

# LLW *notes*

Volume 20, Number 4 July/August 2005

## *Nevada v. U.S. Department of Energy*

### EPA Proposes New Standard for Yucca Mountain

On August 10, in response to a July 2004 ruling from the U.S. Court of Appeals for the District of Columbia Circuit, the U.S. Environmental Protection Agency announced proposed amendments to its radiation safety standards, extending the compliance period to a million years for the proposed Yucca Mountain high-level radioactive waste repository. Under the newly proposed standards, the facility must be designed in such a manner as to expose nearby individuals to less than 15 millirems of radiation a year for the first 10,000 years. From 10,000 years to 1 million years, nearby individuals may be exposed to less than 350 millirems of radiation a year through all exposure pathways.

#### **Setting the Standard**

Some industry groups, including the Electric Power Research Institute (EPRI), have supported the notion of higher exposure limits after 10,000 years. EPRI had recommended long-term limits of 100 millirems a year, however -- the same exposure limits established for the Nevada Test Site.

EPA based the 350 millirem-per-year figure on the typical level of background radiation that an individual is exposed to in a single year in the United States. Exposure from background

radiation is due mostly to radon in buildings, the sun, and cosmic radiation. Exposure is greater in areas at higher elevations.

#### **Statements on the Proposal**

**EPA Statements** "It is an unprecedented scientific challenge to develop proposed standards today that will protect the next 25,000 generations of Americans," EPA Assistant Administrator for Air and Radiation Jeffrey Holmstead said in announcing the proposal. "EPA met this challenge by using the best available scientific approaches and has issued a standard that will protect public health for a million years."

EPA issued a press release announcing the proposed standard which states that "EPA sets standards to protect human health and safety." In addition, the release states in part as follows:

*(Continued on page 13)*

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# Low-Level Radioactive Waste Forum, Inc.

## LLW Notes

Volume 20, Number 4 July/August 2005

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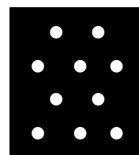
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## Key to Abbreviations

U.S. Department of Energy.....	DOE
U.S. Department of Transportation.....	DOT
U.S. Environmental Protection Agency.....	EPA
U.S. Government Accountability Office.....	GAO
U.S. Nuclear Regulatory Commission.....	NRC
Naturally-occurring and accelerator-produced radioactive material.....	NARM
Naturally-occurring radioactive material.....	NORM
Code of Federal Regulations.....	CFR

***Low-Level Radioactive Waste Forum, Inc.***

**LLW Forum to Meet in Las Vegas, Nevada  
Meeting to Include Optional Yucca Mountain Project Tour**

The next meeting of the Low-Level Radioactive Waste Forum will take place on September 22 – 23 in Las Vegas, Nevada. (A meeting of the LLW Forum's Executive Committee will be held on Thursday, September 22, from 8:00 a.m. until 9:30 a.m.) In addition, there will be an optional site tour of the Yucca Mountain Project on Wednesday, September 21, from approximately 7:00 a.m. – 5:00 p.m. Persons interested in attending the site tour must complete and return a security form at least 75 days in advance of the meeting—i.e., by the first week of July. No exceptions will be made.

A meeting bulletin and registration form can be found on the LLW Forum's web site at [www.llwforum.org](http://www.llwforum.org) by going to the About page and clicking on Meetings and then the appropriate link.

**Location**

The meeting will be held at the Alexis Park Resort, 375 East Harmon, Las Vegas, NV 89109 (phone: 800/582-2228, fax: 702/796-3354, website: <http://alexispark.com>.)

**Reservations**

A block of 35 rooms has been reserved for Tuesday, September 20, and 41 rooms have been reserved for Wednesday, September 21 and Thursday, September 22 for meeting attendees at the special rate of \$122.00 + tax per night for single or double occupancy. A limited number of rooms are available at this special room rate Friday, September 23 and Saturday, September 24. Non-smoking rooms are available. Please ask for a room in "THE FORUM" block under code "LOWLE."

Reservations must be made by Thursday, September 1, 2005 to obtain the special rate. Participants must guarantee the first night's rate and tax. Check-in time is 3:00 p.m. Check-out time is 11:00 a.m.

**Transportation**

Shuttles and Taxis are located outside baggage claim at McCarran International Airport. There are shuttle and taxi options available. Bell Trans Shuttle (800) 274-7433 or (702) 739-7990 offers service to the hotel for \$6.00 per person one way or \$9.50 per person round trip. Taxi rides generally average \$13 one way (not including tip).

**Registration**

The meeting is free for members of the LLW Forum, Inc. Registration for non-members is \$500.00, payable to "LLW Forum, Inc." For information about becoming a member of the LLW Forum, Inc., please contact Todd Lovinger, the LLW Forum's Executive Director, at (202) 265-7990 or go to our website at [www.llwforum.org](http://www.llwforum.org).

Attendees should complete the registration form and forward with payment, if applicable, to: Vicki Green, Rocky Mountain Low-Level Radioactive Waste Board, 1675 Broadway, Suite 1400, Denver, CO 80202 (phone: 303/825-1912, fax: 303/862-3882, e-mail: [vgreen@rmlw.us](mailto:vgreen@rmlw.us).)

**Future Meeting and Site Visit Dates**

The winter 2006 meeting will be held in Austin, Texas on March 20 – 21. The Midwest Compact is co-sponsoring the Texas meeting. The fall 2006 meeting of the LLW Forum will be held at Marco Island, Florida on September 18 – 19 and is being sponsored by the Southeast Compact.

The winter 2007 meeting will be held in San Diego, California on March 19 – 20 and is being sponsored by the Southwestern Compact. The fall 2007 meeting will be in a location, to be determined, in the Central Midwest Compact region and is being sponsored by the compact.

### ***Central Compact***

## **Central Compact Passes Resolutions re Siting Activity and Distribution of Settlement Funds**

The Central Interstate Low-Level Radioactive Waste Compact Commission held a two-day meeting in Little Rock, Arkansas on July 14 - 15 to discuss several issues, including future siting activity and the disbursement of a \$141 million settlement that the compact expects to receive from the State of Nebraska on August 1. During the course of the meeting, the Central Commission passed various resolutions including

- ◆ a resolution to defer further pursuit of a regional disposal facility for the time being;
- ◆ a resolution to continue monitoring national and regional developments concerning low-level radioactive waste generation and disposal needs;
- ◆ a resolution to indefinitely suspend the pursuit of arrangements regarding the use of a proposed disposal facility in the State of Texas;
- ◆ a resolution directing a consultant to carry out a review of the disposal needs and practices of small generators in the member states;
- ◆ a resolution to pay, upon timely receipt of the anticipated settlement funds from Nebraska, approximately \$4.2 million to the states of Arkansas, Kansas, Louisiana and Oklahoma (to be divided equally among them) in resolution of their claims relating to payments of community improvement funds;
- ◆ a resolution to pay, upon timely receipt of the anticipated settlement funds from Nebraska, the major generators approximately \$114.75 million on their joint claim (to be divided as indicated in the resolution), but to withhold \$15 million while investigating, studying and considering the future role and obligations of the compact commission; and

- ◆ a resolution to pay, upon timely receipt of the anticipated settlement funds from Nebraska, US Ecology approximately \$11.8 million in resolution of the company's claim.

### **Siting Resolution**

The resolution states that the Central Commission "has determined that no need currently exists for the siting, construction and operation of a disposal facility in the Compact region." Accordingly, the commission resolved to defer active efforts to site a facility—and not to expend any funds thereon—until it is deemed that such a facility is in the needs of regional generators and the public interest.

### **Monitoring Resolution**

The resolution states that the commission will organize, staff and finance its activities so as to provide optimal efficient use of resources while providing for ongoing monitoring of regional and national generation and disposal needs, an annual review of compact activities, and the establishment and annual review of a business plan.

### **Resolution Suspending Talks with Texas**

The resolution states that the compact commission has pursued arrangements for access to the proposed Texas facility for 12 months, that the planned 10% escrow of funds for pursuit of such an arrangement will not be established or maintained, and that the active pursuit of such an arrangement shall be indefinitely suspended unless authorized by the compact commission.

### **Review of Small Generator Needs Resolution**

The resolution directs a consultant to carry out a review of the disposal needs and practices of small generators in the member states and to report the results of said review to the compact commission by its January 2006 meeting.

**Resolution re Community Improvement Funds Claim**

Both Louisiana and Kansas have instructed the compact commission to pay their share of the community improvement fund payments to generators in their region. The specific payment amounts and recipients are identified in the resolution.

**Resolution re Major Generator Claims**

The resolution provides the specific amounts to be paid pursuant to these claims and the recipients thereof. In regard to the \$15 million being withheld by the compact commission, the resolution states that no final decision is being made regarding the distribution of these monies.

**Resolution re US Ecology Claim**

The resolution provides that it incorporates terms set out in a letter from American Ecology President and CEO Stephen Romano to Central Commission Chair Laura Gilson dated July 8, 2005 "except that the Commission reserves the right to direct US Ecology to dispose of or otherwise deal with the real property owned by US Ecology near Butte, Nebraska in a manner different from that set out in said letter."

*The text of the resolutions, as well as several articles about the meeting and decisions made there, can be found on the Central Compact's web site at [www.cillrwc.org](http://www.cillrwc.org)*

***Northwest Compact/State of Washington***

**Renewable Ten Year Sublease Signed for Hanford Facility**

In late July, it was announced that US Ecology and the Washington Department of Ecology have entered into a renewable ten year sublease agreement for continued operation of a low-level radioactive waste disposal facility on the U.S. Department of Energy's Hanford Reservation near Richland, Washington. Sublease terms include four ten year renewal options and an annual, inflation-adjusted rental payment of approximately \$63,000. The sublease is consistent with a prime lease entered between the State of Washington and the federal government in 1964.

In announcing the sublease, Stephen Romano, American Ecology Corporation President and Chief Executive Officer, stated as follows:

This renewal allows US Ecology to continue serving the low-level radioactive waste disposal needs of medical and academic institutions, government agencies, electric utilities, biotechnology companies and other industry in the Northwest and Rocky Mountain Compact

**Nebraska Pays \$145 Million in Legal Dispute Settlement**

On August 1, the State of Nebraska paid \$145.8 million to the Central Interstate Low-Level Radioactive Waste Compact Commission via wire transfer to settle a lawsuit regarding the state's activities in reviewing a previous license application to develop a low-level radioactive waste disposal facility in Boyd County. The monies will be distributed by the Central Compact in accordance with resolutions passed at a meeting in July. Most of the \$145.8 million will be used to reimburse the states and utilities for their efforts to site the waste facility.

Upon receipt of \$11.8 million from the settlement monies, American Ecology President and Chief Executive Officer, Stephen Romano, issued a statement that the company is "pleased with this expeditious resolution of our claim on the Nebraska litigation settlement proceeds." The \$11.8 million payment reflects the return on contributions to the project made by US Ecology plus interest. US Ecology is working with the Central Compact to expeditiously close out its contract for development of a disposal facility in the five-state compact region.

regions ... US Ecology places great value on its longstanding relationship with the State of Washington and its citizens and we are pleased to have successfully concluded this important agreement.

Romano went on to state that US Ecology “looks forward to continuing to deliver safe, environmentally protective disposal services as we have since opening our Richland facility in 1965.”

### ***Northwest Compact/State of Utah***

## **Another Utah Argument Against PFS Rejected by NRC**

On June 20, the U.S. Nuclear Regulatory Commission unanimously rejected another argument by the State of Utah to block a license for a spent fuel storage facility on the Skull Valley Indian reservation. In so doing, NRC rejected Utah’s contention that the facility—which is being promoted by a consortium of regional utility companies called Private Fuel Storage, LLC—should not be licensed because waste could be stuck at the site permanently. The ruling means that the state has only one remaining avenue to challenge the facility—whether the risk of a fighter jet crash from a nearby air base is too great.

“We’re profoundly disappointed, but we remain optimistic about our other arguments, including the remaining argument before the Nuclear Regulatory Commission,” said Mike Lee—Utah Governor Jon Huntsman Jr.’s legal counsel. “We’re still several steps away from any point we would deem even the beginning of construction on the project to be imminent.”

The state had based its argument that the waste could be stuck at the facility permanently on statements by Gary Lanthrum, Director of the U.S. Department of Energy’s transportation program, that under existing DOE waste storage contracts the department would refuse to bury

nuclear waste in a permanent repository if the storage casks are welded shut as planned. The statements, according to state attorneys, mean that the waste would at the very least have to be returned to reactors and repackaged before being shipped to Yucca Mountain and that NRC should have to redo its environmental impact studies to take such considerations into account.

The Commission disagreed, however, affirming an earlier decision by the Atomic Safety and Licensing Board (ASLB) that found in favor of PFS. The consortium had provided several letters from the Energy Department to various utility companies promising flexibility to accommodate waste stored in a variety of casks. “In the face of this rather overwhelming written record, Utah offers only the unexplained [and apparently off-the-cuff] remarks of Lanthrum, and argues that his remarks require a rethinking of fundamental assumptions about the PFS project,” wrote the commission. “The board sensibly thought differently.” The commission went on to note that Lanthrum is not in the chain-of-command for such decisions and that the state was unable to offer any additional evidence that DOE policy had changed.

The state filed an appeal on its final contention regarding the fighter jets in June. Even if NRC grants the license, however, the state will have several avenues of appeal available including challenging the granting of the license in a federal appeals court. In addition, the state is trying to persuade the Interior Department not to grant a right of way for shipments to travel to the reservation or not to approve the tribe’s contract with PFS.

***Texas Compact/State of Texas***

**First Texas Special Legislative Session Concludes Without Passage of LLRW Amendments**

***Second Special Legislative Session Began July 21***

On July 20, the Texas legislature concluded a special legislative session to address, among other things, public school financing and property taxes. Although various bills concerning low-level radioactive waste management and disposal were introduced during the special session, none passed both the houses of the legislature. However, a second special legislative session on school finance began on July 21. The session is expected to last 30 days, during which legislation or amendments relating to low-level radioactive waste management and disposal may again be introduced.

During the special legislative session, two bills—S.B. 39 and H.B. 118—were introduced relating to the imposition of fees and surcharges on the storage, processing or disposal of radioactive substances within the state. The bills were very similar to S.B. 1667, which was introduced by State Senator Robert Duncan during the regular session. (See *LLW Notes*, March/April 2004, p. 10.) Neither bill received approval from their respective houses before close of the special session.

In addition, on July 11, the Texas State Senate approved amendment #25 to CSHB 3 -- legislation relating to the financing of public schools and reducing property taxes. The amendment, as passed by the Senate, provides for the imposition of fees on the storage or disposal of radioactive waste at facilities located in the state. In particular, it provided as follows:

***Sec. 401.271. STATE FEE ON RADIOACTIVE SUBSTANCES.***

*(a) A holder of a license issued by the commission under this chapter that authorized the storage or disposal of a radioactive substance from other persons shall remit each quarter an amount equal to 10 percent of the license holder's gross receipts received from storage or disposal operations under a license issued under this chapter as follows:*

*(1) eight percent shall be remitted to the comptroller for deposit into the general revenue fund; and*

*(2) two percent shall be remitted to the host county in accordance with Sections 401.244(b) and (d).*

*(b) Subsection (a) does not apply to compact waste or federal facility waste as defined by Section 401.2005, or industrial solid waste as defined by Section 361.003.*

***Sec. 401.272. AUDIT AUTHORITY.***

*The commission may audit a license holder's financial records and waste manifest information to ensure that the fees imposed under this chapter are accurately paid. The license holder shall comply with the commission's audit-related requests for information.*

Although the amendment was approved by the Senate, the legislation did not make it through conference before the close of the special legislative session and therefore did not receive the required final approval from both legislative houses.

**WCS Submits Petition for Change in Texas' Rules re Disposal of Low-Activity Waste**

On June 30, Waste Control Specialists submitted a petition to the Texas Department of State Health Services for a change in the department's rules to recognize exemptions granted by the U.S. Nuclear Regulatory Commission or the U.S. Department of Energy for very low activity radioactive materials without the need for a related rulemaking. Shortly thereafter, on July 7, Robert



## States and Compacts *continued*

Duncan (Chair of the Texas Senate Committee on State Affairs) and Ken Armbrister (Chair of the Texas Senate Committee on Natural Resources) wrote to the department in opposition to the changes sought in the petition.

### **WCS Petition**

The petition seeks to amend Title 25, Chapter 289 of the Texas Administrative Code. In particular, the petition seeks to allow material that has been exempted from regulation by the NRC, DOE, or the Texas Commission on Environmental Quality (TCEQ), or cleared for disposal to alternate facilities by any of those entities, to be disposed of in a Resource Conservation and Recovery Act (RCRA) hazardous waste disposal facility. Such action, according to WCS, "is consistent with the recent interest of both the United States Environmental Protection Agency (EPA) and the NRC in the development of a regulatory program to allow disposal of very low activity radioactive waste in hazardous waste landfills permitted under RCRA." WCS further states that the proposed change "will facilitate providing a safe and cost-effective disposal option for a limited category of very low activity radioactive waste that is currently being stored at NRC-licensed facilities or is being shipped across the United States at much greater expense ... [by] allow[ing] such waste to be disposed of in highly-regulated, RCRA-permitted hazardous waste landfills where potential risks related to transportation distances will be minimized."

In addition, in support of its petition, WCS contends the following:

- ◆ the design criteria for hazardous waste disposal facilities (which are permitted by the Commission and regulated under EPA's RCRA regulations) are equivalent to and exceed in some cases that for low-level radioactive waste disposal facilities;
- ◆ both the NRC and DOE exemption processes are based on an "as low as is reasonably achievable" (ALARA) assessment that ensures that individual doses to the public from both

transportation and disposal are maintained well below allowable levels, with a typical goal of less than 1 millirem per year—a standard that has been accepted by various national and international radiation standard setting bodies as a negligible individual dose;

- ◆ the risk-based methodology proposed for use in WCS' rulemaking is similar to the methodology in the short-lived disposal rule, the decommissioning rule, and the Commission rules for alternate disposal; and,
- ◆ the proposed rule will result in significant cost savings to generators by avoiding excessive security and monitoring requirements, thereby facilitating the cleanup and decommissioning of sites where cleanup is currently problematic.

In its petition, WCS also contends that the proposed amendment will result in cost savings to state government by permitting the department to recognize applicable NRC granted exemptions, thereby precluding "unnecessarily redundant" actions by the department and "reliev[ing] the Department of the need to duplicate analyses undertaken by the NRC prior to granting exemptions." In addition, WCS asserts that the proposal would avoid the need to undertake related rulemakings, resulting in further state government cost reductions. WCS also contends that the proposed amendment has the potential to increase waste disposal volumes, thereby increasing revenues to the state.

### **Opposition Letter from Senate Committee Chairs**

In their letter, state Senators Duncan and Armbrister identify the following reasons for opposing the requested rule change:

- 1. While the advocate for this rule change may claim that it would protect the health and safety of the public, workers, and the environment from the state's perspective, we believe that the U.S. Environmental Protection Agency (EPA) and the NRC should give the proper input into this reclassification of waste. Both of these federal agencies have recently*

*raised questions and concerns about the disposal of this waste into Resource Conservation and Recovery Act (RCRA) hazardous waste disposal facilities.*

*2. It is our understanding that the Texas generators are not likely to realize a reduction of costs from this rule change because Texas generators are not decommissioning any generation facilities. The generators that would most likely benefit from this rule change are decommissioning facilities located outside of Texas.*

*3. There should be no assumption made that this rule change will reduce the potential for mishandling illegal dumping and recycling of these types of materials or that this rule change will promote research and application of medical diagnostic techniques. Making such an assumption would indicate that this waste is not currently being handled appropriately. Furthermore, this rule change does not ensure that this waste is going to be handled more safely outside of regulatory control as radioactive waste. Additionally, medical generators in Texas are already using a proactive 300 day half-life standard; therefore, we as a state, have already promoted improved medical health care.*

*4. This rule change is not necessary for the NRC Agreement State Program. In fact, in June 2005, the NRC voted unanimously not to pursue rule making related to this type of activity. In addition, the EPA has also decided to not pursue rule making related to this type of activity. We question the compatibility of standards being adopted by agreement states, in this case Texas, which the NRC and EPA do not support.*

*5. This rule change also raised a question about the authority of the Texas Low-Level Radioactive Waste Disposal Compact Commission to control import and export of low activity waste that otherwise would be classified as low-level radioactive waste. Additionally, it is unclear how this rule change would impact the Texas Commission on Environmental Quality (TCEQ) which not only has jurisdiction over the disposal of low-level radioactive waste but also over hazardous waste.*

*6. Finally, this rule change will not reduce costs or generate revenue for Texas. If this type of waste is*

*exempted to be disposed of in a RCRA facility, it will not be subject to a radioactive waste disposal fee. As you will recall, we sponsored legislation this past legislative session which would have achieved this goal. In addition, this waste would not qualify for any other waste fee, due to the exemption status, which benefits the State of Texas.*

In conclusion, the Senators emphasize the importance of staying the course for low-level radioactive waste disposal that was established in H.B. 1567 as passed during the 78th Regular Legislative Session. According to the Senators, passage of the rule change petition "will trump a process that was established methodically and deliberately."

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## American Ecology Opens New Waste Treatment Building in Texas

On August 8, American Ecology announced that subsidiary US Ecology Texas has resumed full treatment services in a new hazardous waste treatment building constructed at its Robstown, Texas hazardous waste treatment and disposal facility.

"Our Texas facility's new treatment building is designed to deliver increased throughput for the full range of wastes included in our operating permit," said American Ecology President and Chief Executive Officer Stephen Romano. "The building's advanced design also offers our customers a safe, environmentally superior solution to their hazardous waste service needs," added Romano.

The 6,000 square foot building's environmental controls include a high-volume air emission control system with baghouse, double-walled steel treatment tanks, tank misting system, and an automated treatment reagent measurement and delivery system. According to US Ecology, these

*(Continued on page 18)*

## *U.S. Congress*

### **Congress Passes Energy Bill with NARM Provisions**

On July 28-29, the U.S. Congress passed the Energy Policy Act of 2005—legislation that includes provisions to further enhance the security of nuclear facilities and that amends the Atomic Energy Act of 1954 (AEA) to bring under unified federal control certain discrete sources of Naturally Occurring or Accelerator-Produced Radioactive Material (NARM). The legislation was signed into law by President George W. Bush on August 8.

#### **The Legislation**

Under the terms of the legislation, the U.S. Nuclear Regulatory Commission is given the authority to provide oversight of radium-226 and other sources of NARM that had historically remained outside of federal control. Indeed, the legislation dictates that NRC has 18 months to issue final regulations to include a definition of the term “discrete” sources of radium-226, accelerator-produced materials, and other naturally occurring radioactive materials (other than source material). While this provision applies to all accelerator-produced by-product materials generated for commercial, medical, and research activities, its scope is statutorily limited to include only such sources of NORM that pose a threat similar to the threat posed by a discrete source of radium-226.

NRC will consult with the states and other interested stakeholders on the promulgation of regulations and definitions. NRC is required to issue such regulations to conform to the import/export and source tracking provisions of the International Atomic Energy Agency’s Code of Conduct on the Safety and Security of Radioactive Sources. NRC is required to cooperate with the states and use model state standards in implementing its regulations. The agency is also required to issue a transition plan for Agreement

and Non-Agreement States to facilitate orderly transition of regulatory authority to NRC.

The Health Physics Society (HPS) and Organization of Agreement States (OAS) have analyzed the legislation and state as follows:

Under this legislation, Congress mandated a significant change to the ... [Low-Level Radioactive Waste Policy Amendments Act]. Accordingly, by-product materials are not considered ... [low-level radioactive waste] under this statute. In addition, these by-product materials may be disposed of in a disposal facility that is licensed by NRC (or an Agreement State), as authorized under federal or state solid or hazardous waste laws, or any facility that is adequate to protect public health. While these provisions of the legislation would allow for waste disposals at uranium mill tailing impoundments, it does not contain language addressing the title transfer to DOE into perpetuity. However, during the rulemaking process, perhaps ... [the HPS and OAS] can again encourage decision makers to take a fresh look at other alternatives that would allow for the safe disposal of these types of wastes based on the risk posed to public health, and not their origins or statutory definitions.

#### **Background**

On May 26, Senator Hillary Rodham Clinton (D-NY) and Representative Edward J. Markey (D-MA) introduced legislation in the House and Senate aimed at preventing a dirty bomb attack. (See *LLW Notes*, May/June 2005, pp. 13-16.) The draft bills, S. 1150 and H.R. 2689, were titled the “Dirty Bomb Prevention Act” and were referred to committees in their respective houses of Congress. According to the press release issued on the draft legislation, the proposed bills aimed to correct serious deficiencies in nuclear security by providing the following actions to close gaps in the control and oversight of nuclear materials. The draft legislation built on bills that Clinton and

Markey introduced in the 107<sup>th</sup> and 108<sup>th</sup> Congress.

### ***Prior Input from LLW Forum, NRC, HPS and OAS***

**LLW Forum Resolutions** At the September 2004 and March 2005 meetings of the LLW Forum, members of the Board of Directors passed resolutions concerning proposals to amend the Atomic Energy Act of 1954 to expand the definition of byproduct material. (See *LLW Notes*, September/October 2004, pp. 4-5 and March/April 2005, pp. 4-5.) In general, the resolutions recognize that there may be “a legitimate interest in providing for the federal regulation of discrete radium sources, accelerator-produced radioactive material, and similar materials that may pose a threat to homeland security.” Nonetheless, they identify potential unintended adverse consequences of previously-introduced legislation including:

- ◆ potential elimination of the only disposal outlet for the majority of high-activity discrete radium sources in the nation, and
- ◆ potential roll back of Congressionally approved compact regulation of these materials that has provided for the safe disposal for nearly two decades.

The resolutions encourage Congress, the NRC, and other interested stakeholders to work with the Congressionally approved compacts, states, and federal agencies to ensure that the unintended adverse consequences are avoided.

**HPS and OAS Joint Statement and Draft Legislation** Earlier this year, the Health Physics Society (HPS) and the Organization of Agreement States (OAS), which represent radiation safety professionals and regulatory agency stakeholders, jointly developed a position statement calling for Congressional action to ensure uniform security and safety regulations for all discrete sources of radioactive material. (See *LLW Notes*, January/February 2005, pp. 28-30.) In so doing, they (1) identified fundamental principles that they feel

future legislation should address in order to protect the public from such sources—including protection from malevolent uses of such sources by terrorists—and (2) drafted proposed legislative language that is consistent with said principles. Both the statement and draft legislative language attempt to address unintended adverse consequences posed by earlier legislation with respect to (1) the uniformity of regulatory control for public health and safety purposes and (2) radioactive waste disposal.

*The joint position statement is available on the HPS web site home page at <http://hps.org/documents/MaterialControl.pdf>. The proposed legislative language and a sample of the forwarding letter are available to HPS members on the HPS web site in the "members only" area at <http://hps.org/membersonly/newsandactivities/whatsnew.html#466>. Since the draft legislative language is not a "position of the Society" (but the approving committee agreed it was appropriate for implementing the position), it was not posted on the public area of the site.*

**NRC's Draft Legislative Package** On March 30, U.S. Nuclear Regulatory Commission Chair Nils Diaz submitted to the U.S. Congress a draft legislative package that, among other things, includes reclassification of NARM materials as byproduct material under the Atomic Energy Act. (See *LLW Notes*, March/April 2005, pp. 12-14.) According to NRC, the inclusion of accelerator-produced and certain other radioactive material under its jurisdiction will augment “the Commission’s regulatory authority to protect the public health and safety and to promote the common defense and security with regard to radioactive materials.”

*A copy of the draft amendment can be found on the NRC's public web site in the Agencywide Documents Access and Management System (ADAMS) under accession number ML050900404. Section 105 addresses the coverage of accelerator-produced and other radioactive material in the definition of byproduct material.*

(Continued from page 1)

"The proposed standards set a maximum dose level for the first 10,000 years, more than twice as long as recorded human history. To provide safety beyond 10,000 years to 1 million years, EPA is proposing a separate, higher dose limit based on natural background radiation levels that people currently live with in the United States. The proposed standards also require that the facility must withstand the effects of earthquakes, volcanoes and significantly increased rainfall while safely containing the waste during the 1 million-year period."

**DOE Statements** DOE spokesperson Craig Stevens hailed the announcement of the revised standard as "clearly a positive step." He added, "[s]hould this proposed rule become final, it is a standard that the Department of Energy believes it can meet."

**Statements by Nevada and Others** Facility opponents, however, criticized the revised standard as too lax. Robert Loux, Executive Director of the Nevada Agency for Nuclear Projects, was quoted in the press as saying that "[y]ou could build a repository in Disneyland and meet this standard." Joe Egan, a lawyer that represented Nevada in a lawsuit that led to the proposed new rule, said "[t]hey gave the repository a complete pass and established an unprecedentedly lenient standard ... [that] would be by far the most lenient standard in the world if it were to be adopted as proposed." Senator Harry Reid, a longtime critic of the proposed facility, also finds the newly proposed standard to be inadequate. "What the agency released today is nothing more than voodoo science and arbitrary numbers," he said. Nevada's Attorney General, Brian Sandoval, stated that "[i]f this bogus new standard, or anything close to it, ends up being adopted by EPA, Nevada will sue them again."

### Next Step

EPA is accepting 60 days of public comment on the proposed new standards. The comment period begins upon publication of the proposal in the *Federal Register*. EPA will review public comments

and consider them in developing a final rule. No schedule has been set for the final rule.

Yucca Mountain cannot open if it does not meet EPA's final standards. The NRC will determine through its licensing process whether DOE demonstrates compliance. NRC must revise its licensing requirements to be consistent with EPA's final standards.

### Background

On July 9, 2004, the U.S. Court of Appeals for the District of Columbia Circuit issued a 100-page ruling in consolidated lawsuits involving the planned Yucca Mountain high-level radioactive waste repository. (See *LLW Notes*, July/August 2004, p. 15.) The court rejected all but one of the plaintiffs' arguments, including that Congress violated the U.S. Constitution by "ganging up" on Nevada and focusing solely on Yucca Mountain to the exclusion of possible repository sites in other states. However, the court did find that EPA's public health rules for disposal at the planned repository could not be limited to a compliance period of 10,000 years.

In so ruling, the court sided with the State of Nevada in its argument that EPA violated federal law by setting an all-pathways individual-protection standard that will apply for only 10,000 years. Congress, asserted the state, required EPA to set its standards consistent with a report issued by the National Academy of Sciences. That report, according to Nevada, called for a time frame for such standards that would encompass the "peak dose/risk" from the repository, whenever that might occur. NAS indicated that peak dose would likely occur well after 10,000 years.

Although the appellate court held that the federal government could not limit the compliance period for exposures from radionuclide releases from Yucca Mountain to the site's first 10,000 years, the court did not determine what should be the appropriate planning period. The court did, however, quote that NAS report finding that project site performance for a million years is possible.

The rules developed originally by EPA in 2001 and contested in the lawsuit set maximum permissible radiation doses for persons outside the boundary of the Yucca project from both undisturbed performance and in the event of a human intrusion. EPA also set a standard for the maximum dose through contamination of ground water. The Nuclear Energy Institute and industry members challenged EPA's rules as too restrictive, arguing that there is no basis for a separate water standard. The court, however, disagreed. The Court found that EPA's authority under the Energy Policy Act was sufficient to support the ground water standards, which were prompted by the need to protect the ground water resource, rather than individuals.

For additional information, go to <http://www.epa.gov/radiation/yucca>.

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## ***U.S. Department of Energy v. State of Washington***

### **Federal District Court Questions on Hanford Initiative Interpreted by Washington State Supreme Court**

On July 28, the Washington State Supreme Court answered certified questions of state law for the United States District Court for the Eastern District of Washington pertaining to the State Cleanup Priority Act ("CPA")—a voter initiative that would bar the U.S. Department of Energy from sending any additional waste to the Hanford nuclear reservation until the department cleans up the facility. In particular, the state court provided certified answers to five questions on how the act should be interpreted. The questions, along with an abbreviated summary of the state court's certified answers, can be found below.

It is important to note that while the state court answered questions regarding interpretation of the initiative, I-297, the court did not rule on the

constitutionality of the initiative or parts thereof. Instead, the case will now return to the federal district court, which will apply the state court's certified answers in adjudicating the case.

#### **The Court's Opinion**

The five certified questions asked to the state court, of which the first has four subparts, are identified below in italics. After each question is an abbreviated summary of the court's response. Persons interested in additional information are directed to the state court's opinion itself.

*1. What materials are encompassed within the definition of 'mixed waste' set forth in Section 3(9) of the CPA?*

*(a) Specifically, does the definition of 'mixed waste' encompass materials that consist solely of radioactive source, special nuclear material, or byproduct materials and, if so, under what circumstances does the CPA apply to such materials?*

According to the court, the parties uniformly agree that the answer to this question is no. For a material to qualify as "mixed waste" under the CPA definition, it must have both a radioactive and a non-radioactive component. Materials that consist solely of radioactive source, special nuclear, or byproduct material are outside the scope of this definition.

*(b) Specifically, does the definition of 'mixed waste' encompass materials that are mixtures of radioactive source, special nuclear, or byproduct materials and other hazardous substances that do not designate as 'dangerous waste' under state laws? If so, under what circumstances does the CPA apply to such materials?*

For a material to "designate" as a dangerous waste, it must either be specifically listed as a dangerous waste under Washington State regulations, exhibit one of four characteristics (ignitability, corrosivity, reactivity, or toxicity) under state regulations, or meet the criteria of toxicity or persistence under state regulations. The federal government argued that the plain language of the CPA's "mixed waste" definition includes, as a matter of law, materials that do not "designate" as dangerous waste. The Washington Department of Ecology ("Ecology"), however, favored a far narrower interpretation of

“mixed waste.” The court declined to accept the Department of Ecology’s interpretation, however, stating in part as follows:

“In sum, we are left with a choice between two alternatives. On the one hand, the United States suggests a plain language interpretation based on the statutory definitions of ‘mixed waste’ and ‘hazardous substance.’ There is no dispute that, if these definitions are operative, the CPA includes some materials that do not ‘designate’ as dangerous waste. On the other hand, Ecology asks us to artificially eliminate much of the substance of these definitions in a way that narrows the scope of ‘hazardous substance’ to materials that have been released or pose a threat of release. Such an artificial limitation would require us to ignore long-held rules of statutory interpretation. Accordingly, the answer to question 1(b) is, yes, to the extent that a ‘hazardous substance,’ as defined in RCW 70.105.010(14), might fail to designate as dangerous waste because the concentration of dangerous material is insufficient.”

*(c) Specifically, does the definition of ‘mixed waste’ encompass materials that are not ‘solid wastes’ under the RCRA and, if so, under what circumstances does the CPA apply to such materials?*

The federal government contends that the CPA’s definition of “mixed waste” includes materials that do not fall within the RCRA definition of “solid waste.” Ecology agrees that a number of the materials incorporated by the RCW 70.105D.020(7)(b) – (d) definition of “hazardous substances” do not qualify as “solid waste.” However, Ecology argues that the CPA definition should be limited to hazardous substances that have been released or pose a threat of release. The court disagreed, finding as follows:

“[W]e answer this question as follows: Yes, to the extent that a ‘hazardous substance,’ as defined in RCW 70.105D.020(7)(b)-(d), fails to qualify as a ‘solid waste’ for lack of being ‘discarded’ or otherwise abandoned, recycled, or inherently wastelike under 42. U.S.C. sec. 6903(27) and 40 C.F.R. sec. 261.2.”

*(d) In light of the court’s answers to subparts (a) – (c) above, does the definition of ‘mixed waste’ expand the scope of materials regulated as mixed waste under the HWMA and the RCRA?*

In response to this question, the court held as follows:

“Under the foregoing analysis of subparts (a) – (c), the answer to this subpart of question 1 is, yes. Under subpart (a), the CPA definition of mixed waste does not apply to purely radioactive Atomic Energy Act of 1954, 42 U.S. C. sec. 2011-2297g-4, materials. However, the CPA encompasses materials that do not ‘designate’ as dangerous waste through the cross-reference to RCW 70.105.010(14) and encompasses materials that are not ‘solid waste’ through the cross-reference to RCW 70.105D.020(7)(b)-(d). Thus, the CPA does expand the scope of materials currently subject to regulation as mixed waste beyond the HWMA and the RCRA.

Persons interested in a more detailed explanation of the court’s analysis on the above-questions are directed to the opinion itself.

*2. Does the operation of the CPA prevent the intrasite transfer of waste among various units at a site or facility?*

Ecology contends that the CPA does not prohibit the intrasite transfer of waste. The United States agrees that Ecology’s interpretation is both permissible and preferable. The intervening plaintiffs either agree or offer no argument. Accordingly, the court held that the answer to this question is, no.

*3. How does the exemption in RCW 70.105E.080 affect the application of the CPA to United States naval facilities?*

The CPA provides an exemption related to naval facilities. The only dispute at issue is whether the CPA’s definition of “mixed waste” encompasses materials produced at naval facilities other than “sealed source nuclear reactor vessels or compartments.” The federal government argues that, pursuant to its arguments concerning the scope of “hazardous substances” in question 1, the CPA will impact the shipment of low-level waste materials not listed in the naval exemption.

Ecology, on the other hand, relies on its responses in question 1. The court found as follows:

“We decline any implicit invitation to delve into factual disputes concerning the types of materials shipped from the region’s naval facilities to Hanford; that would be outside the scope of permissible issues . . . However, consistent with our questions 1 (a)-(d), it is clear the naval exemption does not cover those materials (beyond reactor vessels or compartments) that may qualify as ‘mixed waste’ under the CPA via the broad definition of ‘hazardous substance.’ Ecology raises no persuasive argument to the contrary. Accordingly, the answer to this question is as follows: The naval exemption in RCW 70.105E.080 is limited to those materials specifically listed, including ‘sealed nuclear reactor vessels and compartments,’ but does not extend to other materials that qualify as hazardous substances under the CPA’s definition of ‘mixed waste’ as described in question 1.”

*4. Does RCW 70.105E.060(1)(a)(ii), which requires development of an inventory of hazardous substances potentially disposed to unlined trenches based on ‘actual characterization’ of such substances, require the physical inspection of each and every material disposed?*

The court found that there is no statutory definition of the terms “actual,” “characterization,” or “actual characterization” contained in the CPA or any other relevant statute. Accordingly, the term should be accorded its plain and ordinary meaning. The parties disagree as to the consequences of doing such, however. Ecology—which has historically used some degree of “processed knowledge” to determine the contents of disposed materials—asserts that compliance will require physical testing in part but not completely. The federal government, on the other hand, contends that “actual characterization” can only mean physical testing because the word “actual” would be superfluous if process knowledge were an available substitute.

The court found that whether or not “actual characterization” requires physical inspection of every material or allows for the use of prior record keeping is not clear and that “two or more

reasonable interpretations are possible and the terms are ambiguous.” Accordingly, the court applied additional rules of statutory construction that generally give great weight to Ecology’s interpretation of the laws it administers and held that “[b]ecause a reasonable alternative construction is available, and that construction is proposed by the agency responsible for enforcing the CPA, the answer to this question is, no.”

*5. If the federal court finds that certain provisions of the CPA are unconstitutional, are the remaining provisions of the statute severable?*

The court responded to this question as follows:

“The parties agree that any present attempt to determine whether the constitutional portions of the CPA are severable if other portions are deemed unconstitutional would be both hypothetical and speculative, particularly given the myriad possible outcomes in the federal courts. This court has declined to answer certified questions where the record before us was insufficient and any attempt to answer would be improvident. We do the same in this case. However, there is a dispute over the purely legal question of whether the absence of a severability clause precludes severability in all circumstances. We believe the answer to the parties’ query is apparent from our case law but, as a matter of comity, we refer the district court to our recent statement in *In re: Parentage of C.A.M.A.*, that “[t]he presence of an applicable severability clause is evidence that the legislature would have enacted the constitutional portions of a statute without the unconstitutional portions, but a severability clause is not necessary in order to meet the severability test.” (citations omitted)

### **Background**

**The Initiative** By a margin of roughly 2 to 1, voters in the State of Washington on November 2, 2004 overwhelmingly approved an initiative to require the U.S. Department of Energy to clean up the Hanford nuclear reservation before it sends any additional waste to the facility. In addition, initiative 297 also seeks to prevent the disposal of waste in unlined trenches. (See *LLW Notes*, January/February 2004, p. 7.) The initiative—



which is known as the “Cleanup Priority Act”—was sponsored by Heart of America Northwest and received endorsements from environmental groups, the state Democratic Party and the League of Women Voters.

**The Lawsuit** After passage of the initiative, DOE filed a lawsuit challenging its constitutionality and sought a restraining order on its enforcement. In so doing, the department argued that there are too many uncertainties about how the state will implement the measure. In addition, Department of Justice attorneys contended that some cleanup efforts at the site have already been halted as a result of the initiative. On December 2, 2004, the judge for the U.S. District Court of the Eastern District of Washington ruled for the federal government and issued the requested restraining order—although waste shipments to the site had already been halted under another lawsuit. In so ruling, the judge found that there is a possibility that the initiative may be invalid and that DOE will suffer irreparable injury with regard to onsite cleanup at Hanford if it were to immediately become law. (See *LLW Notes*, November/December 2004, p. 13.)

Federal attorneys are seeking to invalidate the initiative on various grounds including that it

- ◆ pre-empts the federal government's nuclear waste and interstate commerce policies;
- ◆ imposes an illegal tax on the federal government; and
- ◆ addresses more than one issue in violation of the state constitution.

**Activities** Currently, about 120,000 cubic meters of radioactive waste are retrievably-stored at Hanford. The State of Washington and the federal government recently agreed on a long-term schedule for cleaning up the waste. In addition, the federal government has shipped small quantities of radioactive waste from two other federal sites to Hanford for packaging before sending it on to the Waste Isolation Pilot Plant (WIPP) in New Mexico. Initiative 297 would halt such shipments until existing waste at the Hanford site is cleaned up.

### ***Advisory Committee on Nuclear Waste***

## **NRC Advisory Committee on Nuclear Waste Meets July 19-21**

The U.S. Nuclear Regulatory Commission's Advisory Committee on Nuclear Waste held a public meeting July 19-21, in Rockville, Maryland. Among other items, members discussed a draft paper on low-level radioactive waste management, generic waste-related research and a document from the International Atomic Energy Agency addressing the subject of geologic disposal facilities for managing long-lived radioactive waste. (The draft paper is not a public document and is not currently available for distribution.) The committee members also were briefed on the evolution of risk-informed regulations and how they might be applied to facilities other than reactors.

**ACNW Background** “The Advisory Committee on Nuclear Waste (ACNW) was established by the Commission in June 1988 to provide independent technical advice on agency activities, programs, and key technical issues associated with regulation, management, and safe disposal of radioactive waste. The ACNW interacts with representatives of the NRC; the Advisory Committee on Reactor Safeguards; other Federal, State, and local agencies; Indian tribes; the public; and other stakeholders, as appropriate, to fulfill its responsibilities. The bases for the committee’s advice include the regulations governing high-level waste disposal, low-level waste disposal, and other applicable regulations and legislative mandates. The ACNW examines and reports on areas of concern as requested by the Commission and may undertake studies and activities on its own initiative, as appropriate. The ACNW is independent of the NRC staff and reports directly to the Commission, which appoints its members. The operational practices of the ACNW are governed by the provisions of the Federal Advisory Committee Act (FACA). Advisory committees are structured to provide a forum where experts representing many technical perspectives can provide independent advice that is

factored into the Commission's decisionmaking process."

**Next Meeting** The ACNW met again on August 2 – 4 in Washington, DC. The next ACNW meeting is scheduled for September 20 - 22 in Las Vegas, Nevada. A discussion of the draft white paper on low-level waste is tentatively scheduled for September 20.

*For additional information on the meeting contact Sharon Steele, at 301-415-6805.*

*A complete agenda is available on the NRC's Web site at: <http://www.nrc.gov/reading-rm/doc-collections/acnw/agenda/2005/>.*

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### ***U.S. Department of Energy***

## **Manifest Information Management System Update**

According to officials at the U.S. Department of Energy, the Manifest Information Management System (MIMS) is now loaded with all the calendar year 2004 data and all current-year data through May 2005, thereby allowing users to do queries on the entire year for all operating 3 disposal sites. DOE is requesting that members and users of the system review the '04 data and notify Doug Tonkay of any discrepancies that are spotted as a means of quality control. Mr. Tonkay can be contacted at (301) 903-7212 or at [Douglas.tonkay@em.doe.gov](mailto:Douglas.tonkay@em.doe.gov).

Please also note that there will be a MIMS working group lunch on September 22—the first day of the LLW Forum meeting in Las Vegas, Nevada—to which all interested parties are invited. During that meeting, Mr. Tonkay will discuss some changes made in the Envirocare historical MIMS data, primarily dealing with FUSRAP waste. In its review, the department found that some historical DOE waste was inadvertently included in MIMS, when the scope is supposed to be just non-DOE waste.

Accordingly, the department has pulled out FUSRAP waste records prior to 1997 when DOE managed that program. The summary table on the web page has been corrected to show these changes.

## **Moab Mill Tailings to be Moved**

In July, the U.S. Department of Energy announced that more than 12 million tons of radioactive tailings will be moved, predominantly by rail, to a proposed holding site at Crescent Junction, Utah. The tailings currently are located at Moab in southeastern Utah about 750 feet from the Colorado River. The new location will be about 30 miles from the river.

"The only way we can look at this is good news," said department spokesperson Mike Waldron. "We have identified a solution that will help to ensure the environmental quality of the region for generations to come."

The tailings come from the mining of uranium deposits in Utah by a mill owned by the Atlas Corporation. The company declared bankruptcy in 1998 and the Energy Department took over the site in 2001.

The department's decision was announced in a final environmental impact statement for the Moab tailings site. It will become final upon publication in the *Federal Register*.

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*(Continued from page 10)*

systems will allow the Texas site to expand dusty waste treatment services and increase options for solidification and disposal of liquids and sludges. "The opening of a more efficient, high throughput waste treatment building is an important element of our growth strategy for the Texas operation," stated Romano.

Hazardous treatment services were suspended at the Texas facility following a July 2004 fire. Limited treatment resumed in December 2004 following repairs to the fire-damaged building. The repaired building remains in use for a limited range of services. Resumption of full treatment services became possible with the opening of the new building.

***U.S. Nuclear Regulatory Commission***

## **NRC Proposes National Tracking System for Certain Radioactive Materials**

The U.S. Nuclear Regulatory Commission is considering amending its regulations to implement a national tracking system for certain radioactive materials used for academic, medical and industrial purposes. The agency is working closely with other federal agencies and states to develop the National Source Tracking System to track certain radioactive materials in specific quantities. The NRC worked with other agencies and the international community during 2002-03 to reach agreement on which radioactive materials and sources should be tracked. Those sources are set forth in the International Atomic Energy Agency (IAEA) Code of Conduct on the Safety and Security of Radioactive Sources. They include, but are not limited to, certain amounts of Cobalt-60, Strontium-90, Cesium-137, Iridium-192 and Americium-241. The sources are considered “sealed sources” because they are encased in a capsule designed to prevent leakage or escape of the material.

Under the proposed amendment to NRC regulations, licensees would be required to report information on the manufacture, transfer, receipt or disposal of these sources of interest to an automated National Tracking System, to be administered by the NRC. Each licensee would also have to provide in its initial inventory of nationally tracked sources and annually verify and reconcile the information in the system with the licensee’s actual inventory. In addition, the amendment would require manufacturers to assign a unique serial number to each nationally tracked source.

“This regulation would allow us to better understand and monitor who possesses sources of interest on a national basis,” said Charles L. Miller,

Director of the NRC’s Division of Industrial and Medical Nuclear Safety. “It is consistent with recommendations of the International Atomic Energy Agency (IAEA) and a joint NRC/ Department of Energy report.”

The National Source Tracking System, once fully operational, would assist NRC and the 33 Agreement States to conduct inspections and investigations, communicate nationally tracked source information to other government agencies, and verify legitimate ownership and use of nationally tracked sources. The NRC has developed and is maintaining an interim database of radioactive sources of interest for both NRC and Agreement State licensees. This database will be maintained until the National Source Tracking System is complete.

Further details of the proposed amendments to NRC’s regulations are contained in a *Federal Register* notice published on July 28, 2005 (70 *Federal Register* 43,646). Interested persons are invited to submit written comments by October 11 to the Secretary, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001, Attention: Rulemakings and Adjudications Staff. Comments may also be sent by e-mail to [SECY@nrc.gov](mailto:SECY@nrc.gov) or submitted via the NRC’s rulemaking web site at <http://ruleforum.llnl.gov>.

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## **NRC Issues Safety Evaluation for North Anna ESP**

The U.S. Nuclear Regulatory Commission has issued a final safety evaluation report (SER) for a requested Early Site Permit (ESP) at the North Anna site in Louisa County, Virginia. A draft SER for the North Anna site, which is located about 40 miles northwest of Richmond, was issued in December 2004. The final SER notes several issues that must be addressed later—in any application to build a new reactor at the site—as well as recommends eight conditions to be

imposed on the ESP if the Commission decides to issue it, including

- ◆ requiring use of a dry cool tower by the proposed Unit 4 during normal operation, and
- ◆ requiring a design for a radioactive waste facility with features that preclude any accidental radionuclide release into a liquid pathway, such as groundwater.

A final decision on the ESP application is expected in mid-2006, after receipt of a report from the NRC's independent Advisory Committee on Reactor Safeguards, issuance of the staff's final Environmental Impact Statement, and the conclusion of an NRC Atomic Safety and Licensing Board hearing on the application.

The ESP process allows an applicant to resolve certain safety and environmental issues related to siting prior to submitting an application to build a new nuclear power plant. An ESP denotes a site's suitability for construction and operation of a nuclear power plant. The North Anna application was filed in September 2003 by Dominion Nuclear North Anna, LLC. If approved, the permit would allow Dominion to reserve the site for up to 20 years. A future application for a construction permit or combined license at the North Anna site could then reference the ESP.

During the application process, NRC staff have reviewed information Dominion provided regarding the ESP site in areas including

- ◆ site seismology, geology, meteorology and hydrology;
- ◆ risks from potential accidents resulting from operation of a nuclear plant at the site;
- ◆ the site's ability to support adequate physical security for a nuclear plant; and
- ◆ proposed major features of the emergency plan Dominion would implement if a reactor is eventually built at the site.

The SER issued by NRC can be found on the NRC's web site at <http://www.nrc.gov/reactors/new-licensing/esp/north-anna.html>.

## License Renewals Continue to Move Forward

On July 1, the U.S. Nuclear Regulatory Commission announced that it had renewed the operating license of the Arkansas Nuclear One power plant, Unit 2, for an additional 20 years. Later that month, NRC staff issued a final environmental impact statement on the proposed renewal of the operating licenses for the Millstone Power Station, Units 2 and 3. A final environmental impact statement on the proposed renewal of the operating licenses for the Browns Ferry Nuclear Plant—Units 1, 2 and 3—was issued one month earlier on June 29.

In addition, in late July, NRC announced that an application for a 20-year renewal of the operating license for the Oyster Creek Nuclear Station is available for public review. On the same day, NRC staff held two public meetings on the environmental review of Nuclear Management Company's application to renew the operating license for Palisades Nuclear Plant. Two public meetings on the environmental review of Nuclear Management Company's application to renew the operating license for the Monticello Nuclear Power Plant were held on June 30.

### Arkansas Nuclear One Plant

The Arkansas Nuclear One Plant is located near Russellville, Arkansas. The current operating license for Unit 2 at the plant, which is operated by Entergy Operations, was set to expire on July 17, 2018. With the renewal, the license is extended to July 17, 2038. The Commission unanimously approved a license extension for Unit 1 on June 20, 2001 following a review of staff recommendations. Unit 1's license is now set to expire on May 20, 2034.

NRC staff held public meetings on February 3 in Russellville to gather comments on environmental issues the public believes NRC should consider in its review of the license application for Unit 2—

## Federal Agencies and Committees *continued*

which application was submitted by Entergy Operations on October 15, 2003. The agency's final EIS on the plant, which was issued on April 20, concluded that there are no environmental impacts that would preclude license renewal for an additional 20 years of operation.

*Copies of the reports related to the Arkansas One renewal are available on the NRC web page at <http://www.nrc.gov/reactors/operating/licensing/renewal/applications/ano-2.html>.*

### **Millstone Station**

NRC's final environmental impact statement on the proposed renewal of the operating licenses for the Millstone Power Station finds that there are no environmental impacts that would preclude license renewal for an additional 20 years of operation. As part of the environmental review of the applications, the NRC held public meetings near the plant to discuss the scope of the review and the draft version of the environmental impact statement. Comments were received from members of the public, local officials and representatives of state and federal agencies.

The Millstone Station is located in Waterford, Connecticut. The current operating licenses for Units 2 and 3 expire on July 31, 2015 and November 25, 2015, respectively. Dominion Nuclear Connecticut, Inc. submitted a license renewal application on January 22, 2004. On March 12, NRC announced the opportunity to request a hearing on the application. The Connecticut Coalition Against Millstone submitted a request for a hearing and a petition to intervene in the hearing. In mid-May, NRC held two public meetings to obtain input on the environmental impact statement prepared for the license application.

On October 20, NRC staff met with Dominion Nuclear officials to discuss the results of the agency's inspections of the company's license renewal program for the plant. The meeting was open to observation by members of the public

and an opportunity was provided to public observers to ask questions prior to adjournment of the meeting. A "scoping and screening" inspection was conducted to verify that the company's license renewal program is implemented consistent with its application and pertinent regulations. A second inspection was conducted to verify that programs are or will be in place to manage the material conditions of the systems, structures and components.

*A copy of the Millstone relicensing application can be found at <http://www.nrc.gov/reactors/operating/licensing/renewal/applications/millstone.html>. A copy of the Millstone final environmental impact statement is available at <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1437/supplement22/index.html>.*

### **Browns Ferry Nuclear Power Plant**

NRC's final environmental impact statement on the proposed renewal of the operating licenses for the Browns Ferry Nuclear Power Plant finds that there are no environmental impacts that would preclude license renewal for an additional 20 years of operation. As part of the environmental review of the applications, the NRC held public meetings near the plant to discuss the scope of the review and the draft version of the environmental impact statement. Comments were received from members of the public, local officials and representatives of state and federal agencies.

The Browns Ferry Nuclear Power Plant is located near Decatur, Alabama. The current operating license for Units 1, 2 and 3 are set to expire on December 20, 2013, June 28, 2014, and July 2, 2016, respectively. The Tennessee Valley Authority submitted a license renewal application for the units on January 6, 2004. NRC staff then held two public meetings on April 1, 2004, in Athens, Alabama on the environmental review related to the license renewal application. (Unit 1 of the plant has been shut down for an extended period. NRC is currently reviewing TVA's extensive work on that unit to determine if it may be restarted.)

*A copy of the Browns Ferry application can be found at <http://www.nrc.gov/reactors/operating/licensing/renewal/applications/browns-ferry.html>. A copy of the final environmental impact statement is available at <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1437/supplement21.index.html>.*

### **Oyster Creek Nuclear Generating Station**

On July 28, NRC announced that an application for a 20-year renewal of the operating license for the Oyster Creek Nuclear Station is available for public review. The Oyster Creek plant is located approximately nine miles south of Toms River, New Jersey. Its current operating license expires on April 9, 2009. The licensee, AmerGen Energy Company, submitted a renewal application on July 22.

NRC staff is currently conducting an initial review of the application to determine whether it contains enough information for the required formal review. If the application has sufficient information, the NRC will formally "docket," or file, the application and will announce an opportunity to request a public hearing.

In December 2004, NRC granted AmerGen an exemption allowing it to retain the protection of "timely renewal" provision of NRC regulations. This provision stipulates that if a nuclear power plant licensee applies for license renewal at least five years before its current operating license expires, the existing license will not expire while the NRC decides whether to grant the requested renewal. AmerGen missed that time frame, but NRC staff decided the exemption was warranted because there would still be ample time to complete the review before the plant's license expires, provided a sufficient application was submitted by July 2005.

*A copy of the renewal application is available on the NRC's web site at <http://www.nrc.gov/reactors/operating/licensing/renewal/applications.html>.*

### **Palisades Plant**

On July 28, NRC staff held two public meetings on the environmental review of Nuclear Management Company's application to renew the operating license for Palisades Nuclear Plant. The meetings were open to the public and time was set aside for public comment on environmental issues that the NRC should consider in its review of the proposed license renewal.

The plant's renewal application was submitted on March 22. The current license for the Palisades plant expires on March 4, 2011. If approved, the plant's NRC license would be extended for 20 years.

At the conclusion of the information-gathering process, the NRC staff will prepare a summary of conclusions and significant issues. NRC staff will then prepare a draft environmental impact statement supplement for public comment and will hold a public meeting to solicit comments. After consideration of comments received on the draft, NRC will prepare a final EIS supplement.

*A copy of the license renewal application is available for review on NRC's web site at <http://www.nrc.gov/reactors/operating/licensing/renewal/applications/palisades.html>.*

### **Monticello Plant**

On June 30, NRC staff held two public meetings on the environmental review of Nuclear Management Company's application to renew the operating license for the Monticello Nuclear Power Plant. The meetings were open to the public and time was set aside for public comment on environmental issues that the NRC should consider in its review of the proposed license renewal.

The Monticello plant is located approximately 30 miles northwest of Minneapolis, Minnesota and its current operating license expires on September 9, 2010. The licensee, Nuclear Management Company, submitted a renewal application on March 24. A notice of opportunity to request a hearing was filed in the *Federal Register* on May 12.

The deadline for requesting a hearing was July 11.

At the conclusion of the information-gathering process, the NRC staff will prepare a summary of conclusions and significant issues. NRC staff will then prepare a draft environmental impact statement supplement for public comment and will hold a public meeting to solicit comments. After consideration of comments received on the draft, NRC will prepare a final EIS supplement.

*The license application for renewal of the Monticello Nuclear Generating Plant can be found on line at <http://www.nrc.gov/reactors/operating/licensing/renewal/applications.html>.*

### **NRC Regulations/Status of Renewals**

Under NRC regulations, a nuclear power plant's original operating license may last up to 40 years. License renewal may then be granted for up to an additional 20 years, if NRC requirements are met. To date, NRC has approved license extension requests for 33 reactor units. In addition, NRC is currently processing license renewal requests for a number of other reactors.

*For a complete listing of completed renewal applications and those currently under review, go to <http://www.nrc.gov/reactors/operating/licensing/renewal/applications.html>*

## **NRC Holds Public Meeting on Nuclear Power Plant Emergency Preparedness**

On August 31 and September 1, the U.S. Nuclear Regulatory Commission held a public meeting in Rockville, Maryland to discuss enhancements to the agency's emergency preparedness guidance and regulations for nuclear power plants in a post-9/11 threat environment. Topics discussed at the meeting included security-based emergency action levels, security-based drills and exercises, event notification to first responders, back-up power to

siren systems and alternative ways to alert the public.

During the first day of the meeting, senior officials from the Office of Nuclear Security and Incident Response participated in roundtable discussions with local, state and tribal representatives, the Federal Emergency Management Agency (FEMA), advocacy groups and nuclear industry staff. On the second day, a discussion was held on questions and comments captured during the 2005 National Radiological Preparedness Conference. The meeting was conducted in a town-hall format, with the public being provided an opportunity to offer suggestions and ask questions.

"The NRC has worked hard to enhance the interfaces among safety, security and preparedness for nuclear power plants," said Eric Leeds, Director of the Division of Preparedness and Response. "While we've made significant improvements over the past few years, we look forward to public input on ways we can further enhance our preparedness."

Each of the nation's commercial nuclear power plants has onsite and offsite emergency plans to assure appropriate protective measures would be taken in the event of a radiological emergency. Federal oversight of these emergency plans is shared by the NRC and FEMA. While NRC reviews and assesses onsite preparedness and response, FEMA takes the lead in reviewing and assessing offsite preparedness and response and in assisting state and local governments. The NRC reviews the FEMA findings and then makes a determination on the overall state of emergency preparedness for each site.

*For additional information on the meeting contact Robert Moody at (301) 415-1737 or send an e-mail to [rem2@nrc.gov](mailto:rem2@nrc.gov). Written comments may also be submitted by October 17 to <http://www.nrc.gov/public-involve/public-meetings/epreview2005.html> or to Robert Moody, U.S. NRC, Mail Stop O-6H2, 11555 Rockville Pike, Rockville, MD 20852.*

## NRC Requests Info from Plants on Emergency Preparedness

The U.S. Nuclear Regulatory Commission has issued a bulletin to companies licensed to operate commercial nuclear reactors in the United States requesting information on several components of their emergency preparedness programs. Areas covered by the bulletin include, among other things, emergency classifications, NRC notifications, onsite protective actions and onsite response organization augmentation.

Several studies show the existing emergency plan basis can successfully deal with events, including those dealing with security, at nuclear power plants. The agency recognizes, however, that security-based incidents present issues, such as the need to relay information and protect plant personnel, where enhancements to emergency planning could be made. The bulletin asks reactor operators for information on their emergency preparedness planning, procedures and training to be cognizant of what enhancements are planned or have been made.

“The NRC remains assured that security-based events at a nuclear power plant that could damage important equipment are very unlikely, and even if those events occur, existing emergency plans can effectively address the possible effects,” said Bruce Boger, Director of the Division of Inspection Program Management in the Office of Nuclear Reactor Regulation. “While emergency planning already includes flexibility for responding to a wide range of events, enhancements for security-related events may be prudent.”

The bulletin requests licensees to provide a written response on several areas, including:

- ◆ a summary discussion of any planned changes to emergency classification levels, as well as a schedule for implementing the changes, and

- ◆ summary discussions of programs (and any changes) for NRC notification, onsite protective actions, onsite response organization augmentation and drills and exercises.

*Bulletin 2005-02, “Emergency Preparedness and Response Actions for Security-Based Events,” can be found on the NRC web site at <http://www.nrc.gov/reading-rm/doc-collections/gen-comm/bulletins/2005/>.*

## NRC Holds Public Meeting re Proposed LES Facility

The U.S. Nuclear Regulatory Commission held a public meeting on August 2 in Eunice, New Mexico to discuss the results of the agency’s Safety Evaluation Report and Final Environmental Impact Statement for a gas centrifuge uranium enrichment facility proposed to be constructed near Eunice by Louisiana Energy Services. The meeting was intended to provide members of the public an opportunity to hear a summary of, and to ask questions about, the NRC review of the LES application as presented in the two reports.

The SER and FEIS document the NRC staff’s findings during the safety/security and environmental reviews of the LES application to build the National Enrichment Facility. Both documents are available to the public at [www.nrc.gov/reading-rm/doc-collections/nuregs/staff/](http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/).

*For further information, please contact Timothy Johnson, at Mail Stop: T-8542, Special Projects Branch, Division of Fuel Cycle Safety and Safeguards, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001 or at (301) 415-7299 or at [tj@nrc.gov](mailto:tj@nrc.gov).*



## NRC Regulatory Conference Scheduled for March 2006

The U.S. Nuclear Regulatory Commission will hold its next Regulatory Information Conference (RIC) on March 7 – 9 in Rockville, Maryland. The goal of the RIC is to provide a forum for discussion of challenging technical and regulatory topics by the NRC, industry stakeholders and the public. Topics at last year's meeting included regulatory trends, risk-informed emergency reactor core cooling requirements, spent nuclear fuel management, new reactor licensing and security in a post-9/11 world.

Persons interested in attending the conference will be able to register at <http://www.nrc.gov/public-involve/conference-symposia/ric/> beginning in December 2005. The conference will be held at the Marriott Bethesda North. For more information, contact Sharon Bell at (301) 415-1217 or Mary Glenn Crutchley at (301) 415-2338.

## NRC Restores Additional Documents to its On-Line Library

The U.S. Nuclear Regulatory Commission has completed the restoration of public access to more than 70,000 additional documents through its on-line public library, ADAMS, after reviewing them for security sensitivity. The documents include administrative, contractual, research and other issues not related to a specific licensee that were deemed non-sensitive as a result of the NRC's review. They were removed on October 25 of last year in order to review them for sensitive information.

"We are pleased that the public will once again be able to obtain these documents," said Edward T. Baker, Director of the NRC's Office of Information Services. "While we are firmly

supportive of openness in our regulatory process, it was important to remove these documents to conduct a security review and remove information that could potentially be of use to a terrorist."

The agency has previously restored access to about 163,000 non-sensitive documents. It continues to evaluate documents dealing with nuclear materials licensees.

*The restored documents may be viewed and retrieved at <http://www.nrc.gov/reading-rm/adams/web-based.html>.*

## NRC Reports Lowest Average Occupational Dose Ever in 2004

The U.S. Nuclear Regulatory Commission recently reported an average annual collective dose per nuclear power plant of 100 person-rem for 2004—which figure is the lowest dose ever reported and half of the dose recorded 10 years ago. In announcing the figure, NRC stated as follows:

To determine a plant's collective dose, individual doses are added up and the result expressed in person-rem. The average American receives a dose of about 360 millirem every year from all radioactive sources; the average nuclear plant worker in recent years received about an additional 160 millirem each year on the job. NRC regulations allow workers at nuclear power plants to safely receive a job-related dose of up to 5,000 millirem each year.

Bruce Boger, Director of the Division of Inspection Program Management in NRC's Office of Nuclear Reactor Regulation, went on to state as follows: "This report shows nuclear power plant operators have very effective plans and procedures in place to reduce workers' exposure

while ensuring the necessary work is done to NRC requirements.”

The nation’s 69 pressurized-water reactors had an average annual collective dose of 71 person-rem, down 22 percent from 2003 and the lowest ever for pressurized-water reactors. The 35 boiling-water reactors had an average annual collective dose of 156 person-rem, the second lowest ever.

*The full report can be found on NRC’s web-based document database, ADAMS, by entering accession number ML051530296 in the search function at <http://www.nrc.gov/reading-rm/adams/web-based.html>.*

### NRC Proposes Improved Drug Testing and Worker Fatigue Provisions

The U.S. Nuclear Regulatory Commission is proposing improvements to the agency’s fitness-for-duty requirements for workers that have unescorted access to a nuclear power plant’s protected areas. The changes are outlined in a proposed rule that would apply to all currently operating plants, as well as any future plants licensed by NRC. The drug- and alcohol-testing provisions would also apply to facilities that transport or handle strategic special nuclear material, including the U.S. Department of Energy’s proposed mixed-oxide fuel facility.

“The NRC has long had strong fitness-for-duty requirements, and the proposed changes would provide even greater assurance that workers with unescorted access are trustworthy and reliable,” said NRC Executive Director for Operations Luis Reyes. “The changes we’re proposing will also set work hour limits to ensure nuclear power plant employees get enough rest to carry out their jobs.”

The proposed rules set out detailed requirements in many areas of fitness-for-duty programs including:

- ◆ requiring validity tests for urine samples to determine if a specimen has been adulterated, diluted or substituted;
- ◆ toughening sanctions for violations, including permanent denial of unescorted access for refusing or attempting to subvert a test;
- ◆ adding the position of Substance Abuse Expert and specifying the role that person would fulfill in the fitness-for-duty and return-to-duty processes;
- ◆ codifying individual work hour limits for some workers of no more than 16 hours in a 24-hour period, 26 hours in a 48-hour period and 72 hours in a week, excluding shift turnover time;
- ◆ establishing minimum individual breaks for some workers of at least 10 hours between shifts, a 24-hour break each week and a 48-hour break every two weeks; and
- ◆ requiring some groups of workers to average a maximum of 48 hours per week while the plant is operating.

The proposed changes represent the resolution of the NRC’s activities in response to petitions for rulemaking regarding work hour limits and certain inspections of fitness-for-duty programs. The rule would also, in part, replace and expand on an order NRC issued in April 2003 setting work hour limits for security personnel, as well as codify a Commission policy statement on fatigue issued in 1982.

*For more information on the proposed rule, contact Rebecca Karas at (301) 415-3711 or [rlk@nrc.gov](mailto:rlk@nrc.gov).*

## Obtaining Publications

# To Obtain Federal Government Information

### by telephone

- DOE Public Affairs/Press Office .....(202) 586-5806
- DOE Distribution Center .....(202) 586-9642
- DOE's National Low-Level Waste Management Program Document Center .....(208) 526-6927
- EPA Information Resources Center .....(202) 260-5922
- GAO Document Room .....(202) 512-6000
- Government Printing Office (to order entire *Federal Register* notices) .....(202) 512-1800
- NRC Public Document Room .....(202) 634-3273
- Legislative Resource Center (to order U.S. House of Representatives documents) .....(202) 226-5200
- U.S. Senate Document Room .....(202) 224-7860

### by internet

- NRC Reference Library (NRC regulations, technical reports, information digests, and regulatory guides). .....[www.nrc.gov/NRC/reference](http://www.nrc.gov/NRC/reference)
- EPA Listserve Network • Contact Lockheed Martin EPA Technical Support at (800) 334-2405 or e-mail (leave subject blank and type help in body of message). .....[listserv@unixmail.rtpnc.epa.gov](mailto:listserv@unixmail.rtpnc.epa.gov)
- EPA • (for program information, publications, laws and regulations) ..... <http://www.epa.gov/>
- U.S. Government Printing Office (GPO) (for the Congressional Record, *Federal Register*, congressional bills and other documents, and access to more than 70 government databases). .....[www.access.gpo.gov](http://www.access.gpo.gov)
- GAO homepage (access to reports and testimony) .....[www.gao.gov](http://www.gao.gov)

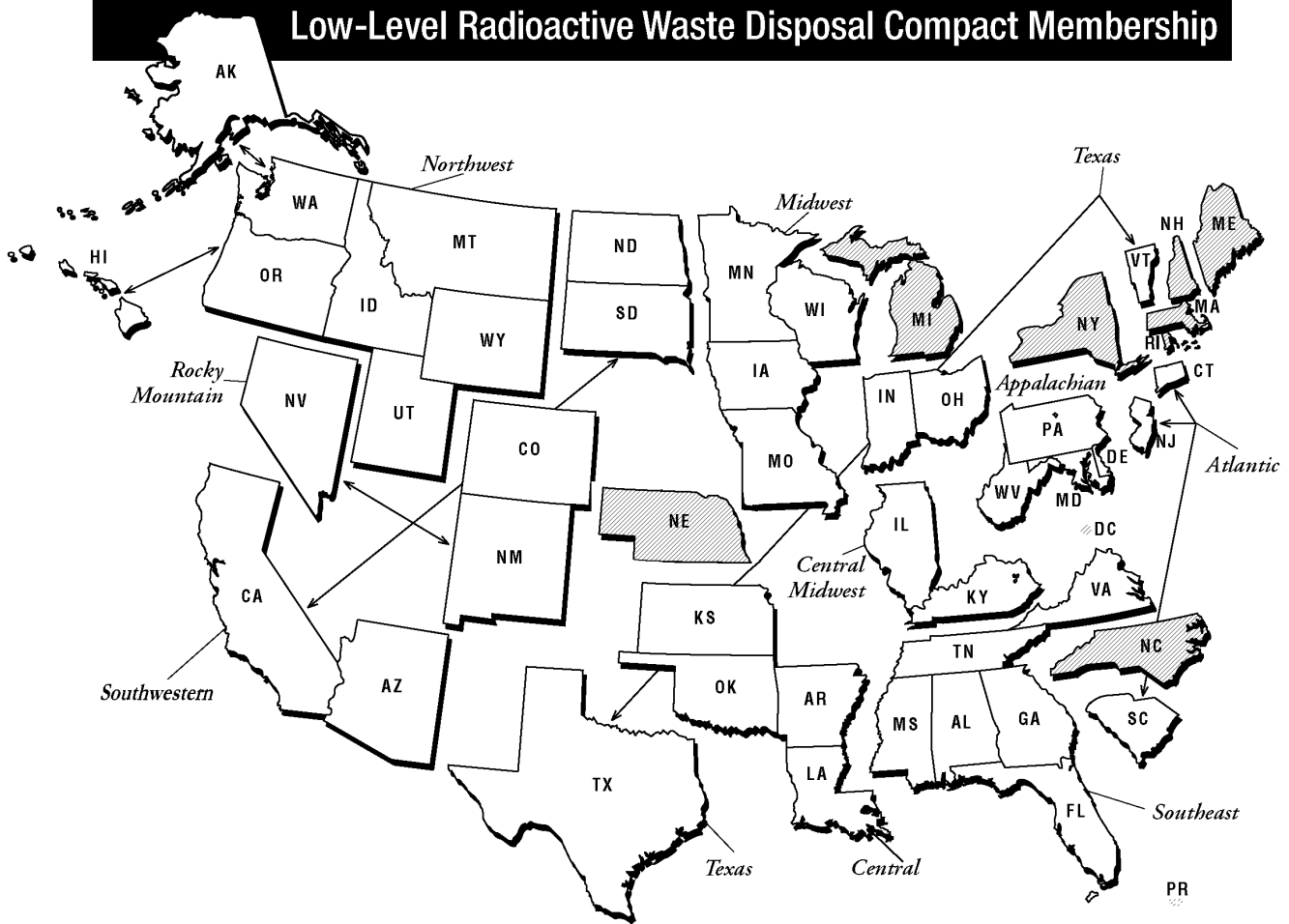
**To access a variety of documents through numerous links, visit the web site for the LLW Forum, Inc. at [www.llwforum.org](http://www.llwforum.org)**

### Accessing LLW Forum, Inc. Documents on the Web

*LLW Notes*, LLW Forum Meeting Reports and the *Summary Report: Low-Level Radioactive Waste Management Activities in the States and Compacts* are distributed to the Board of Directors of the LLW Forum, Inc. As of March 1998, *LLW Notes* and LLW Forum Meeting Reports are also available on the LLW Forum web site at [www.llwforum.org](http://www.llwforum.org). The *Summary Report* and accompanying Development Chart, as well as LLW Forum News Flashes, have been available on the LLW Forum web site since January 1997.

As of March 1996, back issues of these publications are available from the National Technical Information Service at U.S. Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161, or by calling (703) 605-6000.

# Low-Level Radioactive Waste Disposal Compact Membership



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*Northwest accepts Rocky Mountain waste as agreed between compacts*

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