LLW notes

Volume 22, Number 3 May/June 2007

U.S. Nuclear Regulatory Commission

NRC Approves Final Rule re Expanded Definition of Byproduct Material

On May 14, 2007, the U.S. Nuclear Regulatory Commission approved a final rule expanding the definition of radioactive materials subject to its regulatory authority, implementing provisions of the Energy Policy Act of 2005. The rule, which was approved by a vote of 5 to 0, will be published later this year after agency staff incorporate changes to the text directed by the Commission and obtain approval from the Office of Management and Budget for information-collection requirements.

Background

The definition of so-called "byproduct material" subject to NRC's jurisdiction was expanded by the Energy Policy Act of 2005 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 the common defense and security. Previously, these materials were regulated by the states.

Proposed Rule

A proposed rule to implement NRC's new authority was published on July 28, 2006. The rulemaking process included public meetings and opportunities for public comment. In addition, the agency sought and received public comment on the proposed rule. Intense cooperation was involved with the Organization of Agreement States, the Conference of Radiation Control Program Directors, and other stakeholder organizations.

Interim Measures

The legislation provided that these materials would be subject to NRC's authority effective immediately. However, the agency issued a waiver allowing states to continue to regulate them while NRC drafted regulations to implement the new requirements. A transition plan will soon be published for assuming the agency's new authority over these materials. It is expected that the 34 Agreement States—which regulate byproduct

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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.

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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.

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LLW FORUM, INC

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Key to Abbreviations

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

Low-Level Radioactive Waste Forum, Inc.

LLW Forum to Host Next Meeting in Oak Brook, Illinois

The Low-Level Radioactive Waste Forum will hold its next meeting on October 1 – 2 at the Marriott Hotel in Oak Brook, Illinois. The Central Midwest Interstate Low-Level Radioactive Waste Compact Commission is sponsoring the one and one-half day meeting.

The LLW Forum's Executive Committee will meet on Monday morning, October 1, from 8:00 – 9:30 a.m.

Registration

The meeting is free for members of the LLW Forum, Inc. Non-member registration is $500.00, payable to the "LLW Forum, Inc." Advance registration is required. Interested parties are encouraged to register early to ensure space availability. To obtain a registration form, go to the LLW Forum's web site at www.llwforum.org and click on the "Registration Form" link on the home page or call Todd D. Lovinger, the LLW Forum's Executive Director, at (202) 265-7990.

Hotel Reservations

A block of 40 rooms has been reserved for Sunday, September 30, and Monday, October 1 for meeting attendees at the special rate of $95.00 plus tax per night for single or double occupancy. A limited number of rooms are available at this special room rate one day prior to and after the meeting. It is highly suggested that reservations be made early in order to ensure availability. Reservations must be made by August 30 to obtain the special rate. To make reservations, please call (630) 850-5555 and ask for a room in the "LLW FORUM" block.

Transportation

The Marriott Hotel is located approximately 20 miles from O'Hare International and Midway Airports. For information on location, ground transportation and directions, go to www.marriott.com/CHIMC.

Future Meeting Locations and Dates

The Northwest Compact/State of Washington has agreed to host the first meeting of the LLW Forum in April 2008 near Richland, Washington. An optional site visit to the Hanford nuclear reservation is tentatively planned in conjunction with the meeting. The Appalachian Compact has agreed to host the fall 2008 meeting of the LLW Forum in Annapolis, Maryland.

The LLW Forum is currently seeking sponsors and/or hosts for the 2009 meetings. Interested parties should contact Todd D. Lovinger, the organization's Executive Director, at (202) 265-7990.

Atlantic Compact/State of South Carolina

Barnwell Rates Increased for Out-of-Region Generators

At its monthly meeting on June 12, 2007, the South Carolina Budget and Control Board approved disposal rates at the Barnwell low-level radioactive waste disposal facility for the coming fiscal year, which begins July 1. The new rates that apply to waste from generators outside the Atlantic Compact region are generally 15 percent higher than the current year's disposal rates across most of the cost categories. For most irradiated hardware shipments, the increase will most likely be more than 15 percent, due to an increase in the "excess millicurie surcharge" from $.002 per millicurie to $.006.

Because well over 90 percent of the waste received at the Barnwell site is covered by pre-existing contracts that specify the disposal price, the general rate schedule approved by the Board will apply to only to a small volume of waste. Budget and Control Board staff project that the new rates will generate approximately $750,000 in additional disposal revenue during the last year of operation before the facility is scheduled to close to out-of-region waste beginning on July 1, 2008.

Disposal rates for Atlantic Compact generators are adjusted each year in accordance with the producer price index. The index used for disposal rates increased by 1.1 percent for Fiscal Year 2008. In addition, the State will continue the "Volume-Hold" option for Atlantic Compact generators in Fiscal Year 2008. Under this program, generators may register waste containers for delivery to Barnwell in fiscal year 2009. Approximately 3,000 cubic feet of waste have been registered to date, with another 4,500 cubic feet projected for fiscal year 2008.

State and Compact officials are discussing with regional utilities and the disposal site operator, Chem-Nuclear, steps that can be taken to ensure that the disposal site has enough revenue to meet basic operating costs after fiscal year 2008. These involve reductions in the costs of site operations, full utilization of the regional disposal site by regional generators, and disposal of large components now in storage at nuclear power plants within the region.

Under current law, the volume of waste that the Barnwell facility may accept has been decreasing for the past several years, with a maximum volume disposal limit of 35,000 cubic feet in fiscal year 2008. The Budget and Control Board estimates that, after 2008, Atlantic Compact generators can be expected to ship approximately 12,500 cubic feet of waste to Barnwell each year, not including large components and waste held over from fiscal years 2007 and 2008.

Midwest Compact/State of Ohio

USEC Receives Plant License

In mid-April, the U.S. Nuclear Regulatory Commission announced that it had issued a license to the U.S. Enrichment Corporation, Inc. (USEC) to construct and operate a gas centrifuge uranium enrichment plant at the Portsmouth Gaseous Diffusion Plant reservation near Piketon, Ohio. The facility, which will be known as the American Centrifuge Plant, will use a design based on gas centrifuge technology developed by the U.S. Department of Energy to enrich uranium for use in fuel for commercial nuclear power reactors. The license authorizes USEC to enrich uranium up to 10 percent of the fissile isotope uranium-235.

USEC originally submitted a license application for the facility on August 23, 2004. NRC staff published an environmental impact statement (NUREG-1834) on the proposed facility in April 2006 that found there would be no significant adverse environmental impacts that would preclude

granting a license. The staff's safety evaluation report (NUREG-1851), published in September 2006, documents the staff's review of the application.

In March 2007, a three-judge panel of the NRC's Atomic Safety and Licensing Board conducted hearings to consider whether the staff's environmental and safety reviews were adequate. On April 13, 2007, the panel issued its initial decision authorizing the staff to issue the license.

NRC will conduct inspections during construction and operation of the American Centrifuge Plant. The agency plans to hold a meeting in Pike County in the near future to explain its oversight plans to members of the public.

Northwest Compact/State of Idaho

American Ecology Receives National Rail Safety Award

On May 15, 2007, American Ecology Corporation announced that it has received a Norfolk Southern Corporation Thoroughbred Chemical Safety Award for 2006. Companies that safely ship more than 1,000 railcars of hazardous material without incident are eligible for this annual award. American Ecology—which is based in Boise, Idaho—has disposal facilities near Grand View, Idaho and Corpus Christi, Texas that are both served by rail. In 2006, these two facilities safely handled nearly 3,000 railcar shipments without incident.

In a letter of congratulations to American Ecology, Norfolk Southern Chief Executive Officer Wick Moorman stated, "As the transportation and chemicals industries face increased scrutiny over the safety and security of hazardous chemicals shipments, your incident-free handling on Norfolk Southern's rail network is a shining example of superior safety performance." American Ecology's Chief Executive Officer, Stephen Romano, stated, "American Ecology and Norfolk Southern share a continuing commitment to safety and are truly partners in this impressive achievement."

American Ecology Appoints CFO

On May 17, 2007, American Ecology Corporation announced that its Board of Directors has appointed Jeffrey Feeler to be the company's Chief Financial Officer. Feeler, a 37-year old certified public accountant, joined American Ecology in 2006 as Vice President, Controller, Chief Accounting Officer, Treasurer and Secretary.

"Jeff Feeler has made a strong contribution since joining the American Ecology team," stated President and Chief Executive Officer Stephen Romano. "He brings close to 15 years of experience in financial reporting, including nine years in public accounting and several years with Fortune 500 companies. Jeff has demonstrated the ability to serve effectively as the company's Chief Financial Officer and we are pleased to appoint him to this position."

Rocky Mountain Compact/State of Nevada

US Ecology Nevada Receives OSHA Safety Recognition

On June 14, 2007, American Ecology Corporation announced that its subsidiary, US Ecology Nevada, has achieved Safety and Health Recognition Program (SHARP) designation from the Nevada Department of Business and Industry. SHARP recognition is based on independent evaluation of management commitment, employee involvement, health and safety expertise and training.

In announcing US Ecology Nevada's designation, Nevada Division of Industrial Relations Administrator Roger Bremner said, "US Ecology's efforts are already resulting in a significant reduction in employee injuries and illnesses and workplace hazards."

Stephen Romano, President and Chief Executive Officer of American Ecology Corporation, added, "Safety is a core value at American Ecology … We look forward to maintaining this prestigious safety recognition through a continuing commitment to safety at all levels of our organization."

"We value our employees, expect them to work safely, and are proud of their enthusiastic support for the SHARP program," concluded US Ecology Nevada General Manager Bob Marchand.

Additional program information can be found at the Occupational Safety and Health Administration's (OSHA) web site at http://www.osha.gov/dcsp/smallbusiness/sharp.html.

Southeast Compact

Nominations Sought for 2008 Hodes Award

The Southeast Compact Commission for Low-Level Radioactive Waste Management is seeking nominations for the 2008 Richard S. Hodes, M.D. Honor Lecture Award—a program that recognizes an individual, company, or organization that contributed in a significant way to improving the technology, policy, or practices of low-level radioactive waste management in the United States. The award recipient will present the innovation being recognized at a lecture during the Waste Management '08 Symposium in Tucson, Arizona. The award recipient will receive a $5,000 honorarium and all travel expenses will be paid.

Background

Dr. Richard S. Hodes was a distinguished statesman and a lifetime scholar. He was one of the negotiators of the Southeast Compact law, in itself an innovative approach to public policy in waste management. He then served as the chair of the Southeast Compact Commission for Low-Level Radioactive Waste Management from its inception in 1983 until his death in 2002. Throughout his career, Dr. Hodes developed and supported innovation in medicine, law, public policy, and technology. The Richard S. Hodes, M.D. Honor Lecture Award was established in 2003 to honor the memory of Dr. Hodes and his achievements in the field of low-level radioactive waste management.

Past Recipients

In 2004, the Southeast Compact Commission chose W.H. "Bud" Arrowsmith as the winner of the first Richard S. Hodes, M.D. Honor Lecture Award. The Texas A & M University Student Chapter of Advocates for Responsible Disposal in Texas (ARDT) was also chosen in 2004 for special recognition as an Honorable Mention for its innovation in educational activities related to low-level radioactive waste management. William

Dornsife of Waste Control Specialists, LLC was chosen as the second Richard S. Hodes, M.D. Honor Lecture Award recipient in 2005 and the California Radioactive Materials Management Forum (CalRad Forum) received the award in 2006. In 2007, Perma-Fix Environmental Services Chief Operating Officer Larry McNamara was chosen to receive the award.

The Award

The Richard S. Hodes Honor Lecture Award—established in March, 2003—is awarded to an individual, company, or organization that contributed in a significant way to improving the technology, policy, or practices of low-level radioactive waste management in the United States. The award recipient will be recognized with a special plaque and an invitation to present a lecture about the innovation during the annual international Waste Management Symposium (WM 08). The 2008 symposium is sponsored by the University of Arizona and will be held in Phoenix, Arizona, February 24 - February 28, 2008. A special time is reserved during the Symposium for the lecture and the award presentation. The Southeast Compact Commission will provide the award recipient a $5,000 honorarium and will pay travel expenses and per diem (in accordance with Commission Travel Policies) for an individual to present the lecture.

Criteria

The Richard S. Hodes Honor Lecture Award recognizes innovation industry-wide. The award is not limited to any specific endeavor—contributions may be from any type of work with radioactive materials (nuclear energy, biomedical, research, etc.), or in any facet of that work, such as planning, production, maintenance, administration, or research. The types of innovations to be considered include, but are not limited to:

- Conception and development of new approaches or practices in the prevention, management, and regulation of radioactive waste;
- New technologies or practices in the art and science of waste management; and
- New educational approaches in the field of waste management.

The criteria for selection include:

1. *Innovation*. Is the improvement unique? Is it a fresh approach to a standard problem? Is it a visionary approach to an anticipated problem?
2. *Safety*. Does the practice enhance radiation protection?
3. *Economic*s. Does the approach produce significant cost savings to government, industry or the public?
4. *Transferability*. Is this new practice applicable in other settings and can it be replicated? Does it increase the body of technical knowledge across the industry?

Eligibility

To be eligible for the award, the individual/group must consent to being nominated and must be willing to prepare and present a lecture about the innovation being recognized at the Waste Management Symposium. Individuals or organizations can nominate themselves or another individual, company, institution, or organization.

Nominations

To nominate yourself or another individual, company, or organization for this distinguished award, please contact:

Ted Buckner, Associate Director
Southeast Compact Commission
21 Glenwood Avenue, Suite 207
Raleigh, NC 27603
919.821.0500
tedb@secompact.org

or visit the Southeast Compact Commission's website at http://www.secompact.org/.

Nominations must be received by June 30, 2007.

State of Texas/Texas Compact

Texas Passes Bill Transferring Waste Licensing to TCEQ

On May 31, 2007, in the final hour of the state's legislative session, the Texas State Legislature passed a bill (SB 1604) that, among other things, will consolidate most waste management licensing authority within the Texas Commission on Environmental Quality (TCEQ). Under current law, the Department of State Health Services (DSHS) and the Executive Commissioner of the Health and Human Services Commission (HHSC) has jurisdiction over some of these waste management authorities.

The bill now has to be sent to Texas Governor Rick Perry (R) for consideration. Governor Perry has until June 17 to take action on the bill or it will automatically become law.

Waste Management Authority

Under current law, TCEQ has jurisdiction to regulate and license the disposal of radioactive substances except for by-product material. SB 1604, as passed by the legislature, 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.

Specifically, the bill states that TCEQ is the state agency that is charged with authority to license and regulate radioactive waste storage, processing and disposal activities not preemptively regulated by the federal government. HHSC, acting through DSHS or another department designated by its Executive Commissioner, is the state agency that regulates other radioactive waste activities not preemptively regulated by the federal government.

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.

State Fees on Radioactive Substances

SB 1604 also prescribes fees against licensees for the disposal of radioactive substances from other persons equal to 10 percent of the gross receipts received from disposal operations. The fees are to be remitted quarterly with five percent going to the comptroller for deposit to the credit of the general revenue fund and five percent going to the host county. The bill specifically states, however, that such fees do not apply to compact waste, federal facility waste, or industrial solid waste.

In addition, SB 1604 provides that TCEQ may assess and collect additional fees from license applicants in order to recover costs that are incurred for administrative review, technical review, and hearings on the application.

Finally, the bill requires DSHS to coordinate with TCEQ in the setting and collection of annual fees from nuclear reactor or other fixed nuclear facility operators in the state that use special nuclear material.

Area Permits and Production Areas for Uranium Mining

TCEQ is also charged under SB 1604 with authority to issue permits for the construction and operation of uranium mining injection wells. Uranium mining permits issued on or after September 1, 2007 shall be issued for a term of 10 years. Holders of

uranium mining permits issued before said date must submit an application for renewal to TCEQ before September 1, 2012. Otherwise, said permits will expire on that date.

The bill contains further provisions regarding uranium mining permits. Interested persons are directed to SB 1604 for additional information.

Pending License Applications to Dispose of By-product Material

SB 1604 provides specific guidelines for the processing by TCEQ of new license applications to dispose of by-product material that were filed with DSHS on or before January 1, 2007, and that have not yet been referred to the State Office of Administrative Hearings. In particular, the bill requires that TCEQ complete the technical review of any such applications and determine whether or not to issue a draft license no later than October 1, 2007. TCEQ then must render a final decision on any such license application on or before December 31, 2008. The deadlines, however, "are based on the assumptions that the applicant timely submits a complete application and that all requirements are met."

The bill then goes on to provide specific guidelines for the holding of contested case hearings on any such license applications. It also authorizes the applicant, at its own risk, to "begin major construction related to the activities for which the license application was made at the time technical review of the application has been made and an environmental analysis is prepared." Such construction is subject to TCEQ rules and oversight.

The timeline set forth in SB 1604 has particular relevance for Waste Control Specialists, which is currently storing large amounts of 11e.(2) byproduct waste on site from Fernald. After providing a two-year extension, DSHS has set a deadline requiring that this waste be disposed of by October 2009.

Priority of WCS' Pending LLRW Disposal Facility License Application

SB 1604 specifically states that it does not impair, delay or affect the priority established by law for processing and review of the pending Waste Control Specialists' license application for the disposal of low-level radioactive waste. The bill further states that TCEQ shall give priority to the processing and review of that application over all other applications that pertain to radioactive substances or radioactive waste pending before the commission unless its Executive Director determines to give other applications priority in order to avert or address an emergency concerning public health or safety. Thereafter, SB 1604 provides that TCEQ shall give priority to the review and processing of

- an application for the commercial disposition of by-product material;
- an application for termination of a license to recover or process source material and dispose of associated by-product material generated in Texas; and,
- a new application for a permit to recover or process source material and dispose of associated by-product material generated in Texas.

For additional information, as well as the text of SB 1604, please go to http://www.capitol.state.tx.us/BillLookup/Text.aspx?LegSess=80R&Bill=SB1604.

State of Michigan

Big Rock Point ISFSI License Transfer Approved

Effective April 6, 2007, the U.S. Nuclear Regulatory Commission has approved transfer of the operating license of the Big Rock Point Independent Spent Fuel Storage Installation (ISFSI) from Consumers Energy to Entergy Nuclear Palisades and site operator Entergy Nuclear Operations. On October 31, 2006, the companies submitted an application to NRC requesting approval of the license transfer. Major issues considered by the NRC included financial qualifications as well as transfer and maintenance of accumulated decommissioning funds. Several groups petitioned the NRC for leave to intervene in this proceeding, and the Commission is considering the petition.

Big Rock Point began commercial operations on March 29, 1963. The facility ceased production on August 29, 1997. Consumer Energy initiated decommissioning shortly thereafter, completing the process (including dismantlement) in August 2006. NRC survey's verified that cleanup met the 25 millirem per year requirement.

A copy of the NRC's approval order and accompanying safety evaluation report will be placed in the NRC's Public Document Room. The safety evaluation will also be available on the NRC's Agency-wide Documents Access and Management System (ADAMS) by entering accession number ML070920385 at this address: http://adamswebsearch.nrc.gov/dologin.htm.

London, England

Energy*Solutions* to Manage UK Nuclear Plants

On June 6, 2007, Energy*Solutions* announced that it has reached agreement to acquire Reactor Sites Management Company, Ltd (RSMC) from BNFL. RSMC, through its subsidiary Magnox Electric Ltd, holds the contracts and licenses to operate and decommission 10 nuclear sites with 22 reactors in the United Kingdom on behalf of the government body responsible for the clean up and decommissioning and the UK nuclear sites previously under the ownership of BNFL—the Nuclear Decommissioning Authority (NDA). RSMC and Magnox have a workforce of approximately 3,500 employees.

"This opportunity reaffirms our commitment to being a world-wide provider of nuclear services and technology," said Steve Creamer, CEO of Energy*Solutions*. "This announcement today means that Energy*Solutions* will significantly expand its nuclear operations in the United Kingdom. We take on this responsibility with the same commitment to safety and the environment that has always characterized our company."

According to a company press release, the proposed acquisition is the result of a competitive process whereby Energy*Solutions* had to demonstrate its credentials through a rigorous pre-qualification process against a set of stringent criteria including the ability to safely manage and operate large nuclear facilities. All major players in the industry were able to participate in the competition.

For additional information, please contact Greg Hopkins at (801) 649-2238 or Mark Walker at (801) 649-2194—both of whom are with EnergySolutions.

Board of County Commissioners of the County of Adams, State of Colorado v. Clean Harbors Deer Trail, LLC

County Seeks to Stop Disposal at Clean Harbors

On April 25, 2007, the Board of County Commissioners of the County of Adams, State of Colorado ("Adams County"), filed suit against Clean Harbors Deer Trail, LLC ("Clean Harbors") in the District Court of Adams County, Colorado. In the lawsuit, the plaintiff claims, among other things, that Clean Harbors has violated applicable laws by operating a regional low-level radioactive waste disposal facility without applying for and obtaining the necessary permit from Adams County. The plaintiff asserts that Clean Harbors' conduct violates various statutes, rules and regulations including the Local Government Land Use Control Enabling Act, the Colorado Hazardous Waste Siting Act, the Solid Wastes Act, the Adams County Development Standards and Regulations, and the Low-Level Radioactive Waste Act. As such, Adams County is seeking civil penalties, injunctive and declaratory relief from the court.

Background

Clean Harbors operates a hazardous waste disposal facility in eastern Adams County near the former town of Last Chance known as "Deer Trail." In September 2002, Clean Harbors submitted a Permit Renewal Application to the Colorado Department of Public Health and Environment ("CDPHE") for renewal of the facility's 1998 State RCRA Permit. The application was revised in October 2004 to include a proposal to dispose of radioactive materials in excess of the 1998 State RCRA Permit limits, one category of which was radium-contaminated materials from the Denver Radium Superfund Site ("Denver Radium Waste") and Polychlorinated Byphenyls ("PCBs") in excess of the previous 50 mg/kg limit.

In connection with the 2004 permit renewal application, Clean Harbors submitted an application to CDPHE for a Radioactive Materials License in January 2005. In April 2005, CDPHE submitted an application for a regional facility to the Rocky Mountain Low-Level Radioactive Waste Board. In June 2005, the compact board designated Deer Trail as a limited regional disposal facility.

In December 2005, CDPHE issued a final Hazardous Waste Permit effective on January 20, 2006 ("2006 State RCRA Permit") and a Radioactive Materials License effective on December 21, 2005. The 2006 State RCRA Permit authorizes the disposal of radioactive wastes that are licensed under the Radioactive Materials License—specifically, waste containing or contaminated with radioactive materials with a maximum activity of up to 2,000 picocuries per gram ("pCi/g"). The 2006 State RCRA permit also authorizes the disposal of a new PCB waste stream, which may include PCBs as well as PCBs mixed with radioactive waste.

Clean Harbors pursued a contract with the City and County of Denver for the acceptance and disposal of Denver Radium Street Wastes. In December 2006, Clean Harbors accepted six boxes (equivalent to one truckload) of such wastes and disposed of them at the Deer Trail facility. In February 2007, Clean Harbors accepted 45 boxes or containers from BWAB Real Estate amounting to 181.2 tons, or seven and one-half truckloads, of wastes from Denver Radium sites. And, in March 2007, Clean Harbors accepted from the Rocky Mountain Bottle Company 135.4 tons of material described as "used furnace brick."

Claims for Relief

Adams County asserts the following four claims for relief in its lawsuit:

- Adams County argues that Clean Harbors failure to obtain its approval of the new waste streams authorized by the Radioactive Materials License and the 2006 State RCRA Permit violate the Colorado Hazardous Waste Siting

Act and the Adams County Development Standards and Regulations. In addition, Adams County asserts that the Radioactive Materials License, the designation of the facility as a regional low-level radioactive waste disposal facility, and the acceptance of PCB wastes all constitute substantial changes to the facility's design or operation which require the approval of Adams County. For violations of the Hazardous Waste Siting Act, Adams County claims that Clean Harbors is subject to civil penalties of $10,000 per day of violation.

- Adams County argues that Clean Harbors has failed to comply with provisions of the Colorado Solid Wastes Act that require that (1) a facility comply with all standards, rules and regulations of the department, and all applicable zoning laws and ordinances, and (2) no radioactive materials or materials contaminated by radioactive substances be disposed at a facility not specifically designated for that purpose. For said violations, Adams County asserts that Clean Harbors is subject to civil penalties of $2,000 per day of violation.
- Adams County claims that Clean Harbors failed to comply with provisions of the Colorado Low-Level Radioactive Waste Act that require (1) the obtaining of a CD which specifically authorizes the disposal of low-level radioactive waste from the board of county commissioners and (2) agreement and payment of an annual fee to the county in which the facility is located. These failures, asserts the plaintiff, prevent Clean Harbors from obtaining any rights under the Radioactive Materials License or the regional facility designation and prohibit the facility from accepting low-level radioactive waste.
- Adams County seeks to have the Deer Trail facility deemed a "public nuisance" for operation and maintenance in violation of the Hazardous Waste Siting Act. As such, the county requests that the court require Clean Harbors to remove all prohibited materials and enjoin the facility from accepting or disposing of any additional prohibited wastes.

Answer

Clean Harbors will be filing a response to the suit shortly. In the meantime, a company official stated as follows:

"The Clean Harbors Deer Trail Facility has safely and successfully received over 6000 tons of NORM and TENORM waste without incident since December of 2006. Our business operations at the landfill continue, unabated by any of Adams County's legal maneuverings, which are without legal merit. The State of Colorado, through the Attorney General's Office and the Colorado Department of Public Health and the Environment, continues to advise current and prospective customers that the Deer Trail Facility is fully compliant with the terms and conditions embodied in the State License and, more importantly, Adams County's own Certificate of Designation."

Another company official commented: "Deer Trail's current legal status according to the State of Colorado and the Rocky Mountain Low Level Radioactive Compact is that the designated facility is open for business to accept all the materials covered by its license and permits."

Clean Harbors Deer Trail, LLC v. Board of County Commissioners of the County of Adams, State of Colorado

Court Declines to Enjoin Adams County

On April 25, 2007, the District Court of Adams County dismissed a complaint for a declaratory judgment and a motion for preliminary injunction filed by Clean Harbors against Adams County.

Complaint In its action, Clean Harbors requested that the court:

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U.S. Government Accountability Office

GAO Releases Report on Interstate Compacts

The U.S. Government Accountability Office recently released a report (GAO-07-519) titled, "Interstate Compacts: An Overview of the Structure and Governance of Environmental and Natural Resource Compacts." To gather information for the report, which is dated April 3, 2007, GAO reviewed 59 congressionally approved compacts. To collect data on the structure and governance of interstate compact commissions, GAO administered a web-based survey. The agency received a response rate of 80 percent to the survey.

Although the report does not focus on low-level radioactive waste compacts, some LLW Forum members participated in the surveys and may find the report to be of interest.

Background

GAO defines interstate compacts as "legal agreements between states that are designed to resolve concerns that transcend state lines, such as allocating interstate waters." Congress must give its consent to compacts that affect the balance of power between the states and the federal government. Some compacts assign their administration to existing state agencies, whereas others establish an interstate agency (typically called a commission) to administer their provisions. One example of the latter type that was studied by GAO is the Tahoe Regional Planning Compact, which created the Tahoe Regional Planning Agency (TRPA) to administer its provisions.

In reviewing congressionally approved environmental and natural resource compacts, GAO looked at the following:

(1) the organizational structures, powers and authorities, and dispute resolution and public accountability mechanisms;
(2) the extent to which concerns have been raised about the structure and governance of compacts that have commissions; and,
(3) how the structure and governance of TRPA compares to those of other similar compact commissions.

Findings

General Findings GAO found that 46 of the 59 congressionally approved environment and natural resource compacts that the agency reviewed have established interstate commissions to administer the compact, while the remaining 13 rely on existing state agencies for their administration. Of the 46 compacts with commissions, GAO found varying organizational structures, powers and authorities, and means of resolving disputes. All 49, however, take a similar approach to ensuring public accountability.

For example, commission sizes range from 2 to 48 members – with some commissions having regulatory authority while others have only advisory authority. Although GAO determined that only 26% of the commissions have provisions for resolving disputes, approximately 36% of those responding to GAO's survey reported that they have used dispute resolution means other than litigation including arbitration, mediation, administrative appeals, and negotiations. A significantly higher number of the commissions, about 94 percent, reported having procedures for public accountability such as holding public meetings, allowing public input, and giving the public access to commission documents.

Of the 13 compacts that do not have commissions, GAO found variations in their powers and authorities. Eight of these compacts have authorized member states to develop regulations jointly to further the compact's objectives, while five require member states only to coordinate resources to meet the compact's goals. Of these 13 compacts, only a few provide mechanisms for dispute resolution or public accountability. However, their administering agencies or officials

are subject to state requirements and procedures. Only three of the 13 compacts without commissions specified methods for resolving disputes, and only one specified mechanisms for providing public accountability.

Identified Concerns The compact commissions surveyed by GAO reported that significant concerns about their structure and governance have rarely been raised. Concerns regarding organizational structure and public accountability varied from commission to commission. They included issues such as who should be represented on the commission, whether commissioners should be elected or appointed, whether the commission has adequate oversight, and whether the commission is sufficiently independent of its member states.

On the other hand, concerns about regulatory authority largely centered on the scope of the commission's power and were more frequently raised when the issues addressed by the compact were highly controversial. GAO noted that a number of compact officials stated in their responses that they believe that concerns about commission structure and governance often reflected disagreements with specific commission actions rather than actual concerns about the organizational structure, public accountability, or regulatory authority of the commission itself.

Additional Information

To view a copy of the GAO report, go to http://www.gao.gov/cgi-bin/getrpt?GAO-07-519.

To view selected results from GAO's survey of interstate compact commission officials, go to http://www.gao.gov/special.pubs/gao-07-524sp/. The selected results relate to commission type, structure and composition, authority and powers, accountability, dispute resolution, amendments, congressional consent, commission budget, and compact issues.

(Continued from page 13)

(1) interpret the CD as written and declare that it incorporates the terms of Clean Harbors' hazardous waste permit regarding the materials that may be disposed of at its waste disposal facility, or

(2) alternatively, to construe resolutions passed by the county and declare that the disposal of NORM and TENORM does not violate the CD, and that NORM, TENORM and Denver Radium are not "radioactive" or "radioactive waste" as defined under the Colorado Radiation Controls Act.

Motion to Dismiss Adams County sought dismissal of the action based on two considerations:

(1) Under the doctrine of separation of powers, the court lacks jurisdiction to enjoin Adams County; and,

(2) Clean Harbors' claim is precluded by its failure to seek judicial review within the prescribed time limits.

Court's Ruling The district court concluded that Clean Harbors did not exercise its right of review in a timely manner because the statute requires that judicial review be made within thirty days of the award of a certificate of designation. In its ruling, the court noted that it is being asked to rule on Adams County's interpretation of the CD without a specific final action being taken by the county. The order is, according to the court, dispositive. The court declined to enter any further findings as to the claims set forth by either the plaintiff or the defendant.

(Continued from page 1)
material in their states under agreements with the NRC—will maintain authority over the new materials under their agreements with the agency.

Final Rule

The draft text of the final rule was posted on the NRC's website in mid-April 2007 for public viewing. NRC did not, however, seek public comment on the draft text of the final rule. Once the Commission's changes are incorporated and the necessary approvals are obtained, the rule will be published in the *Federal Register*. The rule will become effective 60 days after publication. The final transition plan for implementing the rule nationwide will be published on or before the date the rule becomes effective. NRC is also preparing related guidance documents for licensees.

A draft text of the final rule can be found at http://www.nrc.gov/reading-rm/doc-collections/commission/secys/2007/secy2007-062/2007-0062scy.pdf. The Commission's Staff Requirements Memorandum, which details the edits and revisions directed by the Commission to be incorporated in the rule, will be posted at http://www.nrc.gov/reading-rm/doc-collections/commission/srm/2007/.

Advisory Committee on Nuclear Waste

ACNW Holds May and June Meetings

The U.S. Nuclear Regulatory Commission's Advisory Committee on Nuclear Waste (ACNW) met at the agency's headquarters in Rockville, Maryland on June 19 – 21. During the course of the three-day meeting, members received, among other things, a briefing from U.S Department of Energy officials on the transportation, aging and disposal (TAD) canister and the total system model (TSM) in support of the Yucca Mountain Repository effort. A working group meeting was also conducted on the implementation of 10 CFR 20.1406 ("minimization of contamination") which included presentations from utility representatives on reactor designs, NRC staff on draft regulatory guidance, and a Nuclear Energy Institute official on industry contributions.

ACNW members also met in Rockville on May 16 – 17. During the two-day meeting, members discussed, among other things, the status of the NRC staff readiness to review geological repository operations area design in conjunction with the DOE's application to construct and operate a high-level waste repository at Yucca Mountain, Nevada. Committee members also discussed AREVA spent nuclear fuel recycle facilities, the status of the National Council on Radiation Protection and Measurement's study on U.S. radiation exposure, and topics of common interest with Commissioner Jeffrey Merrifield.

ACNW reports to and advises the Commission on all aspects of nuclear waste management.

ACNW meeting agendas may be found on the NRC's web site at http://www.nrc.gov/reading-rm/doc-collections/acnw/agenda/2007.

Advisory Committee on Reactor Safeguards

ACRS Holds June Meeting

The U.S. Nuclear Regulatory Commission's Advisory Committee on Reactor Safeguards (ACRS) held a public meeting on June 6 – 8 at the agency's headquarters in Rockville, Maryland. During the course of the meeting, ACRS members discussed, among other things, a draft NRC staff report on demonstrating the feasibility and reliability of operator manual actions in response to

fire. In addition, the committee was briefed on the maximum extended load and line limit analysis topical report.

ACRS also met in Rockville on May 3 – 5. During the course of that meeting, ACRS members discussed, among other things, digital instrumentation and control systems matters. In addition, the committee was briefed on a rulemaking to make risk-informed changes to loss-of-coolant accident technical requirements and on the status of NRC's development of a long-term research plan.

The ACRS advises the Commission on licensing and operation of nuclear power plants and related safety issues.

A complete agenda for the meeting is available on the NRC's web site at http://www.nrc.gov/reading-rm/doc-collections/acrs/agenda/2007.

U.S. Nuclear Regulatory Commission

NRC Commissioner Lyons Raises Emergency Access in CRCPD Speech

On May 21, 2007, Commissioner Peter Lyons of the U.S. Nuclear Regulatory Commission delivered prepared remarks at the 39th annual meeting of the Conference of Radiation Control Program Directors (CRCPD) in Spokane, Washington. The speech was titled, "Expanding Challenges of the National Materials Program: Building on Successes—Working Together."

Near the end of the speech, Commissioner Lyons discussed challenges facing the NRC, including both high- and low-level radioactive waste initiatives. Lyons expressed particular concern about the pending closure of the Barnwell facility to out-of-region waste and stated that, as a result, NRC "may need to consider the first-time use of the provisions in 10 CFR Part 62, regarding emergency access to low-level [radioactive] waste disposal facilities."

Overview of Remarks

The theme of CRCPD's annual meeting this year was "Radiation Protection: Expanding the Scope." Lyons noted it was particularly timely in light of successes and challenges faced by both federal and state regulators in this era of heightened emphasis on the security of radioactive materials, continuing and growing public interest, and coordination with an expanding set of federal stakeholders despite increasingly limited resources.

Lyons divided his remarks into three sections: successes, current efforts and challenges:

Successes Lyons identified several examples that demonstrate the successful joint federal-state working relationship including, among others, implementation of NRC's responsibility under the Energy Policy Act of 2005 for the regulation of certain Naturally Occurring or Accelerator Produced Radioactive Materials (NARM), including discrete sources of radium-226. As of May 14, according to Lyons, 32 states have certified that they have a program, which they intend to continue to implement, for licensing byproduct material as defined in the act that is adequate to protect public health and safety. NRC is working with the two remaining Agreement States to receive certification letters before the transition plan is published later this summer and is working with the remaining states to ensure a smooth transfer of licensing information for the new byproduct material. Other successes cited by Lyons include increased security of nuclear materials under the jurisdiction of Agreement States, and the implementation of heightened border control and internal security initiatives for certain radioactive materials.

Current Efforts Lyons also referenced current initiatives being worked on by the NRC, other

federal agencies and states. He noted that a joint working group with representatives from CRCPD and the Organization of Agreement States (OAS) has been formed to address fingerprinting requirements. Also, he stated that NRC continues "to work actively with the states regarding the replenishment of potassium iodide (KI) stockpiles within state radiological emergency preparedness programs." And, following completion of the National Source Tracking System (NSTS) rule, NRC has determined to fund NSTS training-related travel for up to two individuals per Agreement State.

Challenges Lyons concluded his remarks by reviewing the various challenges faced by federal, state and local government agencies including, among others, the availability of an adequate number of qualified staff which he says requires "far more work." In particular, Lyons notes that the American Nuclear Society (ANS) estimated in a December 2006 report that almost one-third of the current nuclear workforce will reach retirement in the next 10 years. ANS recommends, and Lyons agrees, that the U.S. Department of Energy (DOE) "serve as steward for national nuclear research and educational enterprise." Other challenges identified by Lyons include both high- and low-level radioactive waste initiatives and byproduct materials security.

Comments on Waste Initiatives

In the "challenges" section of his speech, Lyons expresses concern about waste initiatives facing both the agency and the states, commenting as follows:

> Both high- and low-level waste initiatives may challenge the NRC and the states. We face a monumental task in the review of a license application for a potential Yucca Mountain high-level waste repository. Low-level waste issues may also present special challenges, especially since the Barnwell site closes to out-of-compact wastes in 2008. The nation could then be without storage for Classes B and C wastes, a far from ideal situation. The NRC and the states will be faced, in all probability, with assuring that the absence of disposal capacity for such wastes does not translate into unsafe storage of such wastes by the licensees generating it. *Lastly, NRC may need to consider the first-time use of the provisions in 10 CFR Part 62, regarding emergency access to low-level waste disposal facilities.* (emphasis added)
>
> In anticipation of this development, we are taking certain concrete steps that will help to mitigate the impact of the closure of Barnwell. We are currently reviewing our low-level waste storage guidance for materials licensees and will be updating it in the next year. We are coordinating this effort with state officials. In addition, the nuclear power industry is developing low-level waste storage guidance, which it intends to submit to NRC for review and comment in the near future.

Comments on Byproduct Materials Security

The last challenge that Lyons mentioned in his remarks is in the byproduct materials security area. He noted that NRC staff is disappointed that a recently issued report on this topic by the NRC Office of the Inspector General (OIG) did not recognize the substantial efforts that have been undertaken by the agency and its Agreement States in this area since 2001. The OIG report concludes that NRC has not adequately identified and evaluated byproduct materials security risks and recommends that an independent panel be convened to identify NRC vulnerabilities concerning its materials licensing and tracking program and to validate NRC's ongoing byproduct materials security efforts.

Lyons stated that NRC staff agrees with the benefits of an independent assessment of NRC programs, but believes that such an independent review has been conducted through the Task Force on Radiation Source Protection and Security. The

interagency task force, which had active state participation, found no significant gaps that are not already being addressed and concluded that there is reasonable assurance that the highest risk sources in this country are both safe and secure.

NRC staff is, according to Lyons, developing a response to the OIG report.

NRC Releases Paper on 20.2002 Authorizations

The U.S. Nuclear Regulatory Commission recently released a Commission Paper (dated March 27, 2007) detailing low-activity waste disposal authorizations under 10 CFR 20.2002 and providing options for change. 10 CFR 20.2002 is a provision contained in NRC regulations "that allows for other disposal methods, different from those already defined in the regulations, provided that doses are maintained as low as is reasonably achievable and within the dose limits in 10 CFR Part 20."

On average, NRC has granted fewer than three 10 CFR 20.2002 approvals each year since 2000. In practice, the provision has most often been used for the disposal of radioactive waste in Resource Conservation and Recovery Act permitted hazardous or solid waste landfills, although it can be used for any type of disposal not already defined in the regulations (such as on a licensee's site or on private property located offsite).

Background

In March 2006, NRC staff completed a document (SECY-06-0056) titled, "Improving Transparency in the 10 CFR 20.2002 Process" which provided options for enhancing public understanding and awareness of 10 CFR 20.2002 approvals. In addition, the paper noted that the agency uses two different approval processes for 10 CFR 20.2002 requests. The Office of Nuclear Material Safety and Safeguards (NMSS), the Office of Federal and State Materials and Environmental Management Programs (FSME), and the Regions approve 10 CFR 20.2002 requests from materials and fuel cycle licensees with a license amendment. NRC approves 10 CFR 20.2002 disposal requests from reactor licensees, however, with a letter.

The Commission subsequently approved the staff's recommendation for improving transparency including initiating enhancements to NRC's public web site, developing a communication plan, and performing additional public outreach for significant 10 CFR 20.2002 requests from licensees. However, in so doing, the Commission directed the staff to provide a basis and justification as to why some 10 CFR 20.2002 disposals are authorized by letter and why some are authorized by license amendment, as well as to present a range of reasonable options in a risk informed manner for appropriate changes. The Commission further directed staff to address what happens when a decommissioning power reactor is transferred from the Office of Nuclear Reactor Regulation (NRR) to NMSS.

The March 2007 paper responds to staff directions from the Commission. It provides five potential options for addressing the issue in the future but ultimately recommends that the agency maintain the status quo. The paper addresses no new commitments.

Discussion

Since the language in 10 CFR 20.2002 does not specify how such approvals are to be granted, NRC has discretion in determining what procedure to use. The reactor program and the materials and fuel cycle programs have developed different approaches based on considerations specific to each.

Reactor Program Licenses for nuclear power reactors are voluminous (often more than 300 pages) and include technical specifications. They are reserved to address matters of high safety or

regulatory significance, such as operating limits and surveillance requirements for safety systems. Many documents that make up the licensing basis are not included in the license itself. NRR has extensive procedures for establishing and maintaining the basic framework for making decisions about creating, revising or deleting licensing basis information for operating nuclear power plants. In addition, each nuclear power plant has dedicated onsite inspection staff that is responsible for maintaining awareness of new actions as part of their jobs.

To date, the 10 CFR 20.2002 requests from reactors that have been authorized by letter approvals have involved low-activity waste with hypothetical exposures of only a few mrem/yr – and without any potentially higher consequences from accident scenarios. Thus, according to NRC staff, "they are by their very nature significantly different from essential safety systems and equipment that are relied on for safe operation of the plant and accident mitigation, and which are included in a reactor license." NRC staff also noted that the license amendment process provides an additional avenue for public input if an opportunity for a hearing were to be requested and granted. NRC, however, is implementing SECY-06-0056, "Improving Transparency in the 10 CFR 20.2002 Process," which includes enhanced methods for public involvement in 10 CFR 20.2002 reviews.

Materials and Fuel Cycle Programs Fuel cycle and materials licenses are far less complex and voluminous (usually no more than 20 pages) than those for nuclear reactors, so including 10 CFR 20.2002 authorization in the license does not significantly affect the scope of the license as it would for reactor licenses. In addition, using a license amendment for approving 10 CFR 20.2002 requests from materials and fuel cycle licensees facilitates inspections by regional staff that performs periodic inspections of various licensees in contrast to onsite inspections used by the reactor program. The use of license amendments in such cases allows NRC to track 10 CFR 20.2002 approvals and inspect against any commitments made by the licensee.

NRC staff has identified two other reasons for having a different approval method for materials and fuel cycle licensees. First, materials licensees do not have the extensive commitment-tracking framework that reactor licensees utilize, so they may also use information in the license to ensure that regulatory commitments are met. This would not be easily accomplished with a letter approval, which would be kept in a file at a potentially different location. Second, including the 10 CFR 20.2002 authorization in the license facilitates enforcement since the materials and fuel cycles programs do not have the same extensive hierarchy of commitments that the reactor program has implemented and in practice rely on license conditions (and the regulations) as the bases for taking enforcement action.

Options

Staff determined that "the letter approval procedure used for reactors and the license amendment procedure used for materials and fuel cycle licensees are not based on risk, but rather on efficiency and effectiveness considerations appropriate to each program." Nonetheless, in response to the Commission's direction, staff developed five options for how these approvals might be issued in the future:

(1) *Option One:* Bases the approval procedure solely on the expected dose to the public, such that all requests with projected doses above a few mrem/yr would require a license amendment and those with projected doses below a few mrem/yr would require a letter approval.
(2) *Option Two:* A hybrid option that includes a risk consideration for reactor licensee approvals, but maintains the existing process of using license amendments for materials and fuel cycle licensees.
(3) *Option Three:* Use the letter-approval procedure for all requests.
(4) *Option Four:* Maintain the status quo—i.e., letter approvals for nuclear reactor requests and license amendments for materials and fuel cycle requests.

(5) *Option Five:* Use the license amendment approval procedure for all requests.

NRC staff recommends Option Four—maintaining the status quo. In so doing, staff explains that there "are no compelling reasons for changing the existing process, which is both effective and efficient, and which has ensured protection of public health and safety and the environment."

For additional descriptions of and information on the above options, see the enclosure to the Commission Paper.

Other Issues

Unrelated to the Commission Paper, NRC staff plans future interaction with Agreement States on issues concerning 10 CFR 20.2002 and similar provisions in Agreement State regulations. According to staff, "[t]he goal is to assess the need for changes to current processes to improve the consistency and efficiency in the use of this provision by the national program." Issues to be examined will include, among others, dose limits, exposure scenarios to evaluate compliance with the limits, coordination with regulatory authorities for the solid and hazardous waste facilities to which material is sent for disposal, and methods of approval.

For a copy of the Commission Paper, go to http://www.nrc.gov/reading-rm/doc-collections/commission/secys/2007/secy2007-0060/2007-0060scy.html.

License Renewals Continue to Move Forward

The U.S. Nuclear Regulatory Commission continues to process license renewal applications from various nuclear power plant operators. In that regard, the agency recently

- accepted oral comments on matters of concern related to an Atomic Safety and Licensing Board (ASLB) proceeding concerning a license renewal application for the Oyster Creek nuclear power plant;
- presented at a public meeting the preliminary results of an NRC inspection associated with the license renewal application for the Vermont Yankee nuclear power plant;
- announced the availability of an application for a 20-year renewal of the operating license for the Indian Point nuclear power plant; and,
- conducted two public meetings to discuss the agency's review process for the license renewal application for the Shearon Harris nuclear power plant.

Oyster Creek Nuclear Plant

On May 31, a three-member ASLB panel accepted comments from interested citizens on matters of concerns related to the board's proceeding regarding the license renewal application for the Oyster Creek nuclear power plant. Known as "limited appearance statements," the comments were accepted during two separate sessions, which are intended as an opportunity for comments from citizens. The remarks will be transcribed and reviewed by the board.

"Although these statements do not constitute testimony or evidence in the proceeding, they nonetheless may assist the Board and/or the parties in their consideration of the issues. In particular, these statements may serve to alert the Board and

the parties to areas in which evidence may need to be adduced," states a notice on the sessions issued by the ASLB.

The Oyster Creek plant is located approximately nine miles south of Toms River, New Jersey. Its current operating license expires on April 9, 2009. The licensee, AmerGen Energy Company, submitted a renewal application on July 22, 2005.

NRC held a public meeting in late August 2005 to discuss how the agency will review the application. In September 2005, NRC staff began its technical review and announced the opportunity to request a hearing on the application. The environmental scooping process concluded on November 15, 2005. A draft supplemental environmental impact statement was then issued in June 2006 that found that there are no environmental impacts that would preclude renewal of the operating license. In August 2006, NRC issued its Safety Evaluation Report with Open Items for the proposed renewal that concludes that there are no safety concerns that would preclude renewal of the license provided the open items are resolved. In January 2007, NRC issued its final environmental impact statement on the proposed renewal finding that there are no environmental impacts that would preclude license renewal.

Information about the Oyster Creek renewal application is available at http://www.nrc.gov/reactors/operating/licensing/renewal/applications.oystercreek.html.

Vermont Yankee Nuclear Plant

NRC released the preliminary results of its inspection associated with the license renewal application for the Vermont Yankee nuclear power plant during a public meeting on May 24. The inspection was conducted to examine whether the plant's program for managing the effects of aging on key safety systems, structures and components is adequate and appropriate for a 20-year license extension. The aging inspection is one of a number of NRC activities involved in evaluating a license renewal application.

The Vermont Yankee plant is a boiling water reactor located in the town of Vernon, Vermont. Entergy Nuclear Operations, Inc. submitted a renewal application for the operating license of the plant on January 25, 2006. The current operating license expires on March 21, 2012.

Members of the public were provided with an opportunity on January 31 to comment on a draft report that assesses the environmental impact of extending the operating license for the Vermont Yankee nuclear power plant. The report, known as a Draft Supplemental Environmental Impact Statement, was issued on December 13, 2006. It preliminarily recommends that the Commission determine the adverse environmental impacts of license renewal for Vermont Yankee are not so great that preserving the option of license renewal for energy planning decision-makers would be unreasonable. The recommendation is based on the analysis and findings in the Generic Environmental Impact Statement used for license renewal reviews; the plant-specific environmental report submitted by Entergy; NRC consultation with other federal, state and local agencies; the NRC staff's own independent review; and the NRC staff's consideration of public comments received during the environmental scoping process.

Information about the Vermont Yankee license renewal application is posted at http://www.nrc.gov/reactors/operating/licensing/renewal/applications/vermont-yankee.html#appls.

Indian Point Nuclear Plant

On May 2, 2007, NRC announced that an application for a 20-year renewal of the operating license for the Indian Point nuclear power plant, Units 2 and 3, is available for public review. Both units are pressurized water reactors located in Buchanan, New York—approximately 24 miles

north of New York City. The current operating licenses expire on September 28, 2013, for Unit 2 and on December 12, 2015, for Unit 3. Unit 1 was shut down in 1974. Indian Point's operator, Entergy Nuclear Operations, submitted a license renewal application on April 30, 2007.

NRC staff is currently conducting its initial reviews of the application to determine whether it contains sufficient information required for the formal safety and environmental reviews. If the application has sufficient information, the NRC will formally "docket," or file, it and will announce an opportunity for the public to request an adjudicatory hearing on the renewal request.

A copy of the Indian Point nuclear power plant renewal application is available at http://www.nrc.gov/reactors/operating/licensing/renewal/applications.html.

Shearon Harris Nuclear Plant

On April 18, NRC conducted two public meetings to discuss the agency's review process for the license renewal application for the Shearon Harris nuclear power plant. The meetings began with NRC staff presentations on how the overall license renewal review process, which includes safety and environmental assessments, will work. Thereafter, members of the public were provided an opportunity to comment on environmental issues that they believe the agency should consider during its review of the application.

"These meetings give interested people in the area a chance to learn what it is we consider during these reviews," said NRC License Renewal Project Manager Maurice Heath. "They will also be able to suggest any environmental issues they think our review should include."

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.

On April 18, 2007, the agency held a public meeting near the plant to discuss the license renewal process and the scope of its review of the environmental impacts of the proposed renewal. On March 21, NRC announced the opportunity to request a hearing on the license renewal application.

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.

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.

ESP Authorized for Grand Gulf Site

On March 27, 2007, by a vote of 5 to 0, the U.S. Nuclear Regulatory Commission authorized the agency's Office of New Reactors to issue an Early Site Permit (ESP) to System Energy Resources Inc. for the Grand Gulf Site near Port Gibson, Mississippi. This will be the second ESP that has now been approved by the Commission, which issued the first-ever ESP for the Clinton site in Illinois on March 15, 2007. (See *LLW Notes,* March/April 2007, pp. 23 – 24.)

Grand Gulf ESP Application and Review

System Energy Resources filed its ESP application on October 21, 2003. Successful completion of the ESP process resolves many site-related safety and environmental issues, and determines that the site is suitable for possible future construction and operation of a nuclear power plant. The permit will be valid for up to 20 years. During that time, System Energy Resources (or any other potential applicant interested in this site) must still seek NRC approval for a Combined License to build one or more nuclear plants on the site before any significant construction can occur.

Technical review of the Grand Gulf application by NRC staff covered issues such as how the site's characteristics affect plant safety, environmental protection, and plans for coping with emergencies. The staff published a final safety evaluation and a final environmental impact statement for the Grand Gulf ESP in April 2006. The Atomic Safety and Licensing Board (ASLB) conducted a hearing on the matter and ruled on January 26th of this year that the permit could be issued.

Other Pending Applications

NRC continues to work on two other ESP applications: North Anna in Virginia and Vogtle in Georgia. The staff has completed its technical review of the North Anna application, which is currently the focus of an ASLB hearing. The staff expects to issue a draft environmental impact statement and initial safety report on the Vogtle application by late summer.

Background

The ESP process allows an applicant to address site-related issues, such as environmental impacts, for possible future construction and operation of a nuclear power plant at the site. If a permit is granted, the applicant has up to 20 years to decide whether to build a new nuclear unit on the site and to file an application with the NRC for approval to begin construction.

Documents related to the Grand Gulf ESP permit application and reviews are available at http://www.nrc.gov/reactors/new-licensing/esp.grand-gulf.html.

NRC Proposes Adding Plane Crash Security Assessments

On April 24, 2007, the U.S. Nuclear Regulatory Commission unveiled the third in a series of major steps to enhance the security of nuclear power plants following the terrorist attacks of September 11, 2001. Under the new proposal, each applicant for a new reactor design would be required to assess how the design, to the extent practicable, can have greater built-in protections to avoid or mitigate the effects of a large commercial aircraft impact, making them even more resistant to an attack. NRC plans to seek comment from the public, the nuclear industry and the technical community on the proposal. The proposed rule, which will replace an NRC staff proposal, will be available for comment later this year.

"This is the most recent step in a broad, proactive effort to improve the security of reactors initiated

by the NRC after Sept. 11, 2001," said NRC Chairman Dale Klein. "We need more technical analysis to understand how to address this. At the end of the road there may not be any changes necessary, but there also may be additional things that can be done."

In announcing the proposal, NRC emphasized that seeking security assessments and analyzing how designs can be improved is consistent with the traditional approach the NRC has taken to so-called "beyond design basis events." These are events with conditions exceeding the stresses imposed by the "design basis event" conditions that require plants to be brought to a safe shutdown. Design basis event conditions include large pipe breaks, fires, earthquakes, hurricanes, tornadoes, and floods. Assessing a new reactor design in the early stages can enable modifications or additional features to reduce the need for human intervention in the event of an airplane crash.

In 1985, the NRC said that it expected reactor designers to build in more safety features to cope with beyond design basis severe accidents as reactor designs advanced. However, the agency did not require specific features, leaving that to plant designers. In the subsequent decades, reactor designs submitted to and approved by the Commission have achieved substantial safety improvements.

If adopted, the proposed rule will affect new applicants for reactor design certification and applicants for a combined license that does not reference a certified design. As proposed, the rule would require applicants to describe how the design, to the extent practicable, can avoid or mitigate the effects of an aircraft crash with reduced reliance on actions by reactor operators. That approach, the Commission found, "allows the designers to evaluate potential competing technical factors, such as the response to earthquakes and passive safety systems, while at the same time addressing aircraft impacts." According to the Commission, the assessments should consider areas such as core cooling capability, containment integrity and spent fuel pool integrity.

"This proposal gives us the chance to assess and make practicable changes to new reactor designs early in the design process," said Chairman Klein. Even for plants already certified, he noted, it would be "in the interests of both the designers and their clients to adopt these changes at the design stage."

In January 2007, NRC approved a final rule enhancing security regulations governing the design basis threat (DBT) against which nuclear power plants must be able to defend with high assurance using their own capabilities. (See *LLW Notes,* January/February 2007, p. 19.) The Commission decided not to include large commercial aircraft in the DBT because the weaponry needed to defend against such a threat, surface-to-air missiles or fighter aircraft, cannot be possessed by the private security forces that protect commercial nuclear plants. The U.S. government has responsibility for protecting against such a threat and has taken numerous steps to prevent terrorist use of large commercial aircraft since the September 11, 2001 terrorist attacks.

In another step to address aircraft impact, building on a directive that was put into place in February of 2002, the NRC instructed reactor operators to develop strategies to mitigate the impact of large fires and explosions potentially caused by the impact from an aircraft. In preparation for a final rule for Commission consideration, NRC staff is examining comments on a proposed rule codifying that step for both existing and new reactors.

In addition to design and mitigative measures for reactors, NRC also works closely with other federal agencies such as NORAD, the Federal Aviation Administration, and the intelligence community to provide layered protection. The NRC has an agreement with NORAD that enables reactor operators to learn rapidly of imminent aviation threats and swiftly place the reactor in a safe state.

Clarifications Issued re Reactor Licensing

In April 2007, the U.S. Nuclear Regulatory Commission approved the issuance of revisions to its regulations dealing with licensing new nuclear power plants. The revisions are contained in a final rule that applies to licensing processes such as Early Site Permits (ESP), Standard Design Certifications and Combined Licenses (COL).

On March 13, 2006, a proposed rule was published in the *Federal Register*. The final rule will supersede revisions proposed in July 2003. It incorporates lessons learned during review of the first three ESP applications. The final rule will be published in the *Federal Register* later this year.

The NRC's changes to the proposed rule came in response to stakeholder comments or from further consideration by the staff. The final rule now clarifies how much additional review of environmental information is needed at the COL stage if an ESP is referenced. The final rule also includes additional criteria for allowing amendments to certified designs, as well as the addition of requirements for COL holders to provide information about how they will complete inspections, tests, analyses and other acceptance criteria if items are not done by the time a notice of intended operation is filed.

For more information on the rule, contact NRC staff members Nanette Gilles at (301) 415-1180 or nvg@nrc.gov or Jerry Wilson at (301) 415-3145 or jnw@nrc.gov.

Final Rules on Limited Work Authorizations Issued

In April 2007, the U.S. Nuclear Regulatory Commission approved the issuance of amended regulations regarding the issuance of limited work authorizations (LWA) for construction related to new nuclear power plants. The Commission also approved the issuance of updated "fitness-for-duty" requirements, such as work hour limits and drug and alcohol testing, at nuclear plants. The rules will become effective following their publication in the *Federal Register* later this year.

Under the new work authorization regulation, "construction" that requires either an LWA, a Part 50 construction permit or a combined license is defined. The final rule does not require an LWA, permit or license for activities such as site clearing, transmission line routing, excavation, road building and erecting construction-related support buildings or service facilities. An LWA, construction permit or license is required, however, for activities that include pile driving and foundation work for structures, systems or components with high importance to safe operation and security at a nuclear power plant. A full construction permit or combined license will be required for activities beyond these.

The new work authorization regulation allows applications for an authorization to be submitted in advance of a complete application for a construction permit or combined license. For a site where a construction permit was issued but no plant was built, the LWA application could reference an existing environmental impact statement for the site, taking into account the possible need for updated information. In October 2006, a draft version of this rule was published for public comment in the *Federal Register*.

All currently operating nuclear power plants and any future plants approved by the NRC are subject to the amended fitness-for-duty

regulations. Many of the regulations will also cover workers at construction sites for new reactors. In August 2005, a draft version of this rule was published for public comment in the *Federal Register*.

NRC Holds Public Meeting re Work Authorizations

On May 22, 2007, the U.S. Nuclear Regulatory Commission held a public meeting at the agency's headquarters in Rockville, Maryland to discuss recent rule changes regarding limited work authorizations (LWA) for new nuclear power plants. The new LWA regulations were announced in a press release issued in April 2007.

NRC regulations now require a company to obtain an LWA before starting construction activities including pile-driving and foundation work for structures, systems or components with high importance to safe operation and security at a nuclear power plant. During the meeting, NRC staff discussed the revised regulations in greater detail and provided guidance as to how they will be implemented.

NRC Holds Public Meeting re USEC Facility

On May 22, 2007, the U.S. Nuclear Regulatory Commission held a public meeting in Piketon, Ohio to discuss the agency's licensing and inspection programs related to refurbishment and construction at the United States Enrichment Corporation's (USEC) American Centrifuge Plant. The meeting was held at the Ohio State University South Centers. It began with an opportunity for informal discussions with NRC staff, followed by the meeting and an opportunity for the public to ask questions.

NRC Imposes New Requirements on Research & Test Reactors

On May 1, 2007, the U.S. Nuclear Regulatory Commission announced that—in accordance with the provisions of the Energy Policy Act of 2005—the agency has issued an immediately effective order imposing additional fingerprinting and criminal history check requirements on the nation's research and test reactors. Under the new order, research and test reactors are now required to ensure that persons currently allowed unescorted access to these facilities, and persons requesting such access, are fingerprinted and undergo a criminal history check by the Federal Bureau of Investigation. NRC already requires these facilities to perform such checks on employees with access to sensitive security information.

"This is one of many steps the NRC has taken in the aftermath of Sept. 11, 2001, to keep U.S. research reactors secure," said NRC Chairman Dale Klein. "Based on the staff's work and my earlier experience overseeing the research reactor program at the University of Texas at Austin, I believe the level of security is appropriate for these educational facilities to continue safely serving their students, their communities and the country."

The order defines "unescorted access" to mean a person could control the radioactive material to be protected at the research reactor without being detected by several kinds of security systems or personnel. The order requires that only an NRC-approved individual at the facility can review the results of the criminal history check. If an employee has a recently completed criminal history check, an additional check would not be required.

The order provides that covered facilities have 20 days to establish a fingerprinting program. The facilities must notify NRC at the end of the 20 days whether they will be able to comply with the order, or explain why specific provisions of the order are

unnecessary at the facility. NRC is also planning to propose revising its regulations to impose the order's requirements on a permanent basis.

The order may be found on the NRC's web site at http://www.nrc.gov/reading-rm/doc-collections/enforcement/security/.

NRC Initiates Reactor Consequence Analysis

The U.S. Nuclear Regulatory Commission will begin implementation of the first phase of its State-of-the-Art Reactor Consequence Analysis (SOARCA), which will be used to realistically predict the consequences of potential accidents at commercial U.S. nuclear power reactors. The first phase, which will be conducted under direction from the five-member Commission, will focus on ensuring the project's analysis methods mesh properly and have the data necessary for the most realistic results. Two sites will be studied during this phase, including the boiling water reactors at Peach Bottom in Pennsylvania and the pressurized water reactors at Surry in Virginia.

"Both sites have significant databases available from earlier studies, and this detailed information will make it easier to judge where the analysis can be improved," said Frank Eltawila, Director of the Division of Risk Assessment and Special Projects in the NRC's Office of Nuclear Regulatory Research. "The results will also help us ensure we know what information we'll need from other sites."

Both Peach Bottom and Surry volunteered to participate in the program. NRC will gather relevant information from the plants. The agency will then conduct the analysis along with contractors from Sandia National Laboratories. Once the staff finishes these analyses later this year, the Commission will examine the results and provide guidance on how to analyze the remaining reactor and containment designs at U.S. commercial nuclear power plants.

"We're undertaking this research to replace work that's almost 25 years old—studies that were so conservative that their predictions are not useful for characterizing results or guiding public policy. Those predictions have sometimes been misinterpreted and often misused," Eltawila said. "Today's computer-based analytical tools are much more capable of realistically evaluating potential nuclear power plant accidents, and this project should improve everyone's understanding of the realistic consequences of such potential accidents."

NRC says that nuclear power plant accidents are extremely unlikely. In the rare event that one does occur, existing plant components and procedures would mitigate most types of accidents. Nevertheless, it is important to understand an accident's possible consequences. This project will analyze U.S. reactors, incorporating more than 20 years of research to develop realistic estimates of possible consequences resulting from a potential accident. The analyses will then use site-specific weather and population data to determine the effects on public health and safety. The results of these analyses will be compiled in a public document to be released once the entire project is complete in 2009.

NRC Receives Reporting Award

Recently, the Association of Government Accountants (AGA) awarded the U.S. Nuclear Regulatory Commission the Certificate of Excellence in Accountability Reporting (CEAR) for the agency's outstanding efforts in preparing its Performance and Accountability Report for fiscal year 2006. This marks the sixth consecutive year that NRC has received the prestigious award that recognizes the quality of its annual performance and accountability reporting.

The Certificate of Excellence is the highest form of recognition in federal government management reporting. It rewards excellence in an agency's reporting of financial and performance results. In its award letter, AGA commended the NRC for preparing an informative, easy-to-read report.

"We are honored to receive this award recognizing the agency's commitment to excellence," said NRC Acting Chief Financial Officer Peter J. Rabideau. "This clear, informative report provided to the public about the NRC's performance and how the NRC conducts its programs is the result of the dedication and hard work of the agency's staff."

NRC was one of 11 federal agencies to receive the AGA certificate of Excellence in Accountability Reporting award during a May 23 ceremony at the National Press Club.

NRC Ranked Top Federal Workplace

The U.S. Nuclear Regulatory Commission received the top ranking among large federal agencies in the *2007 Best Places to Work in the Federal Government.* The guide is developed by the Partnership for Public Service and the American University Institute for the Study of Public Policy Implementation.

"This is a very great honor for all the men and women at the NRC who are committed to our mission to protecting people and the environment," said NRC Chairman Dale Klein. "The remarkable dedication and camaraderie at our agency make it a great place to work, and we will work hard to keep it that way."

Rankings are compiled by the Partnership using data from the Office of Management and Budget's 2006 Federal Human Capital Survey. This year, a record 221,000 employees at 283 federal organizations responded. The survey data is analyzed by the Partnership to develop detailed rankings of federal agencies. Agencies are ranked according to employee satisfaction and engagement, plus by 10 workplace categories including effective leadership, strategic management, teamwork, and training and development, plus pay/benefits and work/life balance.

NRC ranked first in eight of 10 categories and scored well above the government-wide average. The agency ranked consistently higher in three key categories of effective leadership, employee skills/ mission match and work/life balance. NRC also ranked first among all age groups and for black and white employees.

The agency hopes that the ranking, along with new recruiting authority provided by Congress,

will help in its hiring efforts to maintain an innovative and effective workplace. NRC is recruiting about 400 employees each year for the next few years because of the expected arrival of close to two-dozen applications for new reactor licenses beginning this fall.

Details of the survey can be found at http://www.bestplacestowork.org.

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- Legislative Resource Center (to order U.S. House of Representatives documents) ..... (202) 226-5200
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by internet

- NRC Reference Library (NRC regulations, technical reports, information digests, and regulatory guides). ..... **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). ..... **listserver@unixmail.rtpnc.epa.gov**

- EPA • (for program information, publications, laws and regulations) ..... **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**

- GAO homepage (access to reports and testimony) ..... **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

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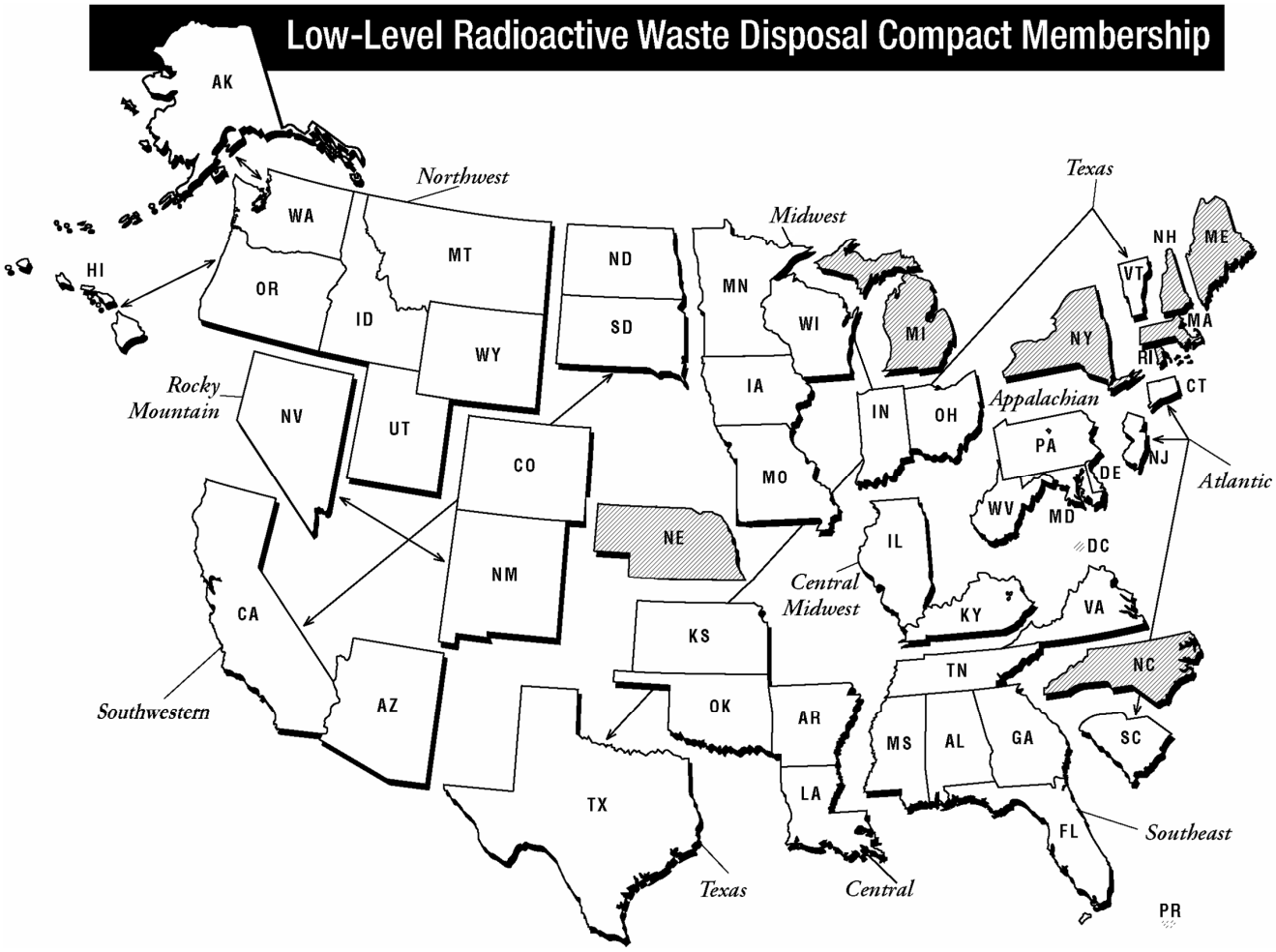
LLW Notes, LLW Forum Meeting Reports and the *Summary Report: Low-Level Radioactive Waste Management Activities in the States and Compacts* are distributed to the Board of Directors of the LLW Forum, Inc. As of March 1998, *LLW Notes* and LLW Forum Meeting Reports are also available on the LLW Forum web site at www.llwforum.org. 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.



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Maryland
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West Virginia

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Connecticut
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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

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Florida
Georgia
Mississippi
Tennessee
Virginia

Southwestern Compact
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California
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South Dakota

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