

# LLW *notes*

Volume 23, Number 1 January/February 2008

## *Texas Compact*

### **TCEQ Issues Initial Draft License for WCS Comment New Requirements and Conditions Included**

On December 10, 2007, Susan Jablonski, Director of the Radioactive Materials Division of the Texas Commission on Environmental Quality (TCEQ), sent correspondence to Rod Baltzer, President of Waste Control Specialists LLC (WCS), concerning the company's application (no. RW4100) for near-surface disposal of low-level radioactive waste dated August 3, 2004 and subsequent revisions thereto. Attached to the letter was an initial draft license including pre-construction, construction, operational, and maintenance requirements that may differ or expand upon information provided in the application. Also attached was a draft licensing Order to accompany the initial draft license. According to the letter, the Order includes conditions that must be met before a final license can be issued.

Jablonski's letter states that WCS may submit comments on the initial draft license within 30 days. She cautions, "[t]he initial draft license is subject to further agency review and modification." In the interim, agency staff is determining whether WCS has any delinquent fees or penalties that are due.

In conclusion, the letter notes that TCEQ "anticipates a thirty day (30) period from the receipt

of any comments on the initial draft license to consider comments."

#### **Initial Draft License**

The following is a brief overview of the initial draft radioactive material license. Persons interested in additional information should contact the TCEQ or refer to the license itself.

**General Requirements** The initial draft license—which, by its own terms, will expire 15 years from the date of issuance—authorizes WCS to receive, possess, use, store, dispose and transfer low-level radioactive waste for near-surface land disposal. Such waste is limited to "compact waste" and

*(Continued on page 9)*

#### **In This Issue**

Barnwell Transition Plan Presented to ACNW&M—Page 5

Texas to Host Stakeholder Meeting re Radioactive  
Material Legislation—Page 12

NRC Responds to Congressional Inquiry re Waste  
Import Proposal—Page 15

Governor Certifications Approved re Byproduct Regulation—Page 24

## **COPYRIGHT POLICY**

The Low-Level Radioactive Waste Forum, Inc. is dedicated to the goals of educating policy makers and the public about the management and disposal of low-level radioactive wastes, and fostering information sharing and the exchange of views between state and compact policy makers and other interested parties.

As part of that mission, the LLW Forum publishes a newsletter, news flashes, and other publications on topics of interest and pertinent developments and activities in the states and compacts, federal agencies, the courts and waste management companies. These publications are available to members and to those who pay a subscription fee.

Current members are allowed to distribute these written materials to a limited number of persons within their particular organization (e.g. compact commissioners, state employees, staff within a federal agency, employees in a commercial enterprise.) It has become clear, however, that there will be instances where members and subscribers wish to share LLW Forum materials with a broader audience of non-members.

This Copyright Policy is designed to provide a framework that balances the benefits of a broad sharing of information with the need to maintain control of published material.

1. LLW Forum, Inc., publications will include a statement that the material is copyrighted and may not be used without advance permission in writing from the LLW Forum.
2. When LLW Forum material is used with permission it must carry an attribution that says that the quoted material is from an LLW Forum publication referenced by name and date or issue number.
3. Persons may briefly summarize information reported in LLW Forum publications with general attribution (e.g., the LLW Forum reports that . . .) for distribution to other members of their organization or the public.
4. Persons may use brief quotations (e.g., 50 words or less) from LLW Forum publications with complete attribution (e.g., *LLW Forum Notes*, May/June 2002, p. 3) for distribution to other members of their organization or the public.
5. Members and subscribers may with written approval from the LLW Forum's officers reproduce LLW Forum materials one time per year with complete attribution without incurring a fee.
6. If persons wish to reproduce LLW Forum materials, a fee will be assessed commensurate with the volume of material being reproduced and the number of recipients. The fee will be negotiated between the LLW Forum's Executive Director and the member and approved by the LLW Forum's officers.

# Low-Level Radioactive Waste Forum, Inc.

## LLW Notes

Volume 23, Number 1 January/February 2008

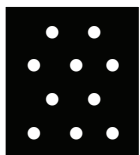
Editor and Writer: Todd D. Lovinger

Layout and Design: Rita Houskie, Central Interstate Low-Level Radioactive Waste Compact

LLW Notes is published several times a year and is distributed to the Board of Directors of the Low-Level Radioactive Waste Forum, Inc. - an independent, non-profit corporation. Anyone - including compacts, states, federal agencies, private associations, companies, and others - may support and participate in the LLW Forum, Inc. by purchasing memberships and/or by contributing grants or gifts. For information on becoming a member or supporter, please go to our web site at [www.llwforum.org](http://www.llwforum.org) or contact Todd D. Lovinger - the LLW Forum, Inc.'s Executive Director - at (202) 265-7990.

The LLW Notes is owned by the LLW Forum, Inc. and therefore may not be distributed or reproduced without the express written approval of the organization's Board of Directors.

Directors that serve on the Board of the Low-Level Radioactive Waste Forum, Inc. are appointed by governors and compact commissions. The LLW Forum, Inc. was established to facilitate state and compact implementation of the Low-Level Radioactive Waste Policy Amendments Act of 1985 and to promote the objectives of low-level radioactive waste regional compacts. The LLW Forum, Inc. provides an opportunity for state and compact officials to share information with one another and to exchange views with officials of federal agencies and other interested parties.



LLW  
FORUM, INC

**Low-Level Radioactive Waste  
Forum, Inc.**  
1619 12<sup>th</sup> Street N.W.  
Washington, DC 20009  
(202) 265-7990  
FAX (202) 265-7995  
E-MAIL [llwforuminc@aol.com](mailto:llwforuminc@aol.com)

## Table of Contents

<b>States and Compacts (Cover Story)</b> .....	1
TCEQ Issues Initial Draft License for WCS Comment .....	1
<b>Low-Level Radioactive Waste Forum, Inc.</b> .....	4
Low-Level Radioactive Waste Forum Meetings—2008 and Beyond .....	4
April 2008 LLW Forum Meeting Registration Now Open .....	4
<b>States and Compacts (continued)</b> .....	5
Barnwell Transition Plan Presented to ACNW&M .....	5
Haddam Neck Site Released for Unrestricted Use .....	7
Lee Site COL Available .....	8
Wyoming Uranium Recovery Application Available .....	8
North Anna COL Available .....	9
Texas to Host Stakeholder Meeting re Radioactive Material Legislation .....	12
South Texas Project COL Application Accepted by NRC .....	13
Public Meeting Held re South Texas Project Environmental Scoping .....	14
<b>Congress</b> .....	15
NRC Responds to Congressional Inquiry re Waste Import Proposal .....	15
Public Notice re Import Proposal .....	18
<b>Federal Agencies and Committees</b> .....	19
ACNW&M Hosts Low-Activity Waste Workshop .....	19
ACRS Holds End-of-the-Year Meeting .....	20
NRC Merges Advisory Committees .....	21
HLW Document Library Certification Upheld .....	22
Comments Sought re HLW Security Requirements .....	23
HLW Senior Resident Inspector Named .....	23
Governor Certifications Approved re Byproduct Regulation .....	24
Draft EIS Issued re Shearon Harris Renewal Application .....	25
Clarification Issued re COL Process .....	26
NRC Tightens Access Requirements .....	26
NRC Seeks Info re Plant Security .....	27
NRC Issues Letter re Gas Accumulation .....	27
Mitsubishi US-APWR Design Application Available .....	28
Requirements to Avoid Legacy Sites Proposed .....	28
20th Annual Regulatory Information Conference Scheduled .....	29
NRC Holds Meetings re Transportation .....	30
<b>Obtaining Publications</b> .....	31

## 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.*

## Low-Level Radioactive Waste Forum Meetings 2008 and Beyond

The following information on future meetings of the Low-Level Radioactive Waste Forum is provided for planning purposes only. Please note that the information is subject to change.

*For the most up-to-date information, please see the LLW Forum's web site at [www.llwforum.org](http://www.llwforum.org).*

### Spring 2008 Meeting

The next meeting of the LLW Forum will be held in Richland, Washington on April 28 – 29, 2008. It will be a one-day meeting, followed by a one-day optional site tour of the Hanford reservation. An optional site tour of the Pecos facility is planned as well. Meeting bulletin and registration forms for the meeting—which is being sponsored by the Northwest Compact—are available on the LLW Forum's web site at [www.llwforum.org](http://www.llwforum.org).

### Fall 2008 Meeting

The Appalachian Compact will serve as host of the fall 2008 LLW Forum meeting. The meeting will be held in Annapolis, Maryland on September 11 – 12

at the Westin Hotel. It will include an optional site tour of the Calvert Cliffs Nuclear Power Plant.

### Spring 2009 Meeting

The Atlantic Compact will serve as host of the spring 2009 LLW Forum meeting. The compact is currently exploring various facilities and locations in South Carolina including Charleston, Columbia and Greenville. Additional information on the facility and location will be forthcoming.

### Other Future Meetings

The LLW Forum is currently seeking hosts for the fall 2009 and for both 2010 meetings. The State of New York has agreed to host one of these meetings, but hosts are being sought for the remaining two meetings at this time. Although they seem far off, substantial lead-time is needed to locate appropriate facilities. Anyone interested in potentially hosting or sponsoring one of these meetings should contact one of the officers or Todd Lovinger, the organization's Executive Director, at (202)265-7990.

## April 2008 LLW Forum Meeting Registration Now Open

Registration for the next meeting of the Low-Level Radioactive Waste Forum is now open. The one-day meeting, which is being sponsored by the Northwest Interstate Compact on Low-Level Radioactive Waste Management, will be held at the Marriott Hotel in Richland, Washington on Monday, April 28. An optional Hanford site tour will be held on Tuesday, April 29, and an optional site tour of the Pecos facility is scheduled for Wednesday, April 30. (The Executive Committee will meet on Sunday evening, April 27.)

***Persons who plan to attend this meeting are strongly encouraged to register and make hotel reservations immediately. Due to the site visits, high attendance is anticipated for this meeting and space may be limited due to transportation and logistical issues.***

***And, please note that the deadline for getting the discounted rate at the hotel is February 27.***

Meeting bulletin and registration forms are now available on the LLW Forum's web site at [www.llwforum.org](http://www.llwforum.org). Links to the documents can be found both in the first bold paragraph of the Home Page, as well as under "Meetings" on the About Page. (Persons having trouble accessing the documents may request to have them e-mailed or faxed by calling the LLW Forum's office at 202/265-7990.) Persons planning to attend the site tours must provide their (1) social security number, (2) driver's license state of issuance and number, and (3) mother's maiden name, as requested on the registration form.

### *Atlantic Compact*

## Barnwell Transition Plan Presented to ACNW&M

On December 18, 2007, William House, Vice President of Regulatory Affairs, Barnwell Operations, gave a presentation about the transition plan for the Barnwell low-level radioactive waste facility to the Advisory Committee on Nuclear Waste & Materials (ACNW&M). The presentation outlined options being explored by EnergySolutions for operation of the site after June 30, 2008—at which time Barnwell is scheduled to cease accepting waste from generators across the country and instead only accept waste from generators in the Atlantic Compact region states of Connecticut, New Jersey and South Carolina.

ACNW&M is a part-time advisory group established by the U.S. Nuclear Regulatory Commission to provide independent technical review of, and advice on, the disposal of nuclear waste, transportation of both high- and low-level radioactive waste, storage of spent nuclear fuel, materials safety, and facilities decommissioning.

### **Barnwell Disposal Site Status**

The Barnwell site, which consists of 119 acres of disposal trenches, has been operating uninterrupted for 36 years. To date, approximately 28 million cubic feet of waste has been disposed at the facility, comprising approximately 12 million curies, and 96 acres of trenches have been capped. There is a remaining inventory of about 3 million curies at the site.

Under the terms of the Atlantic Compact, the maximum volume of waste allowed to be disposed at the facility has declined each year from a high of 160,000 cubic feet in FY 2000-2001 to a low of 35,000 cubic feet in FY 2007-2008. After June 30, 2008, no out-of-compact waste may be disposed at the facility.

During the last five fiscal years, the total volume of Class B and C waste disposed at the Barnwell facility excluding RPV's has averaged approximately 21,350 cubic feet/year. Of this annual Class B and C waste disposal volume, approximately 16,200 cubic feet/year has come from generators in the 34 states that are expected to lose Class B and C waste disposal access after June 30, 2008—with the remaining volume coming from generators in the Atlantic Compact and Texas Compact.

### **Transition Planning and Operational Scenarios**

As part of the planning for transition to an in-region waste only facility, EnergySolutions officials are projecting waste volumes, evaluating operating approaches, evaluating trench design options, determining cost assumptions, developing various cost estimates, identifying funding sources and attempting to build consensus among the affected parties.

At present, EnergySolutions' officials are projecting between 4,000 (B and C waste only) to 11,000 (A, B and C waste) cubic feet of waste to be disposed at the Barnwell facility annually from regional generators—not including the disposal of irradiated hardware and large components. Using these volume estimates, facility officials are currently considering two base case scenarios:

- ◆ *4,000 cubic feet of Class B and C waste only:* The site would use only one trench design and would accept waste and continue active disposal operations for two to three months per year.
- ◆ *11,000 cubic feet of Class A, B and C waste:* The site would use only one trench design and would continue accepting waste throughout the year, with the waste being disposed at the time of receipt.

EnergySolutions is also looking at various trench design and construction options including a pre-staged vault array; a Class A, B and C progressive trench; and, use of the existing Class B/C trench.



## States and Compacts *continued*

### Post-2008 Cost and Labor Estimates

The company estimates total operating costs of approximately \$6 million per year for the first scenario (4,000 cubic feet/year) and approximately \$7.6 million per year for the latter scenario (11,000 cubic feet/year). If the facility were to cease accepting waste and maintain the capability to perform disposal operations, EnergySolutions' officials estimate total operating costs of approximately \$3.7 million annually, with institutional costs of approximately \$2.6 million per year.

Approximate labor resources (representing full-time equivalents, not staffing levels) are estimated at 14 for institutional activities and 19 for facility maintenance without the acceptance of any waste. For continued operations, approximate labor resources of 24 are estimated for the scenario of 4,000 cubic feet/year versus 29 estimated for the scenario of 11,000 cubic feet/year.

These cost and labor estimates have been presented to the primary parties for consideration including the South Carolina Budget and Control Board, the Atlantic Compact Commission, compact generators (utilities) and the South Carolina Department of Health and Environmental Control (DHEC).

The parties continue to work toward an economically viable in-region only operations scenario. This may include waste volume commitments, the stabilization of costs beyond the site operator's control and implementation of an institutional cost reimbursement mechanism. In this regard, the South Carolina Budget and Control Board issued a letter to compact generators asking for their commitment to support the site. The Board has also indicated that it supports paying institutional costs from the Extended Care and Maintenance Fund and has hired a contractor to evaluate the fund's adequacy.

### Budget and Control Board Letter

On December 14, 2007, the South Carolina Budget and Control Board sent a letter to the six utilities that operate nuclear power reactors in the Atlantic

Compact region, as well as to the U.S. Navy, which operates several regional facilities that generate waste. The letter, which was signed by John Clark, Director of the South Carolina State Energy Office, stresses that South Carolina law requires the Board to suspend disposal operations at the Barnwell site if it appears that disposal revenues received at the facility will not be sufficient to meet operating costs—i.e., the site can continue accepting regional waste for disposal only if income received from regional disposal customers covers all facility operating costs and obligations.

Accordingly, the letter requests that “those generators who want the Barnwell site to remain available for disposal of Atlantic Compact regional waste propose a financial arrangement by February 15, 2008, for ensuring that disposal revenue will be adequate to cover all disposal facility operating costs.” The letter states that a workable plan may include the following:

- ◆ *As the basis for a revenue requirement, the amount of operating costs, margin, surcharges and other obligations identified by the disposal site operator, and the staffs of the Atlantic Compact Commission, the South Carolina Department of Health and Environmental Control and the State Budget and Control Board.*
- ◆ *An equitable disposal rate structure or fee methodology designed to generate enough income to meet the revenue requirement. The Budget and Control Board will be required to adopt a disposal rate schedule prior to July 2008, and it will be important to consider the views of the generators on how such a fee system should be structured.*
- ◆ *A legally binding mechanism for covering operating costs, in the event that the income derived from the Board-approved rate schedule falls short of the revenue requirement. Income could fall short during any period, for example, due to additional operating costs that were unanticipated, or due to fluctuations in the volume of waste received.*
- ◆ *Any proposed actions that might be taken by the Atlantic Compact Commission, the Budget and Control Board, or the disposal site operator within the current*

## States and Compacts *continued*

*statutory framework that might be necessary or helpful in executing the plan.*

The ultimate decision as to whether or not Barnwell may be sustained as a regional disposal facility, according to the letter, is up to the generators themselves. If disposal operations must be suspended due to a lack of generator support, the letter notes, “the decision might not be reversible, due to the expense and regulatory complexity of resuming operations at a later date.”

The letter concludes by noting, “South Carolina has no means to use tax dollars to subsidize the operating costs of the Barnwell facility in the event that disposal income falls short of the amount needed to cover costs.” Accordingly, if regional generators are not committed to covering all facility operating costs through disposal revenues or other financial assurance mechanisms, the Board may need to “consider appropriate actions under the law.”

*For additional information on the letter, please contact Bill Newberry of the South Carolina Budget and Control Board at (803) 737-8030. To view a copy of the Budget and Control Board's letter, go to [http://www.atlanticcompact.org/PDFs/Letter\\_to\\_PSEG\\_2007\\_12\\_04.pdf](http://www.atlanticcompact.org/PDFs/Letter_to_PSEG_2007_12_04.pdf).*

### **Other Activities**

In concluding his presentation, House reviewed other Barnwell activities that are on-going in addition to the work on a plan to transition the facility to an in-region only site. These activities include the following:

- ♦ updating the 2005 Barnwell Closure Plan cost estimates;
- ♦ preparing a financial authorization request to the South Carolina Budget and Control Board;
- ♦ beginning a 7-acre capping project at the Barnwell facility in the spring of 2008;

- ♦ preparing a Performance Objectives Verification Plan for DHEC review; and,
- ♦ the Phase 1 Closure which is scheduled to start in July of 2008.

In terms of the latter, the Phase I Closure project is projected to take approximately 15-months.

*For additional information, please contact William House of EnergySolutions at (803) 758-1809.*

---

---

### ***Atlantic Compact/State of Connecticut***

## **Haddam Neck Site Released for Unrestricted Use**

In late November 2007, the U.S. Nuclear Regulatory Commission announced that it has approved a request by Connecticut Yankee Atomic Power Company to release a majority of the Haddam Neck nuclear power plant site near Meriden, Connecticut for unrestricted public use. In so doing, the agency determined that residual contamination on the approximately 210 acres of land at the site is below NRC regulatory requirements that allow a maximum radiation dose of 25 millirem per year. (The average person in the United States receives about 300 millirems per year from background radiation.) Release of the land for unrestricted use, according to NRC, poses no threat to public health and safety.

Connecticut Yankee's license will still apply to the site's dry cask storage facility in which spent nuclear fuel from the plant's 28 years of operation is stored. In addition, the license will still apply to a parcel of land surrounding the facility, such that the total land remaining under the license is approximately 5 acres. Connecticut Yankee will remain responsible for the security and protection of this land and the dry cask storage facility. The company is required

## States and Compacts *continued*

to maintain \$100 million in nuclear liability insurance coverage for the facility until the waste has been removed.

Haddam Neck began commercial operations on January 1, 1968. The plant ceased production on December 5, 1996. Connecticut Yankee initiated decommissioning shortly thereafter.

Dismantlement and decommissioning were completed in July of 2007. NRC surveys verified that the cleanup met the 25 millirem per year requirement.

*NRC's Safety Evaluation Report of Connecticut Yankee's amendment request is available in the agency's online documents database, ADAMS, at <http://www.nrc.gov/reading-rm/adams/web-based.html> using accession number ML073120350 in the search field.*

---

---

### ***Atlantic Compact/State of South Carolina***

## **Lee Site COL Available**

In late December 2007, the U.S. Nuclear Regulatory Commission announced the availability of the public version of a combined license (COL) application for two new reactors at the Lee site near in Cherokee County, South Carolina.

The applicant, Duke Energy, submitted the application and associated information on December 13, 2007. The application seeks approval to build and operate two AP1000 reactors at the site, which is located approximately 35 miles southwest of Charlotte, North Carolina.

The AP1000 is a 1,100-megawatt electric pressurized-water reactor design. The NRC certified it in 2006.

NRC staff is currently conducting an initial check of the application to determine whether it contains

sufficient information required for a formal review. If the application passes the initial check, the NRC will “docket,” or accept it, for review. NRC expects to make this decision in early 2008. If the application is accepted, the NRC will then notice an opportunity for the public to request an adjudicatory hearing on the application.

*The Lee COL application, minus proprietary or security-related details, is available on NRC's web site at <http://www.nrc.gov/reactors/new-licensing/col.html>.*

---

---

### ***Northwest Compact/State of Wyoming***

## **Wyoming Uranium Recovery Application Available**

On December 7, 2007, the U.S. Nuclear Regulatory Commission announced the availability of an application from Lost Creek ISR, LLC to construct and operate an in-situ leach (ISL) uranium recovery facility at the Lost Creek site in Sweetwater County, Wyoming. This constitutes the second application that NRC has received for a new in-situ leach recovery operation. The first application—which was submitted by Energy Metals Corp. US on October 4, 2007—is for a proposed facility at Moore Ranch in Campbell County, Wyoming.

NRC staff is currently reviewing the application, which was submitted on October 30, 2007, to determine whether it contains sufficient information to begin detailed environmental and safety reviews. If the application is deemed acceptable, the agency will formally docket it and publish a notice of opportunity to request an adjudicatory hearing.

Lost River ISR is a subsidiary of Ur-Energy USA, Inc., which is based in Ken Caryl Ranch in Colorado. Lost Creek ISR has offices in Littleton, Colorado and in Casper, Wyoming.



## States and Compacts *continued*

In-situ recovery of uranium involves injecting a leaching solution, typically water mixed with oxygen and sodium bicarbonate, through wells into underground ore to dissolve the uranium. The leach solution is then pumped back to the surface and sent to a processing plant, where ion exchange is used to separate the uranium from the solution.

Before operations begin at Lost Creek, the U.S. Environmental Protection Agency, with assistance from the State of Wyoming, must exempt the groundwater aquifer from Safe Drinking Water Act requirements. After uranium recovery ceases, Lost Creek ISR will be required to return the groundwater affected by operations to pre-operational baseline concentrations.

*The Lost Creek ISR application can be found on NRC's web site at <http://www.nrc.gov/about-nrc/regulatory/adjudicatory/hearing-license-applications.html>.*

---

---

### ***Southeast Compact/State of Virginia***

## **North Anna COL Available**

In early December 2007, the U.S. Nuclear Regulatory Commission announced the availability of the public version of a combined license (COL) application for a new reactor at the North Anna site near Richmond, Virginia. The applicant, Dominion Virginia Power, submitted the application and associated information on November 27, 2007. The application seeks approval to build and operate an Economic and Simplified Boiling Water Reactor (ESBWR) at the site, which is located approximately 40 miles northwest of Richmond.

The ESBWR is a 1,500 Mwe design currently under review by the NRC for possible certification. The agency expects to complete its ESBWR review in mid-2010. NRC will consider those findings in any review of the North Anna application.

NRC staff is currently conducting an initial check of the application to determine whether it contains sufficient information required for a formal review. If the application passes the initial check, the NRC will “docket,” or accept it, for review. NRC expects to make this decision in February. If the application is accepted, the NRC will then notice an opportunity for the public to request an adjudicatory hearing on the application.

*The North Anna COL application, minus proprietary or security-related details, is available on NRC's web site at <http://www.nrc.gov/reactors/new-licensing/col.html>.*

---

---

### ***(Continued from page 1)***

“federal facility waste” with source material not to exceed 30,000 kilograms and special nuclear material not to exceed 350 grams total of U-235 or 200 grams of plutonium or any combination of these provided the sum of the ratios of the quantities does not exceed unity.

“Compact waste” includes low-level radioactive waste that is generated in Texas or a party state or, in the alternative, low-level radioactive waste that is not generated in Texas or a party state, but which has been approved for importation to Texas by the Compact Commission. “Federal facility waste” includes low-level radioactive waste that is the responsibility of the federal government under the Low-Level Radioactive Waste Policy Act of 1980 and its 1985 amendments. Greater-Than-Class C waste is specifically excluded from the definition of “federal facility waste.”

The initial draft license specifically limits the total volume and radioactivity of “compact waste” that may be disposed at the facility to 2,310,000 cubic feet or less and not more than 3,890,000 curies. The total volume of “federal facility waste” that may be disposed at the facility is limited to 26,000,000 cubic feet, with a total radioactivity not to exceed 5,600,000 curies. In regard to such waste, the license provides the following additional

## States and Compacts *continued*

limitation: “Of totals, not more than a total volume of 8,100,000 cubic feet (or 300,000 cubic yards) and total radioactivity of 5,500,000 curies of Class A Containerized, Class B, and Class C low-level radioactive waste, collectively.”

The initial draft license provides that the form of the material is to be dry-packaged low-level radioactive waste, except as otherwise authorized in the license. It specifically prohibits the receipt and/or disposal of spent fuel, high-level radioactive waste, by-product material, naturally-occurring radioactive material, hazardous waste, industrial solid waste, municipal solid waste, liquid waste, explosive or pyrophoric materials. It also specifically prohibits any additional waste streams not specifically characterized in the application, including but not limited to uranium hexafluoride conversion waste, depleted uranium or similar waste, until complete waste profiles, radionuclides information, total radioactivity, radionuclide concentrations, chemical constituents, and analysis of any impacts to members of the public and the environment are reviewed and approved via amendment.

**Additional Requirements** Among other things, the initial draft license includes requirements relating to the following: pre-construction; site design and construction; receipt, acceptance, and inspection; radiation safety; general packaging; waste characteristics and waste forms; disposal operations; environmental surveillance; closure; financial assurance and qualifications; and, additional items.

Some highlights from these additional requirements include the following:

- ◆ Prior to construction, WCS must conduct and provide to the TCEQ an updated performance assessment that incorporates the license conditions, includes the most current waste characterization data, and demonstrates compliance with statutory performance objectives. WCS must obtain written approval from TCEQ prior to the commencement of major construction of the land disposal facility.
- ◆ An individual buffer zone must be maintained for both the compact and federal facilities in a lateral perimeter of at least 100 feet around all disposed waste to allow monitoring for early detection of releases and to allow for remediation, if necessary.
- ◆ Compact waste and federal facility waste may not be commingled and each facility shall have separate receipt, acceptance and disposal areas.
- ◆ Federal facility waste may not be accepted until WCS has begun accepting compact waste in compliance with the terms of the license.
- ◆ Prior to the acceptance of any federal facility waste, WCS must provide an agreement signed by the Secretary of the U.S. Department of Energy that the federal government will assume all right, title and interest in land and buildings for the disposal of federal facility waste. Said agreement must be acceptable to TCEQ.
- ◆ Waste intended for disposal at either facility may not be accepted by rail. In order for waste to be shipped by rail, the licensee must prepare an evaluation and procedures for the receipt, handling, off-loading and acceptance of waste into the land disposal facility for TCEQ review and approval as a license amendment.
- ◆ Sixty days prior to accepting waste for disposal, WCS must provide an inventory of any waste in storage at adjacent facilities that is intended for disposal.
- ◆ The license does not authorize the processing, treatment, storage or disposal of hazardous waste at the federal facility. Specific conditions and limitations are included for the disposal of bulk waste at this facility.
- ◆ Waste that contains special nuclear material (SNM) may be accepted for disposal in quantities not sufficient to form a critical mass, as noted in the license.

## States and Compacts *continued*

- ◆ The concentration of radioactive constituents may not be reduced by dilution to meet exemption levels or to change the waste's classification or disposal requirements. Low-level radioactive waste that has been diluted as a result of processing, stabilization, mixing, treatment or for any other reason must be subject to the disposal regulations it would have been subject to prior to dilution.
- ◆ WCS may not accept low-level radioactive waste that contains hazardous listed chemicals or exhibits hazardous characteristics for disposal at the compact facility. Specific authorized waste streams are included in the license.
- ◆ The top of all waste must be a minimum of five meters below the top surface of the cover or must be disposed of with intruder barriers that are designed to protect against an inadvertent intrusion for at least 500 years.
- ◆ Prior to closure and license termination, WCS must re-evaluate the impacts or activities of nearby facilities in order to ensure that statutorily required performance objectives will continue to be met.
- ◆ WCS must apply for an amendment to transfer the license to TCEQ upon fulfillment of all applicable requirements for closure and post-closure observation and maintenance. Upon application to transfer the license, WCS must acknowledge conveyance to the State of Texas of all right, title and interest in compact waste.
- ◆ Upon completion of all decommissioning requirements and before transfer of the license can occur, WCS must convey to the federal government all right, title and interest in land and buildings of the federal facility and convey all right, title and interest in federal facility waste to the federal government.
- ◆ Before the commencement of major construction, WCS must update the financial model, demonstrate financial viability, and meet specified financial requirements and

qualifications. Financial assurance as listed in the license must be provided 60 days prior to accepting waste.

*For a complete list of additional requirements, interested persons are directed to the initial draft license itself.*

### **Draft Licensing Order**

The draft licensing Order that was issued by TCEQ provides, in pertinent part, that WCS must acquire free and clear title to and all interest in land and buildings, including the surface and mineral estates, of the proposed disposal site as defined in the license application by either having acquired:

- (A) an undivided ownership of the buildings, surface estate, and mineral estate in fee simple through purchase or completed condemnation; or
- (B) an undivided ownership of the buildings and surface estate, along with an exemption, granted by TCEQ in accordance with federal law for use of a surface use agreement, in lieu of acquiring fee simple title to the mineral estate.

WCS must demonstrate that it has met the above-stated requirements, and the Executive Director must approve thereof, before a final license may be issued, signed or granted.

Under the terms of the initial draft license, upon its issuance, WCS must convey all right, title and interest in land and buildings for the Compact Waste Disposal Facility to the State of Texas together with requisite rights of access to the property. Furthermore, the initial draft license specifically provides that WCS may not transfer the real property on which the Federal Facility Waste Disposal Facility is located except to the federal government.

*For additional information, please contact Susan Jablonski of the Texas Commission on Environmental Quality at (512) 239-6731.*

### *Texas Compact/State of Texas*

## Texas to Host Stakeholder Meeting re Radioactive Material Legislation

On February 15, 2008, the Texas Commission on Environmental Quality (TCEQ) hosted a stakeholder meeting beginning at 9:00 a.m. at its offices at 12100 Park 35 Circle (Building E, Room 201S) in Austin, Texas. The purpose of the meeting was to provide an opportunity for the regulated community and the public to offer input on the next phase of implementation of legislation for radioactive waste management and source material recovery (uranium mining).

As noted below, of particular interest to LLW Forum members was TCEQ's consideration of disposal rate setting for low-level radioactive waste and related disposal fee assessment and collection.

### Background

TCEQ hosted the meeting in order to provide information to the public and solicit comments before initiating rulemaking to implement the remaining provisions of Senate Bill (SB) 1604 and House Bill (HB) 3838.

**SB 1604** SB 1604 concerns the transfer of certain regulatory responsibilities for radioactive waste management licensing from the Texas Department of State Health Services (DSHS) to the TCEQ. (See *LLW Notes*, May/June 2007, pp. 9-10.) Prior to its enactment, TCEQ had jurisdiction to regulate and license the disposal of radioactive substances except for by-product material. SB 1604, however, provides that TCEQ will also have jurisdiction to regulate and license:

- ♦ the processing or storage of low-level radioactive waste or naturally occurring radioactive material (NORM) waste received from other persons, except oil and gas NORM;

- ♦ the recovery or processing of source material;
- ♦ the processing of by-product material; and,
- ♦ sites for the disposal of radioactive waste, by-product material or NORM waste.

In addition, SB 1604 provides that TCEQ by rule may exempt a source of radiation or a kind of use or user that is under its jurisdiction from the statutory licensing or registration requirements if it determines that the exemption will not constitute a significant risk to the public health and safety and the environment.

**HB 3838** HB 3838 relates to the regulation of injection wells used for in situ uranium mining by the TCEQ. The legislation expands the TCEQ's jurisdiction to include wells used in the development of information that TCEQ requires for area permit applications. It clarifies that TCEQ has exclusive jurisdiction over wells used to provide geologic, hydrologic and water quality information in support of the development of mining permit applications. The bill requires that these wells be registered with TCEQ unless they are later included in a production area permit, at which point the wells become subject to applicable area permit provisions, including notice and hearing requirements.

HB 3838 further requires that a person developing an application for an area permit for in situ uranium mining within a groundwater conservation district shall provide certain, specified information to the district. And, it clarifies TCEQ authority for right of entry inspection and investigation to include production and monitoring wells as defined and any business or operating records required to be maintained for such wells.

Finally, HB 3838 expands the TCEQ's discretion to require financial assurance to ensure proper closure of wells regulated under Water Code Chapter 27 by making such assurance mandatory for any person issued a permit for any well used for in situ uranium mining.



## States and Compacts *continued*

### Considerations

The following considerations were identified by TCEQ in its meeting announcement:

**SB 1604 Considerations** The following are identified as considerations relating to SB 1604:

- ♦ Financial assurance requirements for programs transferred from DSHS to TCEQ; and,
- ♦ New requirements including new notice and opportunity for contested case hearings related to uranium in situ mining and new disposal fee assessment and collection for radioactive material.

**HB 3838 Considerations** The following are identified as considerations relating to HB 3838:

- ♦ Well registration requirements for in situ uranium mining.

**Additional Considerations** The following are identified as additional considerations:

- ♦ Disposal rate setting for low-level radioactive waste, and related disposal fee assessment and collection; and,
- ♦ TCEQ directive to review and provide revisions, if appropriate, to the agency's in situ uranium mining program.

### Other Recent Actions

TCEQ Commissioners met on January 30, 2008 to consider adoption of proposed rules that would implement provisions of SB 1604. During the course of the meeting, the Commissioners passed a motion to adopt provisions relating to radioactive substance rules (Chapter 336), applications processing (Chapter 281) and public notice (Chapter 39). However, the Commissioners decided to defer consideration of provisions relating to financial assurance (Chapter 37) until a later time. The Commissioners nonetheless instructed the Executive Director to begin

rulemaking on Chapter 37 by, among other things, gathering input on the issue through the above-identified February 15 stakeholders meeting.

*For additional information, please contact Susan Jablonski, Radioactive Waste Specialist at the Texas Commission on Environmental Quality, at (512) 239-6731.*

---

---

## South Texas Project COL Application Accepted by NRC

In late November 2007, the U.S. Nuclear Regulatory Commission announced that it has accepted for review a combined license (COL) application for two new reactors at the South Texas Project site near Bay City, Texas. However, prior to the establishment of a complete technical review schedule for the application, the agency is seeking additional information. The South Texas Project COL application is the first that NRC has accepted for review.

“We have what we need to open a file, or ‘docket,’ on the application, and we’ll start analyzing those pieces that have enough detail to review properly,” said Bill Borchardt, Director of the NRC’s Office of New Reactors. “We’ve also listed those areas where the applicants, NRG Energy and South Texas Project, will have to give us more detailed information.” Docketing of the COL application does not indicate whether or not it will be approved or rejected by the Commission.

NRG Energy and the South Texas Project submitted the application and associated information on September 24, 2007. The application seeks approval to build and operate two Advanced Boiling Water Reactors (ABWR) at the site, approximately 12 miles southwest of Bay City. The ABWR is a 1,300 MWe design that the NRC certified in 1997. It is currently in use overseas.



## States and Compacts *continued*

In late December, NRC issued a notice of opportunity to request a hearing in the *Federal Register* on the application. Petitions for a hearing may be filed within 60 days of the notice by anyone whose interest may be affected by the proposed license and who wishes to participate as a party in the proceeding.

NRC is currently conducting acceptance reviews on COL applications for the Bellefonte site in Alabama and the North Anna site in Virginia. The agency also expects two additional applications to be submitted shortly.

*Information about the new reactor licensing process can be found on the NRC web site at <http://www.nrc.gov/reactors/new-reactor-licensing.html>. The NRC's acceptance letter of the South Texas Project's COL application, as well as the application's public version (minus proprietary or security-related details), is available on the NRC web site at <http://www.nrc.gov/reactors/new-licensing/col/south-texas-project.html>.*

### **Public Meeting Held re South Texas Project Environmental Scoping**

On February 5, 2008, U.S. Nuclear Regulatory Commission staff held public meetings in Bay City, Texas to discuss the agency's review of a Combined License (COL) application for two new reactors at the South Texas Project site. During the meeting, NRC staff solicited suggestions for environmental issues that the agency should consider during its review of the application.

The meetings, which ran from 1:30 to 4:30 p.m. and 7:00 to 10 p.m., were held at the Bay City Civic Center. NRC staff was also available for informal discussions with members of the public during "open house" sessions from 12:30 to 1:30 p.m. and 6:00 to 7:00 p.m. No formal comments on the environmental review were accepted during the open houses.

NRC staff will also consider written comments on the scoping process. Comments should be submitted no later than February 18, by mail to the Chief, Rules and Directives Branch, Division of Administrative Services, Office of Administration, Mail Stop T-6D59, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. Comments may also be submitted via e-mail at [STP\\_COL@nrc.gov](mailto:STP_COL@nrc.gov) or may be hand-delivered to the NRC's headquarters at 11545 Rockville Pike, Rockville, Maryland from 7:30 a.m. to 4:15 p.m. on federal workdays.

*NRC plans to transcribe the meeting, including any follow-up answers that the staff provides later, and post the transcript on the agency's web site at <http://www.nrc.gov/reactors/new-licensing/col/south-texas-project.htm>.*

## *U.S. Congress/House of Representatives*

# NRC Responds to Congressional Inquiry re Waste Import Proposal

On December 13, 2007, U.S. Nuclear Regulatory Commission Chairman Dale Klein responded to an inquiry from U.S. Representatives Joe Barton and Ed Whitfield concerning an application from EnergySolutions to import up to 20,000 tons of potentially radioactively contaminated material from Italy to the company's licensed disposal facility in Clive, Utah. (See *LLW Notes*, November/December 2007, pp. 6-9.)

In the letter, Klein writes, "NRC regulations ensure that licensees that import or export radioactive waste are authorized to do so and will handle the waste in a manner that will protect public health and safety." Klein further notes that "NRC's regulations and practices also provide for significant coordination among the public, States, and Low-Level Waste (LLW) Compacts, where the waste would be processed and/or disposed, and promotes transparency with the public concerning the proposed import or export."

Barton is the Ranking Member of the U.S. House of Representatives Committee on Energy and Commerce. Whitfield is the Ranking Member of the committee's Subcommittee on Oversight and Investigations.

## **Background**

**EnergySolutions' License Applications** On September 14, 2007, EnergySolutions filed an application with NRC for "a generic license to allow the importation of up to 20,000 tons of radioactively contaminated material including metals, graphite, dry activity material such as wood, paper, and plastic, ion exchange resins, and liquids such as aqueous and organic based fluids." As of

the date of EnergySolutions' correspondence, the sources of the material were not fully known. However, EnergySolutions writes that it "will be limited to Italian facilities authorized to use and possess radioactive material such as reactors, fuel cycle facilities, research facilities, and material licensees or facilities equivalent to U.S. Superfund sites." EnergySolutions continues "It is expected that the material to be imported would be generated during various activities such as remediation, decontamination, decommissioning, maintenance, equipment upgrades, and routine operational activities." Some of the imported material may be free from contamination, whereas some may only be superficially contaminated and some may be volumetrically contaminated.

EnergySolutions filed the import license application expressly for the purpose of allowing the importation of contaminated material for disposal at the company's facility in Clive, Utah. However, intermediate uses will also include inspections, surveys, sorting and stabilization (as required) at the company's licensed facilities in Tennessee. EnergySolutions also filed an export license application to allow any waste that may not be disposed in Utah to be returned back to Italy.

*A copy of EnergySolutions' license applications may be found on the NRC's Agencywide Documents Access and Management System (ADAMS) at [www.nrc.gov](http://www.nrc.gov).*

**Barton and Whitfield Correspondence** On November 19, 2007, Representatives Barton and Whitfield sent a letter to NRC Chairman Klein expressing concern about the proposal and requesting additional information regarding the agency's "regulatory criteria and decision making process for import license applications for large volumes of radioactive wastes imported from foreign countries for disposal here in the United States." According to the letter, their interest in the NRC's regulations was specifically prompted by EnergySolutions' application. While acknowledging that NRC has reviewed several applications for the import and export of radioactive wastes, Barton and Whitfield write that it is their understanding "that this is the first time NRC has received a license

application for the importation and domestic disposal of such a large quantity of radioactive wastes.”

In the letter, Barton and Whitfield contend that some of the imported waste may exceed NRC’s threshold limits for low-level waste disposal and/or be non-suitable for disposal at the Clive facility since the exact type and composition of the waste cannot be evaluated before embarkation. In support of this contention, they note that the application states, “It is not possible to estimate the quantities, volume, and activity of the materials that will need to be exported.”

The letter includes 9 questions for which Barton and Whitfield request responses in writing from the NRC.

*A complete copy of the letter from Representatives Barton and Whitfield to NRC Chairman Klein can be found at <http://republicans.energycommerce.house.gov/Media/File/News/11-19-07%20NRC.PDF>. The letters may also be found on the NRC’s Agencywide Documents Access and Management System (ADAMS) at [www.nrc.gov](http://www.nrc.gov) using accession numbers ML073330805 and ML073330814.*

### NRC Response

**General Comments** In his letter, Chairman Klein notes that all import and export license applications that are submitted to the NRC are reviewed using criteria defined in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 110, “Export and Import of Nuclear Equipment and Material.” As part of the application review process, NRC staff consults with and/or solicits input from the U.S. Department of State, the U.S. Environmental Protection Agency (for applications that include mixed waste), affected states and compacts, and the general public. In regard to the latter, NRC publishes a notice in the *Federal Register* that provides an opportunity for a hearing.

NRC makes a decision on whether or not to issue the requested license only after considering the opinions and comments of the above-identified parties and after completing its own technical

evaluation. NRC’s decision is based on the following criteria found in 10 CFR Part 110: “The proposed import will not be inimical to the common defense and security; the proposed import will not constitute an unreasonable risk to the public health and safety; and, an appropriate facility has agreed to accept the waste for management or disposal.”

In the case at hand, since EnergySolutions has also requested an export license, NRC must determine that the proposed export will not be inimical to the common defense and security. In addition, the State Department will also confirm that Italy will accept the proposed export and request confirmation that the designated consignee is authorized to receive the radioactive waste.

**Specific Responses** The following are NRC’s responses to questions posed by Barton and Whitfield.

Questions 1 and 2: Does NRC allow radioactive wastes to embark from a foreign country bound for the United States without a clear understanding of its exact type and composition? If so, what were the instances where this occurred? Does NRC grant an import license to applicants who cannot provide details regarding the exact origin of the waste or exactly who generated the waste? If so, what were the instances where this occurred?

*No, the U.S. Nuclear Regulatory Commission (NRC) does not allow imports of radioactive waste into the country without a reasonable understanding of the type and composition of the material. In situations where the type or composition is not fully characterized prior to the import, the NRC allows applicants to provide, with appropriate justification, maximum bounding concentrations or activity levels anticipated in the shipment for NRC to consider in its deliberations. The NRC will not approve an import license until it ensures that the imported waste material will meet (1) the provisions of the Atomic Energy Act of 1954, as amended, (2) the license of the importer, and (3) the NRC’s provisions for issuing a license to import waste contained in the agency’s regulations (Title 10, Part 110, “Export and Import of Nuclear Equipment and Material,” of the Code of Federal Regulations (10 CFR Part 110)). The existing*

## Congress continued

facility license issued by the NRC or an Agreement State contains provisions to ensure that any radioactive material received from another person, whether in the United States or from a foreign country, will be handled safely. In its import license application, the applicant must identify the maximum quantity of radioactive material, its chemical and physical form, the volume, waste classification (as defined in 10 CFR 61.55, "Waste Classification"), physical and chemical characteristics, route of transit of shipment, and ultimate disposition (including forms of management). The applicant must also describe the industrial or other process responsible for generating the waste and the status of the arrangements for disposition (e.g., any agreement by a low-level waste (LLW) compact or State to accept the material for management purposes or disposal). As noted in response to question 3, some waste may be imported for processing for disposal and the ultimate disposal may be in the country of origin. In some cases, maximum values for the amounts of waste may be provided, and these values must not cause the licensee that receives the waste to exceed the limits or terms and conditions of its facility license. Descriptions of the waste must be sufficiently detailed for the NRC staff to conclude that the U.S. transportation, management, and disposal requirements for ensuring protection of public health and safety will be met.

Question 3: Has NRC ever granted an import license with the understanding that some of the wastes will be so dangerous they must be exported back to the country of origin? If so, what were the instances where this occurred?

No instances have occurred in which imported waste could not be handled safely or with undue risk to the public health and safety. This is largely due to the material description requirements discussed in the answer to questions 1 and 2. On several occasions, the NRC has granted import licenses along with a corresponding export license. For these occasions, the import was initially for processing the waste for disposal (generally by volume reduction). Once processed, for disposal, some of the material may be authorized to be disposed in a U.S. facility and some, or all of the material, may be returned to the country of origin for final disposal. The fact that some LLW material is not allowed to be disposed at a specific U.S. facility does not imply that it is too dangerous to be disposed in any U.S. facility. For example, the EnergySolutions Clive facility is only authorized to accept class A waste. Barnwell, which is

licensed for class A, B, and C waste, has a general policy that it will not accept foreign waste for disposal.

Questions 4 and 5: Does a State identified by an applicant as a host for the storage or processing of the imported radioactive wastes have any authority to object? Has this ever occurred? If so, what were the circumstances? If the importation of radioactive waste is inconsistent with a regional low-level radioactive waste interstate compact, can the regional commission established by the compact object?

Absolutely, the NRC will consult with interested States and the LLW compact(s), if applicable, before issuing an import license for LLW. The NRC will only grant an import license for waste intended for disposal if it is clear that the waste will be accepted by a disposal facility, host State, and compact (where applicable). This will be part of the staff's determination regarding the appropriateness of the facility that has agreed to accept the waste for management or disposal.

For example, in 1995 the State of South Carolina objected to a proposed import of radioactive waste from Mexico that was planned to be processed in Texas and then to be sent to the Barnwell Low-Level Radioactive Waste Disposal Facility for final disposal. The South Carolina point of contact commented that foreign generated material is not accepted at Barnwell. The State of Texas commented that they could not concur with the import until a waste disposal site agreed to accept the waste. Based on this information, the NRC did not grant a license to import the radioactive waste.

Question 6: If U.S. Customs and Border Protection determines a sea cargo container laden with radioactive wastes needs to be inspected, are port security officers trained and prepared to handle the kind of radioactive wastes described in the EnergySolutions applications?

The NRC recommends that this question be referred directly to the U.S. Department of Homeland Security which can more appropriately characterize its capabilities in this regard.

NRC has worked closely with U.S. Customs and Border Protection (CBP) on imports of radioactive material, established 24-hour communication channels between the two



## Congress continued

agencies, routinely provided licensee information to CBP, and briefed CBP on NRC's licensing practices and information sharing capabilities.

Question 7: When the NRC established its criteria for evaluating import licenses, did the Commission anticipate commercial applicants would seek to import large volumes of radioactive wastes for domestic disposal?

*No, when the NRC amended its regulations in 1995 to establish specific licensing requirements for the import and export of radioactive waste it did not specifically anticipate that bulk quantities of foreign generated LLW would be disposed in U.S. facilities. The 1995 amendment aligned U.S. policies with the guidelines of the International Atomic Energy Agency's (IAEA) Code of Practice on the International Transboundary Movement of Radioactive Waste and strengthened the NRC's control over radioactive waste entering and leaving the United States. The Statement of Consideration published with the 1995 rule does not address whether the Commission expected applications for the import of large volumes of waste. However, one criterion for the import of waste into the United States is that an appropriate facility as well as the host State and compact where applicable have agreed to accept the waste for management or disposal.*

Question 8: If radioactive waste is imported without a clear understanding of its type and composition, how would NRC ensure that domestic transport of such waste would not be inimical to public health and safety?

*The NRC requires specific information regarding the type and composition of radioactive waste to be imported into the United States. In this particular case, the staff requested additional information from EnergySolutions to better understand the type and composition of the proposed import. Regarding transportation, EnergySolutions states in its application that shipments will comply with the packaging, labeling, and marking requirements of the International Atomic Energy Agency's "Regulations for the Transport of Radioactive Material" (TS-R-1). U.S. Department of Transportation (DOT) regulations authorize transportation of shipments imported into the United States under the IAEA TS-R-1 regulations. DOT and NRC domestic transport regulations are derived from and compatible with*

*TS-R-1. In instances where some relevant data is not available, TS-R-1 applies more restrictive activity limits on the shipment than would be applied if all relevant data were available.*

Question 9: When NRC evaluates an application to import large quantities of radioactive waste, does it consider the existing capacity of domestic low-level waste facilities and the future disposal needs of domestic generators?

*No, as a regulator, the agency does not directly consider future domestic disposal needs during the license application review process. However, NRC does solicit the opinions of the affected LLW compacts and States. It would be reasonable for a LLW compact (or State) to comment if capacity became a concern at a particular disposal site, and for NRC to consider those comments in the licensing process. However, as discussed previously, the LLW compact (or State) has the ability to deny the disposal of specific LLW waste in their facility for any reason.*

---

*A complete copy of Klein's letter to Representatives Barton and Whitfield may be found at <http://www.nrc.gov/reading-rm/doc-collections/congress-docs/correspondence/2007/barton-12-13-2007.pdf>.*

*For additional information, please contact Tye Rogers of EnergySolutions at (801) 649-2000 or Dave McIntyre at (301) 415-8200.*

### Public Notice re Import Proposal

On February 11, NRC published two notices (73 *Federal Register* 7764) announcing the receipt of EnergySolutions' applications proposing to import potentially radioactively contaminated material from Italy and to export for return any of the imported waste that does not meet its waste acceptance criteria. (See related story, page 15.)

A request for a hearing or petition for leave to intervene—as well as written comments in accordance with 10 *Code of Federal Regulations* 110.81—may be filed within thirty (30) days after publication of the notices.



## Federal Agencies and Committees

### ***Advisory Committee on Nuclear Waste & Materials (ACNW&M)***

## **ACNW&M Hosts Low-Activity Waste Workshop**

The U.S. Nuclear Regulatory Commission's Advisory Committee on Nuclear Waste & Materials (ACNW&M) hosted a working group meeting on the management of low-activity waste on February 13 – 14, 2008. The working group meeting, which took place from 1:00 p.m. to 5:00 p.m. on Wednesday and from 8:30 a.m. to 3:45 p.m. on Thursday, was held at the agency's headquarters in Rockville, Maryland. It was part of the ACNW&M's regularly scheduled three-day monthly meeting.

According to the *Federal Register* announcement, the "purpose of this Working Group Meeting is to understand how low-activity radioactive waste (LAW) is being managed in the United States, and to determine if there are ways to improve its management." (See 73 *Federal Register* 5,236 January 29, 2008.) Also addressed was the extent to which Resource Conservation and Recovery Act (RCRA) disposal sites could factor into the management of LAW.

Of particular note, on February 13 from 8:35 a.m. to 9:30 a.m., NRC Commissioner Pete Lyons addressed the committee on current topics and issues of common interest.

### **Agenda Sessions and Topics**

The working group meeting was broken down into the following four sessions and associated topics:

#### **Session I: What is Low-Activity Waste**

- ◆ an overview of LAW and TENORM
- ◆ NRC's regulatory perspective on alternative disposal options for LAW

- ◆ a national perspective on LAW regulation from an official from the Conference of Radiation Control Program Directors

#### **Session II: Risk-Based Approaches to the Regulation of LAW**

- ◆ the National Council on Radiation Protection's (NCRP) recommendations for a risk-based classification system for radioactive and chemically hazardous wastes
- ◆ NRC staff review of U.S. Department of Energy waste incidental to reprocessing (WIR) determinations
- ◆ an industry perspective on enabling risk-informed approaches to the management of LAW from an official from the Nuclear Energy Institute
- ◆ international approaches to managing LAW in a risk-informed manner

#### **Session III: Alternative Disposal Methods for LAW**

- ◆ a status report on the U.S. Environmental Protection Agency's 2003 Advanced Notice of Proposed Rulemaking on the disposal of mixed radioactive wastes
- ◆ case studies:
  - (1) Tennessee municipal landfill exemptions
  - (2) American Ecology's disposal facility at Grandview, Idaho
  - (3) Energy.Solutions' disposal facility at Clive, Utah
  - (4) Clean Harbors' disposal facilities at Colorado (Deer Trail) and California (Buttonwillow)
  - (5) Waste Control Specialists' site in Andrews County, Texas

## Federal Agencies and Committees *continued*

### Session IV: Working Group Meeting Impressions and Recommendations

- ♦ stakeholder comments, views and perspectives
- ♦ roundtable discussion
- ♦ closing remarks

*A complete agenda for the meeting can be found on the NRC's web site at <http://www.nrc.gov/reading-rm/doc-collections/acnw/agenda/2008>.*

### Logistical Information

The ACNW&M reports to and advises the Commission on all aspects of nuclear waste and materials management. ACNW&M meetings are open to the public; however, portions may be closed to protect information that is pre-decisional.

ACNW&M meeting agendas, transcripts and letter reports are available through the NRC Public Document Room (PDR) at [pdr@nrc.gov](mailto:pdr@nrc.gov) or by calling the PDR at 1-800-397-4209. These documents may also be found on the Publicly Available Records System (PARS) component of NRC's document system (ADAMS) which is accessible from the NRC web site at <http://www.nrc.gov/reading-rm/adams.html> or at <http://www.nrc.gov/reading-rm/doc-collections/acnw> (ACNW&M schedules and agendas).

*For additional information, please contact Mike Lee of the ACNW&M at [mpl@nrc.gov](mailto:mpl@nrc.gov) or (301) 415-6887.*

### *Advisory Committee on Reactor Safeguards (ACRS)*

## ACRS Holds End-of-the-Year Meeting

The U.S. Nuclear Regulatory Commission's Advisory Committee on Reactor Safeguards (ACRS) held its last meeting of 2007 at the agency's headquarters in Rockville, Maryland on December 6 – 8 to discuss, among other things, state-of-the-art reactor consequence analysis, the agency's safety research program and the extended power uprate application for the Susquehanna nuclear power plant. Portions of the meeting were closed to protect information that is proprietary, as identified on the agenda.

The ACRS advises the Commission on licensing and operation of nuclear power plants and related safety issues. ACRS meetings are open to the public; however, portions may be closed to protect information that is proprietary.

*Copies of ACRS meeting agendas are available on the NRC's web site at <http://www.nrc.gov/reading-rm/doc-collections/acrs/agenda/2007>.*

### ***Advisory Committees (ACNW&M/ACRS)***

## **NRC Merges Advisory Committees**

On February 5, 2008, the U.S. Nuclear Regulatory Commission announced that it has decided to merge its Advisory Committee on Nuclear Waste & Materials (ACNW&M) into the Advisory Committee on Reactor Safeguards (ACRS). Frank Gillespie, Executive Director of the Advisory Committees, will draft a transition plan to implement the merger including the disposition of topics currently before the committees and whether and how such topics should continue. Until the transition plan is implemented, the ACNW&M will continue to meet under the direction of its current Chairman, Michael Ryan. The next meeting, which will include a working group meeting on the management of low-activity waste, will be held on February 13 – 14, 2008. *(See related story, this issue.)*

“The Commission has benefited immensely from the expertise and advice of the Advisory Committee on Nuclear Waste and Materials,” said NRC Chairman Dale Klein. “We thank these eminent scholars and will continue to draw on their assistance as a subcommittee of the Advisory Committee on Reactor Safeguards.”

The merger—which reflects the changing workloads and technical challenges facing the agency—anticipates increasing need for expertise in health physics, waste management, and earth sciences in the agency’s licensing reviews for new reactors, the mixed-oxide (MOX) nuclear fabrication facility and facilities related to the Global Nuclear Energy Partnership (GNEP).

The Commission established the Advisory Committee on Nuclear Waste—which last year was renamed ACNW&M—in 1988 to provide advice on high-level radioactive waste and low-level radioactive waste issues. The Waste Management

Subcommittee of the ACRS previously performed this function.

In recent years, as NRC’s low-level radioactive waste and decommissioning programs have matured, the ACNW&M’s role has concluded. In addition, the committee’s activities related to high-level radioactive waste have decreased as most key technical issues concerning the U.S. Department of Energy’s plans for a high-level radioactive waste repository have been resolved by DOE and NRC. The license application, which is expected to be filed later this year, should address any outstanding issues. If and when DOE submits the application, ACNW&M’s members would be designated as adjudicatory advisors to support the Commission, thereby limiting their interaction with agency staff.

*For additional information, please contact Mike Lee of the ACNW&M at [mpl@nrc.gov](mailto:mpl@nrc.gov) or (301) 415-6887.*

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

## **HLW Document Library Certification Upheld**

On December 12, 2007, the U.S. Nuclear Regulatory Commission's Pre-License Application Presiding Officer (PAPO) Board rejected a petition from the State of Nevada to strike the U.S. Department of Energy's certification of its document collection on the Licensing Support Network for the Yucca Mountain proceeding. The Licensing Support Network is an extensive online library of documents relating to DOE's potential license application for a proposed high-level nuclear waste repository at the proposed Yucca Mountain site. It is intended to assist potential parties in preparing and arguing contentions challenging DOE's application in hearings before the NRC's Atomic Safety and Licensing Board. DOE is expected to submit its application by the end of June 2008.

In the two-page ruling, which was issued one week after oral arguments were heard in Las Vegas, the PAPO board explained that it was issuing the order quickly in order to give other parties advance notice since NRC regulations require them to certify their own document collections no later than January 18, 2008. The PAPO board will issue a full decision on Nevada's motion at a later date.

The State of Nevada had argued the DOE's document collection—which the department certified on October 19, 2007—was incomplete because it did not include key documents that are currently in development or not yet prepared. The PAPO board, however, rejected this contention.

NRC "regulations recognize that parties and potential parties, such as DOE, will continue to develop, prepare, and finalize additional documentary material, and to supplement their document production, after the date of initial certification," the PAPO board wrote in its ruling. "The regulations do not specify that DOE, or any

other potential party, must finalize all documentary material before it can certify."

*The text of the PAPO board's ruling is available online on the NRC's electronic hearing docket at <http://www.nrc.gov/about-nrc/regulatory/adjudicatory/hlw-hearings.html>.*

### Comments Sought re HLW Security Requirements

In mid-December 2007, the U.S. Nuclear Regulatory Commission announced that it is seeking public comment on a proposed rule that would amend security requirements for a proposed high-level nuclear waste repository at Yucca Mountain, Nevada. Shortly thereafter, on January 23, 2008, the agency held a public meeting in Las Vegas to describe that proposed rule and receive public comments.

The proposed rule, which has been published in the *Federal Register*, would establish new security and material control and accounting requirements for a “geologic repository operations area.” The rule’s goal is to ensure that effective security measures are in place for the protection of high-level radioactive waste and other radioactive material at a repository in the post-September 11-threat environment.

As proposed, the rule includes new requirements for security training, improved access authorization, improvements to defensive strategies and enhanced reporting requirements. It would also establish general performance objectives and capabilities for the material control and accountability program and would require the emergency response plan to address radiological emergencies.

NRC will accept public comments on the proposed rule for 75 days following its publication in the *Federal Register*. Comments may be mailed to Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attn: Rulemakings and Adjudications Staff. They may also be submitted via email to [SECY@nrc.gov](mailto:SECY@nrc.gov) or through the federal eRulemaking portal at [www.regulations.gov](http://www.regulations.gov). Comments should include the number RIN 3150-AI06.

*The proposed rule can be found on the NRC’s Agencywide Documents Access Management System (ADAMS) at <http://www.nrc.gov/reading-rm/adams/web-based.html> using accession number ML073370554.*

### HLW Senior Resident Inspector Named

In December 2007, the U.S. Nuclear Regulatory Commission announced that Leonard Willoughby has been assigned as senior resident inspector for the proposed high-level waste repository at Yucca Mountain. In this capacity, he will lead the agency’s on-site inspection related activities during the license application review. Willoughby will report to the Region IV office in Arlington, Texas. That office is responsible for implementing NRC’s inspection program for the project.

“Willoughby’s extensive technical and regulatory experience will help enable the NRC to protect public health and the environment through rigorous oversight if the Energy Department submits a license application for a high-level waste repository at Yucca Mountain,” said NRC Region IV Administrator Elmo Collins.

Willoughby graduated from Colorado State University with a Bachelor of Science degree in engineering science in 1978. Following graduation, he worked for the U.S. Navy at Puget Sound Naval Shipyard for 19 years. He joined the NRC in 1999 as a reactor engineer and has served as resident inspector at the Fort Calhoun Station nuclear power plant in Nebraska since 2001.

*For additional information, contact Leonard Willoughby of the NRC at (702) 794-5048.*



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

## **Governor Certifications Approved re Byproduct Regulation**

The U.S. Nuclear Regulatory Commission has approved certifications by the Governors of all 34 of the agency's Agreement States for the continued regulation of certain radioactive materials placed under the agency's authority by the Energy Policy Act of 2005. (See *LLW Notes*, May/June 2007, pp. 1, 16.) That law, as signed by President Bush on August 8, 2005, expanded the definition of "byproduct material" that is subject to the NRC's authority to include discrete sources of radium-226, material made radioactive in a particle accelerator, and other radioactive material that the Commission determines could pose a threat to public health and safety or to the common defense and security. Prior to implementation of the law, these materials were regulated by the states.

"This is an important milestone in NRC's implementation of the Energy Policy Act of 2005 and reflects broad cooperation between our agency and our state partners in the effective regulation of radioactive material," said NRC Chairman Dale Klein.

The Energy Policy Act of 2005 made NRC's authority over these new materials effective immediately. However, the agency issued a waiver to allow the states to continue to regulate them while the agency drafted regulations to implement the new requirements. The final rule implementing that authority took effect on November 30, 2007.

The Governor certifications provide that individual state programs for regulating radioactive material effectively cover the expanded definition of byproduct material and that the states intend to continue regulating these materials. NRC, in approving the certifications, has determined that the state programs provide adequate protection of

public health and safety and the environment, as well as that existing agreements between the agency and the states cover the expanded definition of byproduct material. Simultaneous with approving the certifications, NRC is terminating the waivers for these states. Users of the newly added byproduct material currently licensed or registered by these states will continue to be subject to state regulatory authority.

The 34 Agreement States whose certifications have been approved include Alabama, Arizona, Arkansas, California, Colorado, Florida, Georgia, Iowa, Illinois, Kansas, Kentucky, Louisiana, Massachusetts, Maine, Maryland, Minnesota, Mississippi, Nebraska, Nevada, New Hampshire, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Rhode Island, South Carolina, Tennessee, Texas, Utah, Washington and Wisconsin.

Authority over the newly defined byproduct material will be assumed by the NRC in the 16 non-Agreement States, federal agencies and recognized Indian tribes, the District of Columbia, Puerto Rico and U.S. territories and possessions in stages, as set out in the agency's transition plan, which was published in the *Federal Register* on October 19, 2007.

*To view the NRC's transition plan, the state certifications and the NRC's approvals of the certifications, go to <http://www.nrc-stp.onrl.gov/narmtoolbox.html>.*

### Draft EIS Issued re Shearon Harris Renewal Application

The U.S. Nuclear Regulatory Commission continues to process license renewal applications from various nuclear power plant operators. In that regard, the agency recently issued a draft environmental impact statement for the Shearon Harris nuclear power plant concluding that there are no environmental impacts that would preclude renewal of the operating license.

#### Shearon Harris Nuclear Plant

On December 26, 2007, NRC staff announced their preliminary conclusion that there are no environmental impacts that would preclude renewal of the operating license for the Shearon Harris nuclear power plant. That conclusion is contained in the NRC's Draft Supplemental Environmental Impact Statement for the Harris plant—which was issued on December 11, 2007—and is based on review of an environmental report submitted by the company, performance of an on-site audit, and the consideration of comments made during the environmental scoping process and at two public meetings that were held in April 2007. In addition, NRC staff consulted with other federal, state and local agencies.

The draft report preliminarily recommends that the Commission determine that the adverse environmental impacts of license renewal for the Harris plant are not so great that preserving the option of license renewal for energy planning decision-makers would be unreasonable. On January 30, 2008, members of the public were given an opportunity to comment on that preliminary recommendation and on the draft report at two meetings that were held in Apex—about six miles from the plant site. In addition, NRC staff is currently accepting written comments on the draft report.

The Shearon Harris plant is a pressurized water reactor located approximately 20 miles southwest of

Raleigh, North Carolina. The current operating license expires on October 24, 2026. The applicant, Carolina Power and Light (a subsidiary of Progress Energy), submitted the renewal application on November 16, 2006.

Comments on NRC's draft report may be submitted by mail to Chief, Rulemaking, Directives and Editing Branch, Division of Administrative Services, Office of Administration, Mail Stop T-6D59, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or via email to ShearonHarrisEIS@nrc.gov. In order to ensure consideration by NRC staff, comments should be submitted no later than March 5, 2008.

*The Shearon Harris license renewal application can be found on the NRC's web site at <http://www.nrc.gov/reactors/operating/licensing/renewal/applications.html>. The draft report can be found on the site at <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1437/supplement33/>.*

#### 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 48 reactor units. In addition, NRC is currently processing license renewal requests for several 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>.*

### Clarification Issued re COL Process

The U.S. Nuclear Regulatory Commission has issued a Regulatory Issue Summary (RIS) to clarify the agency's procedures for accepting applications for a Combined License (COL) to build and operate a new nuclear power plant. In particular, the RIS describes an expanded 60-day "acceptance review" that every COL application will go through. The purpose of the review is to ensure that the COL application is complete and technically sufficient for a full review prior to staff deciding whether to "docket," or formally accept, the application.

This expansion, from the general 30-day acceptance review, is one of several recommendations from an agency task force that sought to identify possible efficiencies in the new reactor licensing process. In June 2007, the Commission voted to adopt several of those recommendations. (See <http://www.nrc.gov/reading-rm/doc-collections/news/2007/07-080.html>.) In its decision, the Commission also stated that the staff's overall review schedule for a COL application should start at the point of docketing, not during the 60-day acceptance review.

In the RIS, NRC informs potential applicants that the Office of New Reactors has issued formal staff guidance for conducting an acceptance review. This guidance includes information on how the NRC will consider issues, such as departures from a certified design or alternative methods for meeting regulatory requirements, when developing an application-specific review schedule.

*The RIS is available on NRC's web site at <http://www.nrc.gov/reading-rm/doc-collections/gen-comm/reg-issues/2007/>. More information on the NRC's new reactor licensing process is available on the site at <http://www.nrc.gov/reactors/new-reactor-licensing.html>.*

### NRC Tightens Access Requirements

On December 5, 2007, the U.S. Nuclear Regulatory Commission issued an order to nearly 1,000 licensees requiring them to begin fingerprinting and criminal history checks for all persons granted unescorted access to certain radioactive materials. The order applies to NRC licensees in industry, academia and medicine that are licensed to possess "radioactive materials in quantities of concern" from a security perspective. These quantities are essentially equivalent to Category I and Category II sources as defined in the International Atomic Energy Agency's Code of Conduct on Radioactive Material Safety and Security.

The order—which implements requirements contained in the Energy Policy Act of 2005—has been published in the *Federal Register*, along with details of how the new requirements are to be implemented. NRC plans to develop a proposed rule to make the new requirements part of its regulations. The order was issued so as to implement the requirement while the rule is being developed.

NRC did not release the identities of licensees receiving the order as the agency considers such information to be sensitive. However, NRC did state that the order applies to licensees in the 16 states, the District of Columbia, Puerto Rico and U.S. territories where the agency has regulatory authority. The 16 states under NRC jurisdiction include Alaska, Connecticut, Delaware, Hawaii, Idaho, Indiana, Michigan, Missouri, Montana, New Jersey, Pennsylvania, South Dakota, Vermont, Virginia, West Virginia and Wyoming. The remaining 34 Agreement States will issue similar requirements to their licensees within 180 days.

### NRC Seeks Info re Plant Security

On December 13, 2007, in response to recent reports of inattentive security guards at some nuclear power plants, the U.S. Nuclear Regulatory Commission informed operators of commercial nuclear power plants and certain fuel cycle facilities that they must provide specific information to the agency on their security programs and practices. The information sought includes what actions licensees have taken to ensure security officer attentiveness. Once received, NRC will review the information and then determine if additional regulatory actions are warranted.

In particular, licensees are being asked to provide such information as their actions and management controls to detect and correct behavioral problems; details on how they ensure that employees report potential safety and security concerns; information on physical conditions at security posts; and results of any recent self-assessments associated with these issues. Licensees are required to provide the requested information within 60 days or to file a request for an extension.

“Several of our licensees have had instances of inattentive security officers,” said Roy Zimmerman, Director of the Office of Nuclear Security and Incident Response. “While multiple layers of defense at each site maintain its security, the NRC is concerned that, collectively, these incidents are a sign that some licensees are not giving appropriate attention to the effectiveness of this portion of their security programs.”

*A copy of the bulletin can be found through NRC's Agencywide Documents Access and Management System (ADAMS) at <http://www.nrc.gov/reading-rm/adams.html> using accession number ML073400150.*

### NRC Issues Letter re Gas Accumulation

In January 2008, U.S. Nuclear Regulatory Commission staff asked all U.S. nuclear power plant operators for information on how they protect certain safety systems from the buildup of air, nitrogen or other gases that could cause the systems to malfunction. NRC regulations require plant operators to prevent gases from accumulating beyond the point where safety systems could be compromised since pockets of gas can damage the pipes, valves and pumps that transport water during a reactor emergency.

“U.S. plants are operating safely, but we’ve seen a steady recurrence of gas accumulation affecting safety systems over the past 10 years,” said Bill Ruland, Director of the Division of Safety Systems in the NRC’s Office of Nuclear Reactor Regulation. “We’re asking the plants to describe and verify what they have been doing to meet our regulations, and we’ll examine their answers to see if we need to take more action.”

The “Generic Letter” sent to operators by NRC staff asks that they evaluate three basic system types—emergency core cooling, decay heat removal, and containment spray—to determine how their design, testing and corrective action programs address gas buildup. The agency is asking plant operators to provide three types of information from the evaluations:

- 1) The overall results of the evaluations, in sufficient detail to demonstrate how the plant meets all applicable NRC regulations;
- 2) A description of all corrective actions the plant operator found necessary to meet the regulations; and,
- 3) A statement including a list of all completed corrective actions, a schedule for any remaining actions, and the basis for why that schedule is acceptable.

## Federal Agencies and Committees *continued*

Licensees have nine months to respond to the NRC. If a plant operator feels that it cannot meet this deadline, the operator has three months to describe the actions that it will take and why it believes that these actions are acceptable. A draft letter was published for comment in the *Federal Register*, and responses to public comments have been incorporated into the final document.

*The letter can be found on the NRC's web site at <http://www.nrc.gov/reading-rm/doc-collections/gen-comm/gen-letters/2008/index.html>.*

### Mitsubishi US-APWR Design Application Available

In mid-January 2008, the U.S. Nuclear Regulatory Commission announced the availability of the public version of a design certification application submitted by Mitsubishi Heavy Industries for its U.S.-Advanced Pressurized Water Reactor (US-APWR) standard plant design. Mitsubishi had submitted the application and associated information on December 31, 2007. To date, NRC has certified four other standard reactor designs.

The US-APWR design is a nuclear power plant capable of producing approximately 1,700 megawatts of electricity. The plant, which is designed for a 60-year operating life, is currently being licensed and built in Japan. It features redundant core cooling systems and refueling water storage inside the containment building. It also has fully digital instrumentation and control systems.

NRC certification of the US-APWR design would allow a company applying for a license to build and operate a new nuclear power plant in the United States to use the design and reference it in the application. Safety issues resolved within the scope of the design certification are not subject to litigation with respect to that individual license application, although site-specific design information and environmental impacts associated

with building and operating the plant at a particular location could be litigated.

Currently, NRC staff is checking the application for completeness. If it is deemed acceptable, then the staff will start their technical review and request any additional information that they need. A Safety Evaluation Report will be issued after all technical and safety questions have been resolved. NRC would then certify the design through an agency rulemaking, which includes an opportunity for public participation. Staff anticipates that this process will continue through 2011.

*Mitsubishi's application, minus proprietary or security-related details, is available on NRC's web site at <http://www.nrc.gov/reactors/new-licensing/design-cert/apwr.html>. The certification process, which is described in Subpart B of Part 52, is available on the agency's web site at <http://www.nrc.gov/reading-rm/doc-collections/cfr/part052/>.*

### Requirements to Avoid Legacy Sites Proposed

On January 22, 2008, the U.S. Nuclear Regulatory Commission announced that it is seeking public comment on a proposed rule designed to prevent future "legacy sites" with insufficient funds for decommissioning by requiring licensees to minimize the introduction of residual radioactivity at their sites during operations.

The proposed rule, which was published in the *Federal Register* on January 22, would require licensees to keep survey records of residual radioactivity, including in the subsurface soil and groundwater, with records important for decommissioning. The proposed rule would also require certain licensees to report additional details in their decommissioning cost estimates and to amend some financial assurance mechanisms for decommissioning planning.



The proposed rule notes that facilities that process large quantities of material (especially in liquid form) have the potential for significant environmental contamination due to the scale of their operations. Leaks from these facilities can lead to significant radioactive contamination of the subsurface soil and groundwater, even though the radiation doses from these releases are well below annual regulatory limits for public and occupational exposure.

The proposed rule also recognizes that the high costs of disposing of radioactive material offsite may lead licensees to store more waste onsite, thereby increasing the potential for subsurface radioactive contamination and significantly higher decommissioning costs.

Current requirements mandate that licensees perform surveys to verify that radioactive effluent releases are below regulatory requirements and do not pose public health hazards. NRC believes, however, that existing regulations are not clear enough concerning subsurface contamination and require interpretation to apply to long-term environmental conditions. Surveys have rarely been performed to assess the radiological hazard of chronic releases and subsurface contamination because these are not considered effluent releases and they do not cause immediate exposure either to workers or the public approaching regulatory limits.

The proposed rule includes changes to financial assurance requirements that would mandate more detailed reporting by licensees and would place tighter NRC control over certain financial instruments set aside to cover eventual decommissioning costs.

*Comments on the proposed rule should be submitted no later than April 7. Comments may be mailed to the Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attn: Rulemaking and Adjudications Staff. They may also be sent via e-mail to [SECY@nrc.gov](mailto:SECY@nrc.gov) or sent via facsimile transmission to (301) 415-1101. Please note "RIN 3150-AH45" in the subject line.*

## 20<sup>th</sup> Annual Regulatory Information Conference Scheduled

The U.S. Nuclear Regulatory Commission will hold its 20<sup>th</sup> Annual Regulatory Information Conference (RIC) on March 11 – 13 at the Marriott Bethesda North in Rockville, Maryland. This year's theme is "Enhancing Safety During the Global Nuclear Renaissance." More than 2,300 people are expected to attend the conference, including representatives from more than 25 foreign countries, members of Congress and the nuclear industry.

NRC Chairman Dale Klein is scheduled to speak at the conference, as are Commissioners Gregory Jaczko and Peter Lyons and Executive Director for Operations Luis Reyes. The conference brings together NRC staff, regulated utilities, materials users and other interested stakeholders to discuss nuclear safety topics, significant and timely regulatory activities and allow informal dialogue to ensure an open regulatory process. Topics at this year's RIC include, among others:

- ◆ construction and licensing of new nuclear power plants;
- ◆ safe disposal of nuclear waste;
- ◆ advanced reactor designs to improve safety;
- ◆ security;
- ◆ safety research; and,
- ◆ operator training.

The RIC is a joint presentation of the NRC's Offices of Nuclear Reactor Regulation and Nuclear Regulatory Research. The conference is free and open to the public. Those interested in attending may register at <http://www.nrc.gov/public-involve/conference-symposia/ric/registration.html>. Onsite registration will also be available during the conference.

*A copy of the conference agenda may be found on NRC's web site at <http://www.nrc.gov/public-involve/conference-symposia/ric/program.pdf>.*

### NRC Holds Meetings re Transportation

In January 2008, the U.S. Nuclear Regulatory Commission hosted three separate meetings to solicit public comments on plans to revise security requirements relating to the transportation of Radioactive Material in Quantities of Concern (RAMQC)—a term which applies to 16 radionuclides that are considered to be potentially of interest for a malicious act. The meetings are part of an enhanced participatory process implemented by the NRC to assist in developing a sound technical basis for rulemaking on RAMQC. Once the technical basis is complete, a draft proposed rule would also be issued for public comment. NRC orders and advisories were issued after September 11, 2001, which placed additional security measures on the transportation of these materials. These requirements will be included in the proposed rule.

The meetings were held on January 15 in the NRC Region III building in Lisle, Illinois; on January 17 at the Federal Reserve Building in Oakland, California; and on January 23 at NRC headquarters in Rockville, Maryland. Through the meetings, NRC hopes to gather information on technologies used to track items during shipping, including global positioning satellite technology. NRC is also seeking input on how the agency should involve Agreement States, which regulate certain radioactive materials at the state level pursuant to agreements with the NRC.

RAMQC includes Americium-241, Cobalt-60, Cesium-137, Plutonium-238 and Strontium-90, among others, in specific quantities. It does not include spent nuclear fuel. RAMQC is typically shipped in packages that must meet NRC safety standards. The materials are shipped to medical institutions, companies that support medical and academic institutions, and companies that manufacture and distribute radioactive materials for various industrial applications. Both the NRC and the Department of Transportation regulate the

transport of these materials. The technical basis being discussed at the meetings will not cover transportation by air or water, which is regulated by other government agencies.

Written comments on NRC's plans may be submitted to Chief, Rules and Directives Branch, Division of Administration Services, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. Comments may also be submitted via facsimile to (301) 415-5144 or via e-mail to [nrcprep@nrc.gov](mailto:nrcprep@nrc.gov).

*For additional information, go to <http://www.nrc.gov/public-involve/public-meetings/index.cfm>.*

## 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](http://www.nrc.gov)
- 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) ..... [www.epa.gov](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)

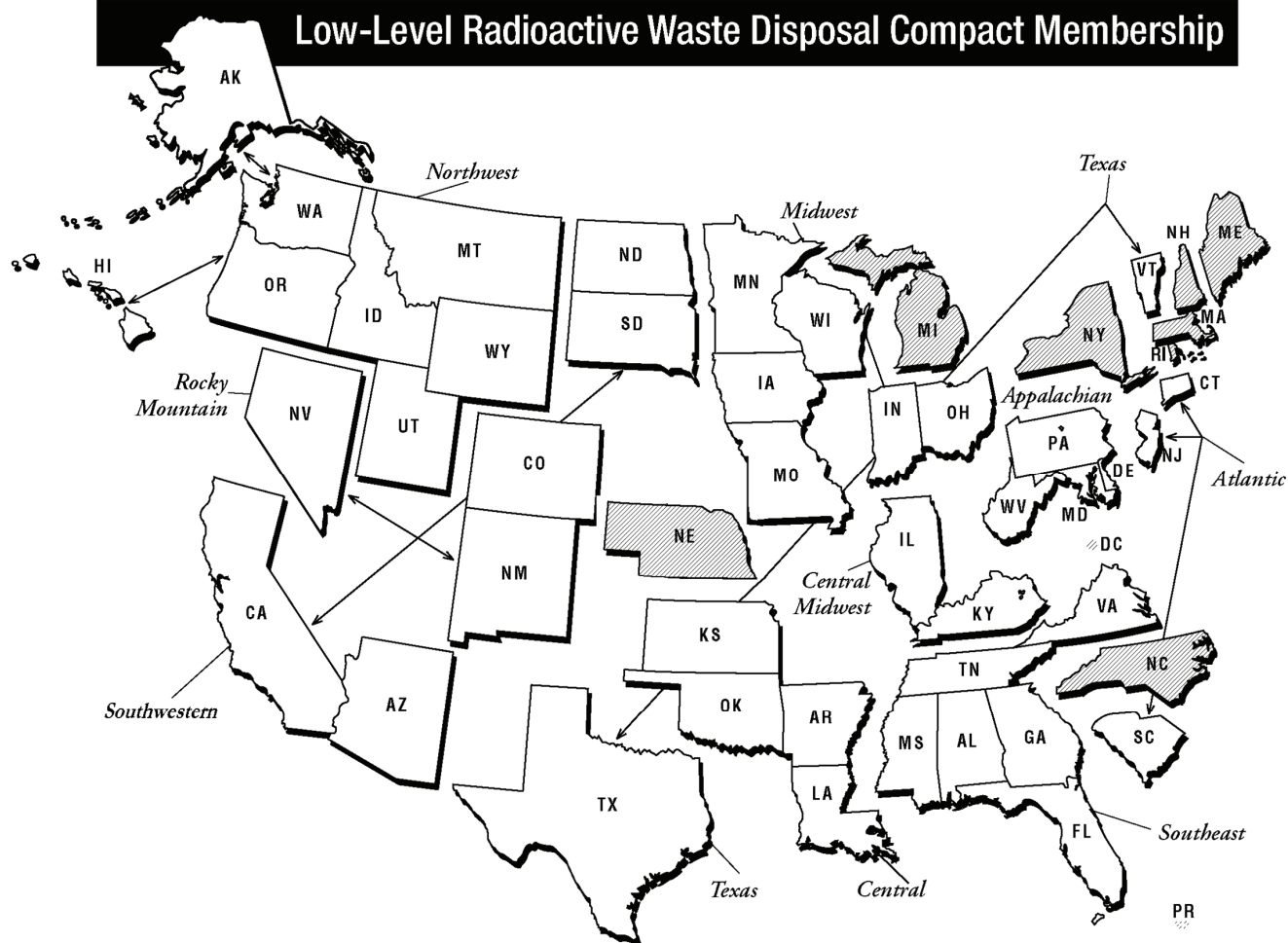
**To access a variety of documents through numerous links, visit the web site for the LLW Forum, Inc. at [www.llwforum.org](http://www.llwforum.org)**

#### 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



### Appalachian Compact

Delaware  
Maryland  
Pennsylvania  
West Virginia

### Atlantic Compact

Connecticut  
New Jersey  
South Carolina

### Central Compact

Arkansas  
Kansas  
Louisiana  
Oklahoma

### Central Midwest Compact

Illinois  
Kentucky

### Northwest Compact

Alaska  
Hawaii  
Idaho  
Montana  
Oregon  
Utah  
Washington  
Wyoming

### Midwest Compact

Indiana  
Iowa  
Minnesota  
Missouri  
Ohio  
Wisconsin

### Rocky Mountain Compact

Colorado  
Nevada  
New Mexico

*Northwest accepts Rocky Mountain waste as agreed between compacts*

### Southeast Compact

Alabama  
Florida  
Georgia  
Michigan  
Mississippi  
Tennessee  
Virginia

### Southwestern Compact

Arizona  
California  
North Dakota  
South Dakota

### Texas Compact

Texas  
Vermont

### Unaffiliated States

District of Columbia  
Maine  
Massachusetts  
Michigan  
Nebraska  
New Hampshire  
New York  
North Carolina  
Puerto Rico  
Rhode Island