NSTAR, which increased the overall foreign ownership to 74%, the NRC determined that Maine Yankee was in violation of its Part 50 requirements and assessed it its lowest violation category, a Severity Level 4.
3. On August 10th the Nuclear Regulatory Commission (NRC) notified Maine Yankee that it had received its June 8th exemption request from specific requirements from the amended emergency planning rule. The NRC staff noted that sufficient information was provided to proceed with a detailed evaluation of Maine Yankee's request.
4. On August 16th an individual from another nuclear plant site was observed taking pictures from Ferry Road. The Local Law Enforcement Agencies were notified. The Wiscasset Police Department and the Lincoln County Sheriff's Office responded and intercepted the individual. The person was interviewed and counseled. Since the individual was not trespassing, no notification to the Nuclear Regulatory Commission's Operations Center was necessary.
5. On August 28th, at the request of the three Yankee decommissioned sites, the Department of Energy (DOE) and its contractor, Sandia National Laboratory, visited Maine Yankee's ISFSI to get a sense of what transportation infrastructure existed at the site, what enhancements would have to be made to upgrade the infrastructure, and how long it would take to accomplish those enhancements. The visit was part of a DOE effort to lay the groundwork for future implementation of consolidated storage and transportation of used nuclear fuel from shutdown sites. According to Maine Yankee the DOE and contractors were very interested in Maine Yankee's barge slip as a potential option to ship the used fuel. The DOE and contractors conducted similar visits to Connecticut Yankee and Yankee Rowe in Massachusetts.

Environmental

There is no information to report this month.

Other Newsworthy Items

1. On August 1st New Mexico Senator Bingaman introduced S.3469 - The Nuclear Waste Administration Act - to manage the nation's used nuclear fuel and defense related wastes. The bill closely tracked the recommendations from the Blue Ribbon Commission's report issued last January. However, the bill did depart from the BRC's recommendation of a federal corporation,

similar to the Tennessee Valley Authority, to administer the nation's nuclear waste stockpile. The bill instead recommended a new, independent executive branch agency. Although the bill would allow for one pilot storage facility to be built before a host community agreed to a repository, the bill did require "an agreement for a repository before allowing the new agency to store nuclear waste at other storage facilities." The other three senior senators, who assisted in drafting the legislation, parted ways on the issue of storage facilities. Since they wanted to move faster with storage, they expressed concern the legislation's insistence on prior congressional approval for a repository location as delaying progress for decades in the moving of spent nuclear fuel to consolidated storage facilities. For more information the legislation's web link can be accessed through the underlined text above.

2. On August 1st the 15-state Southern Legislative Conference of the Council of State Governments issued a policy urging Congress, the Obama Administration, and the Nuclear Regulatory Commission to meet its federal obligations by adopting the Blue Ribbon Commission's recommendations; by promulgating legislative and administration actions to enact nuclear waste reforms and begin moving used nuclear fuel from decommissioned and operating sites to centralized facilities; by consulting with state, local, and tribal officials on transportation to centralized storage facilities; and by completing the Yucca Mountain license application review. For more information the policy's web link can be accessed through the underlined text above.
3. On August 2nd the Nuclear Waste Strategy Coalition (NWSC) held its bi-weekly conference call to update its membership on the three litigation cases before the Court (the nuclear waste fund fee suspension, the waste confidence rule, and the mandamus case), the Department of Energy's report that was due July 26th on their roadmap for implementing the Blue Ribbon Commission's recommendations, congressional updates on appropriations and Senator Bingaman's bill on nuclear waste management, and upcoming events and meetings. The NWSC is an ad hoc organization of state utility regulators, state attorneys general, consumer advocates, electric utilities, local governments, tribes, and associate members. Its primary focus is to protect ratepayer payments into the Nuclear Waste Fund and to support the removal and ultimate disposal of spent nuclear fuel and high-level radioactive waste currently stranded at numerous sites across the nation.
4. On August 3rd the U.S. Court of Appeals for the District of Columbia Circuit issued an Order to hold in abeyance its final decision until December 14th on the petition to compel the Nuclear Regulatory Commission to reopen its licensing proceedings on the Yucca Mountain nuclear waste repository in Nevada. Two of the three judges agreed that the Nuclear Regulatory Commission was in noncompliance with the Nuclear Waste Policy Act. However, two of the three judges opted to wait for further clarification from pending congressional appropriation deliberations before issuing the Court's decision. The web link for the order can be accessed through the underlined text above.
5. On August 3rd the Nuclear Regulatory Commission issued a meeting notice for August 16th-17th to get stakeholder feedback in identifying enhancements to the current licensing and inspection programs for spent nuclear fuel storage and transportation. The topics covered compatibility of between storage and transportation requirements for retrievability, cladding integrity and safe handling; regulating stand-alone Independent Spent Fuel Storage Installations; administration and amendments to storage certificates of compliance; applicability, compatibility, and consistency of spent fuel storage requirements and guidance for specific licensees, general licensees, and certificate of compliance holders, and an update on the Commission's inspection enhancement initiative. For more information the meeting notice's web link can be accessed through the underlined text above.
6. On August 3rd the National Association of Regulatory Utility Commissioners, the Nuclear Energy Institute and the Nuclear Waste Strategy Coalition issued press releases expressing their

disappointment at the DC Circuit Court of Appeals' decision in the mandamus case to hold in abeyance whether the Nuclear Regulatory Commission should be directed to resume its proceedings on the Yucca Mountain license application. All three believe the decision delays the inevitable. The web links for the new releases can be accessed through the underlined texts above.

7. On August 7th the Nuclear Regulatory Commission (NRC) voted unanimously not to issue any final decisions on granting licenses to build new nuclear power plants and issuing 20 year license renewals to existing power plants, pending resolution of its waste confidence rule that was overturned by an Appeals Court on June 8th. The NRC's Waste Confidence Rule stated that the Commission had reasonable assurance that spent fuel could be safely stored for at least 60 years beyond a reactor's license expiration. According to the DC Circuit the NRC's Rule amounted to a major federal action necessitating an environmental impact statement or a finding of no significant environmental impact. After the Court's ruling multiple environmental organizations filed petitions with the Commission to postpone its final decisions until it had completed an environmental review of its waste confidence rule. The NRC's order impacted eight license renewals, nine applications for new reactor construction, one current operating license and one early site permit. For more information the web link for the order can be accessed through the underlined text above.
8. On August 13th economists at the Brattle Group issued a report, entitled, "Centralized Dry Storage of Nuclear Fuel – Lessons for U.S. Policy from Industry Experience and Fukushima." Their study recommended that the federal government "restart a spent fuel handling program at one or more centralized interim storage facilities by 2020 to avoid adverse engineering and economic consequences. The report presented several assessments on how a new program beginning in 2020 with a removal capacity of 6,000 metric tons of uranium per year for ten years and a 3,000 metric ton pace per year thereafter would be able to allow full decommissioning of sites awaiting fuel removal, retiring all private storage facilities by 2030, and achieving about a 10% reduction in wet pool storage. However, delaying a new federal program by ten years would cost the industry about \$1.6 billion in increased storage costs, increased federal liability for compensation for lawsuits, and result in a failure to timely address some of the important lessons from Fukushima. For more information the report's web link can be accessed through the underlined text above.
9. On August 15th the Government Accountability Office (GAO) issued a report, entitled, "Spent Nuclear Fuel – Accumulating Quantities at Commercial Reactors, present Storage and Other Challenges (GAO -12-797)." The GAO was asked to examine the amount of spent fuel expected to accumulate before it can be moved from nuclear reactor sites, the key risks posed by stored spent fuel and actions to help mitigate these risks, and key benefits and challenges of moving spent nuclear fuel out of wet storage and away from nuclear reactors. The study found that the amount of spent fuel will increase by 2,000 metric tons per year and likely double to 140,000 metric tons before it can be moved off-site, because storage or disposal facilities may take 15 to 40 years before they are ready to accept spent nuclear fuel. The key risk posed by spent nuclear fuel would be a release of radiation from a self-sustaining fire in a drained or partially drained spent fuel pool. Studies show this low probability scenario could have high consequences such as widespread contamination, a significant increase in the probability of fatal cancers in the affected population, and the possibility of early fatalities. Mitigating procedures such as replacement water to respond to a loss of pool water from a terrorist attack or accident could help prevent a fire. Transferring spent fuel from wet to dry storage did offer several benefits such as safely storing spent fuel for decades and reducing the potential of a pool fire. As to challenges, transferring spent fuel from wet to dry storage is generally safe, but there are some risks to moving it and accelerating the transfer of spent fuel could increase those risks. The report noted that the Nuclear Regulatory Commission did not have a mechanism that allowed for easy identification and location of classified studies conducted over the years and

recommended establishing such a system to ensure that institutional knowledge was not lost. For more information the report's web link can be accessed through the underlined text above.

10. On August 16th the Nuclear Waste Strategy Coalition held its second bi-weekly conference to update its membership on Senator Bingaman's bill, the Court of Appeal's August 3rd ruling on the mandamus case, the Nuclear Regulatory Commission's August 7th ruling on the petitions filed over the Circuit Court's vacating of the NRC's waste confidence rule, and the status of the congressionally mandated Department of Energy report on the DOE's recommended implementation of the Blue Ribbon Commission's recommendations to manage the nation's nuclear stockpile.
11. On August 21st the Nevada Legislative Committee on High-Level Radioactive Waste held its semi-annual meeting on the status of the Yucca Mountain Project. The State of Nevada's opposition to Yucca Mountain remained unchanged. The opposition also included interim storage and reprocessing. The Committee heard presentations on the mission and future activities of the Nuclear Waste Technical Review Board, updates on the activities of Nevada's Agency for Nuclear Projects, updates on the litigation related to the Yucca Mountain Project, and the lessons learned and best practices on socioeconomic and transportation-related studies. The Nevada's Agency for Nuclear Projects presented its review of the Yucca Mountain project, highlighted recent developments in high-level waste transportation, presented the Government Accountability Office's proposed alternative uses of Yucca Mountain, and the reclassification of melter and feed tanks used to vitrify high level waste from reprocessing of spent nuclear fuel at West Valley in New York as low level waste for shipment and burial at the Nevada National Security Site, formerly known as the Nevada Test Site. The web link for the agenda can be accessed through the underlined text above.
12. On August 22nd the Nuclear Regulatory Commission (NRC) failed to file a petition to the full 15 member U.S. Court of Appeals for the DC Circuit to challenge a June 8th landmark unanimous decision by a three judge Appellate Court panel on the NRC's Waste Confidence Rule. In June the NRC had asked the Court for time to petition the full Court. The August 7th Commission decision to order all future license renewals and new plant licenses held in abeyance was probably an early indication that the NRC would not appeal the Court's decision, but rather spend its energies on addressing the Court's ruling.
13. On August 28th the Environmental Council of the States (ECOS) issued a resolution 12-6 urging collaboration between federal agencies and states to manage high-level radioactive waste and spent nuclear fuel. The resolution:
 - Encouraged the Department of Energy(DOE), the Nuclear Regulatory Commission (NRC), and the Environmental Protection Agency (EPA) to fund the development of scientifically based health and environmental standards and model state laws and regulations to guide the siting, storage and disposal of high-level waste;
 - Affirmed the status of states as partners, including having a clear decision-making voice on activities within their borders;
 - Urged the DOE, NRC, and EPA to work with state agencies through ECOS and support ECOS and any state's formal involvement in any rulemaking process addressing the storage and disposal of defense and commercial high-level waste;
 - Urged the DOE to fund ECOS, ECOS member states, and third-party technical experts to provide independent analysis of proposed activities, including analyzing impacts from transporting spent nuclear fuel and high-level waste; to ensure transparency and responsiveness to concerns expressed by states, communities, and the public; and to encourage federal support and funding for research, test, and demonstration projects to inform siting decisions for future storage and disposal facilities.

For more information the resolution's web link can be accessed through the underlined text above.

14. On August 30th the Nuclear Waste Strategy Coalition held a third bi-weekly conference call to update its membership, of which the State is a member. The discussion focused on the expected Department of Energy's report to Congress on their implementation plan of the Blue Ribbon Commission's (NRC) recommendations to resolve the nation's nuclear waste. There were no new developments in the three litigation cases before the U.S. Court of Appeals for the DC Circuit. The three cases involved suspension of the nuclear waste fee, the Court's decision to vacate the Nuclear Regulatory Commission's Waste Confidence rule for the final disposition of spent nuclear fuel, and the mandamus case to force the NRC to resume its proceedings on the Yucca Mountain licensing application. There was no new development on the FY 2013 Appropriations Bill as Congress was out on recess. However, it was noted that there would be a hearing on Senator Bingaman's proposed nuclear waste legislation on September 12th. His legislation mirrored most of the Blue Ribbon Commission's recommendations. The hearing will be webcasted.

15. On August 30th the U.S. Nuclear Waste Technical Review Board sent a letter to the Department of Energy (DOE) requesting them to make a special presentation at their October meeting in Idaho Falls, Idaho on whether sodium bearing waste from the Idaho National Laboratory's treatment project would be classified as high-level waste. The request is a follow-up to an earlier DOE presentation. The letter's web link can be accessed through the underlined text above.