The Radioactive Exchange®

To promote the exchange of views and information on radioactive waste management

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GAO: LET STATES, TRIBES PARTICIPATE IN DOE INTERNAL HLW MEETINGS

A "draft" of a soon-to-be-released GAO report examining state and tribal relations with the Department of Energy's (DOE) Office of Civilian Radioactive Waste Management (OCRWM) recommends that DOE allow states to participate in **all** internal coordination meetings on the selection and siting of the HLW repository as a means of building state and tribal confidence in the HLW program.

The draft reveals that the states and Tribes "have little confidence in DOE...have placed little creditability in the program-...have grown to mistrust DOE and do not believe DOE when it says it can manage all of the technical problems associated with a repository." According to GAO if "the states and Tribes continue to feel disenfranchised from the... decisionmaking process and DOE's creditability remains low, the additional cost to the program could be very high." (See **GAO** in **the HLW Focus**)

WESTINGHOUSE-WEST VALLEY SET TO START UP NATION'S NEWEST LLRW DISPOSAL SITE

Within the next week or two the Department of Energy will officially publish in the **Federal Register** the already approved Finding Of No Signification Impact (FONSI) regarding the proposed disposal of on-site low-level radioactive waste at the Western New York Nuclear Service Center (WNYNSC) near West Valley, New York. The FONSI has been signed by DOE Assistant Secretary for Environmental Affairs, Mary Walker.

This action will signal the start up of the newest LLRW disposal facility in the United States. The facility, located within the WNYNSC, will accept LLRW resulting from the site-cleanup activities for permanent disposal in a engineered shallow-land burial trench and in an above grade earth-mounded concrete vault. Class A will be interred in the engineered trench, Class B and C in the earth-mounded concrete vault. (See **Westinghouse** pg. 2)

FEDS, STATE, INDUSTRY, AIR KEY CONCERNS, UPCOMING ACTIONS AT 8TH DOE LLRW FORUM
...See Meeting Notes

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(**Westinghouse** from pg.1)
Construction of the initial engineered trench is about complete and the expectation is that it will be ready to accept Class A waste in 50 gallon drums and box containers before the end of October -- very soon after the publication of the FONSI.

Facility Conforms to NRC Regs

Though the facility does not come under Nuclear Regulatory Commission (NRC) regulation, it has been designed to conform to the "performance objectives of 10 CFR 61.44 and other selected portions of 10 CFR 61 which are considered applicable." 10 CFR 61 embodies the NRC regulations governing the development and operation of a commercial LLRW disposal facility.

FONSI Not Insignificant

DOE's "Finding of No Significant Impact" followed the completion and issuance of the necessary Environmental Assessment in April of this year. According to Don Adams, the DOE Health Physicist at the site, local community leaders and the public were kept involved and informed throughout the decisionmaking process. The comments filed and published with the release of the FONSI and EA do not reveal any outright opposition to the proposed action. The "engineered design" aspects of the disposal facility seem to have contributed to public acceptance along with the seemingly convincing analysis of the potential release of radioactivity off site.

Radioactive Releases Negligible

According to the FONSI "Because of the containment systems provided by the reference design, no releases of radioactivity are expected during the institutional control (100 years) with design integrity maintained." The calculated maximum effective dose equivalent which would be received by a member of the general public outside the WNYNSC "is estimated to be 0.01 mrem per year." The maximum dose for persons who may inadvertently intrude on the site and establish residence 100 meters away from the disposal area after the 100 year institutional control period "is estimated to be 3.4 mrem per year." According to the FONSI these estimates are a small fraction of background radiation levels.

The predicted health effects of the proposed action are minimal. The estimated chance of one additional cancer death in 1000 years as a result of radioactivity released is 0.005.

The Class A Trench

As noted above the burial site will include an engineered trench for Class A waste. The engineered trench will be constructed so that dry active Class A waste will be emplaced within natural walls of impermeable clay. This will entail removal of approximately 9-11 feet of weathered till.

Voids between the containers of waste will be backfilled with pea gravel. Layers of unweathered till, gravel, clay and a geotech fabric will be used in between layers of containers and to form the trench cap.

The trench will be of traditional slope design to afford water removal via sump pumps. A continuous monitoring system will be installed. This was one key requirement requested by the local community.

The amount of Class A to be disposed of in the engineered trenches is approximately 9,200 cubic meters but is of very low curie content.

The Earth-Mounded Vault

The earth-mounded vault structure for the disposal of B and C waste is not unlike the French earth-mounded concrete bunker. It was designed by Westinghouse with technical support from Dames and Moore.

The structure will consist of a concrete floor with concrete side walls, covered by a Butler building while the waste is being emplaced. The area where it will be constructed will be "graded" to remove the weathered till allowing the concrete floor to be placed on the unweathered till and the

concrete sidewalls to be constructed above this new grade level.

The earth mound will be nearly level on top and will have 25 percent side slopes. A 3.9 m thick cover composed of compacted clay, gravel and riprap will be placed over the waste, once emplaced, to inhibit water infiltration and to protect the waste from erosion penetration by plants, animals and inadvertent human intrusion.

The design of the structure and the B and C waste forms allow for "recoverability" of the waste, a factor valued by the host community.

A New Waste Container

The West Valley Disposal Facility will not only be the newest disposal facility but also be the first to use **Square Barrels** as containers for solidified Class B and C waste. The DOE reports that eventually the square barrels will also be used for Class A dry active waste (Congratulations to Jim Greaves of Packaging Specialities -- See related story below).

The square barrel allows 25 percent more waste to be placed in the same "volume" that would be occupied by the standard 55 gallon cylindrical barrel, decreasing the "drum" void space, and thereby the problem of subsidence.

Westinghouse West Valley Services placed the very first order for the Packaging Specialities Inc. of Columbus, Ohio, square Barrel. A few have already been delivered to the site for testing. The expectation is that 10,000-15,000 will be purchased over the period of a year. For Class B and C waste the container will be delivered with a six inch diameter opening to accept a Portland Cement waste slurry. **

USING LLRW TO FILL THE VOIDS BETWEEN 55 GALLON DRUMS -- THE SQUARE BARREL

In 1983 a small Cleveland, Ohio metal container company specializing in developing unique metal containers began to develop, using their own resources, a square metal container for the transport of nuclear submarine torpedo tail sections. However, in the midst of development, the company discovered that the Navy found an alternative container for the tail sections. With a good deal of time and money already invested in the manufacture of the square container, the company began looking about for another commercial market. Then along came an individual who pointed in the direction of nuclear waste disposal and -- EUREKA! -- the square 71 gallon barrel for the containerization of low level radioactive nuclear waste was born!

Now, after a couple of years of persistent traipsing to LLRW meetings, waste processing vendors and government agencies to demonstrate the disposal efficiency of the container, Jim Greaves (the person who originally recognized the value of this container for the disposal of LLRW, and is now with Packaging Specialities Inc., the company which developed it) has succeeded in making the first square barrel sale to Westinghouse-West Valley Services for use in the West Valley Nuclear Services on-site burial facility.

WVNS has already received a couple of the square barrels for testing and, if everything proceeds according to schedule, an order for over 10,000 of the containers is forthcoming (See Related Story on Front Page).

Disposal Capacity Efficiency

Packaging Specialities, Inc.'s (PSI) square barrel has been designed to "circumscribe" the diameter of the traditional 55 gallong drum currently used for disposal. The result is that the "voids" resulting from stacked 55 gallon drums are now almost filled with radioactive waste, not pea gravel or grout. The barrel's use provides an almost 25 percent increase in burial facility, and storage or transport capacity.

DOT Certification Under Way

Testing to obtain Department of Transportation 7A container certification for the PSI square barrel is now underway at Mound Laboratory. Once certified the barrel will be available for the transport of Class A dry active waste.

Credit For Volume Efficiency

An interesting facet of the use of the square barrel is how disposal operators will assess the per barrel disposal fee. The container will allow 10 cubic feet of waste to be stored or disposed of in the same space 7.5 cubic feet of waste now occupies thereby increasing the per disposal barrel cost on a volume basis. However use of the square container will relieve the operator from much of the burden of backfilling the voids. Subsidence due to voids will be much less of a problem. Thus, all other factors being equal, the overall decrease in operating costs due to using the square barrels should result in some "credit" to the generator, even though more volume is emplaced for disposal.

The West Valley Square Barrels

West Valley Services will initially use the PSI Square Barrel as containers for their solidified Portland Cement Class B and C waste. They also report that they definitely have plans to use the square barrel as a Class A disposal container. PSI is actively involved in completing fabrication development of an open top square barrel to be used for inserting Class A dry active waste.

Orders Being Taken

Large-scale fabrication capacity for the square barrels has been developed by PSI. Jim Greaves, however, made it clear that the company does not intend to push output at the expense of quality control. He emphasized that "tight quality control of the fabrication process is the top priority." For more information on the square containers or to place orders contact Jim Greaves at (216) 271-7988. **

LLRW BROKERS, PROCESSORS FORM TRADE ASSOCIATION

During the Spectrum '86 Niagara Falls Decommissioning Conference executives from several Low-Level radioactive waste broker firms and waste processing companies met to form a new trade association appropriately named -- **The Nuclear Waste Brokers and Processors Association.**

At a press conference-cocktail reception Scott Dam, of Babcock & Wilcox, the group's first elected President, explained that the "waste brokers and processors are an important link in the radwaste management network." He emphasized that the objectives of the Association are to "utilize its unique position in the radioactive waste management system to facilitate communication between the generators, the disposal operators, state and federal regulatory agencies and the compacts."

The other newly elected officers of the Association and members of the Board of Directors are: Vice President and President-elect - John Tekin of RADIAC; Treasurer - Dan Caulk of RSO; Secretary - Steve Black of Teledyne Isotopes; At-Large-Members of the Board of Directors - Robert Gallagher of Applied Health Physics (3 year term); James Bell of ADCO (2 year term); Ben Warren of Quadrex HPS (1 year term).

The companies directly involved in developing and founding the Association in addition to those represented by the elected officers include: NDL; Scientific Ecology Group; RAMP Industries; US Ecology; Chem Nuclear; Pacific Nuclear; INS; and Westinghouse-Hittman.

Membership Requirements

According to proposed Articles of Incorporation and By-Laws (which the Association expects to finalize at their next planned meeting during the American Nuclear Society Conference in Washington, D.C.), active membership with full voting privileges is restricted to "corporations, firms or organizations which hold a license to possess radioactive material for the purposes of storage, processing and-or volume reduction." Two other classes of membership have been established: Associate Membership to accommodate the participation of other firms, corporations, and organizations (e.g, utilities, industrial and medical waste generators) who do not

qualify for Active Membership; and Affiliate Membership for individuals who have an interest in radioactive waste brokering or processing.

For more information on the Association contact one of the Officers: Scott Dam (804) 385-3368; John Tekin (718) 963-2233; Steve Black (201) 664-7070; or Dan Caulk (301) 953-2482. **

DOE RETURNS SURCHARGE REBATE FUNDS FROM SE, RM REGIONS TO WA STATE

The Washington State Department of Ecology received a letter during the past week informing them that DOE was returning to the State the twenty-five percent rebate of the ten dollar surcharge collected from generators residing in the Southeast (SE) and Rocky Mountain (RM) regions. The rebate money was forwarded to the Department for deposit in the "Escrow Fund" set up by the Low-level Radioactive Waste Policy Amendments Act.

The letter stated that since the SE and RM regions are not unsited regions under the provisions of the LLRWPAA, they do not have to meet the Act's required site development milestones. It further explains that DOE is only authorized to rebate funds from the Escrow Account to unsited states or regions that are judged to be in compliance with the Act's milestones. Since the SE and RM regions are not required to meet this criteria there is no way DOE can determine their compliance and thus rebate funds from the Escrow Account. The money forwarded by the State of Washington from the surcharge collected from generators within these regional compact is, therefore being returned. According to DOE the total amount is around $10,000.

Collection of Surcharge Unchallenged

The most interesting facet of DOE's letter to Washington is that it completely ignores the question of whether the State of Washington has the authority under the LLRWPAA to collect the $10.00 surcharge from generators residing in regions or states that have operating burial facilities -- sited regions as defined in the LLRWPAA.

The EXCHANGE contacted Northwest Compact Executive Director Elaine Carlin, and raised the issue. Ms. Carlin justified the State's action on the following basis:

-- the principal intent of the LLRWPAA is to encourage the disposal of LLRW in regional compact facilities. Applying the $10.00 surcharge to out-of-region waste accepted at the Hanford facility is in keeping with this intent;

-- The State Executive Order implementing the provisions of the LLRWPAA signed by the Governor authorizes the Department of Ecology to collect the $10.00 surcharge from **out-of-region generators.** No distinction is made between sited or unsited regions.

When the provision of the LLRWPAA exempting sited state generators from the surcharge was raised: [Section (d)(1) "Surcharges.--The disposal of any low-level radioactive waste under this section (other than low-level radioactive waste generated in a sited compact region) may be charged a surcharge by the State in which the applicable regional disposal facility is located..."] the Compact Executive Director again emphasized the overall intent of the entire Act.

She further stated, when asked by the EXCHANGE, that the State Attorney General's Office had offered a legal opinion regarding the relevance of the parenthetical phrase in the above quoted provision of the LLRWPAA and found it "contrary to the overall purpose of the Act."

Similar Views in Other Sited Regions

Rocky Mountain Compact officials provided a similar, but not identical, view on the assessment of the out-of-region site-use surcharge. Whether or not generators from sited regions would be assessed a surcharge apparently would depend on the amount of waste received. At this point, however, no waste has been accepted at the Beatty Facility from either the Southeast or Northwest region.

Interstate Commerce Implications?
-- AN EXCHANGE ANALYSIS

The State of Washington's action and any further surcharge levied by other host states on generators in sited-regions depends on the interpretation of what powers Congress granted to states to interfere with the interstate commerce of waste management, and how and when the powers so granted could be exercised.

It is quite clear that on January 1, 1993 the regional compacts have the authority to impose import restrictions on out-of-region waste delivered for disposal at their respective regional disposal facilities. The currently operating host states also have the power to stop accepting waste during the intervening years -- from now to 1993 -- once the site volume cap stipulated in the LLRWPAA is reached. In addition, during this intervening period Congress specifically limited any other interstate commerce actions by the compacts or host states, to imposing set surcharges and penalties on the unsited regions or states and prohibiting access if stipulated milestones are not met.

The current host states would not have been able to levy the surcharges on out-of-region generators and not do the same to in-region generators if Congress had not specifically authorized such action. This would have been a violation of the "nondiscriminatory provisions" of the Interstate Commerce statutes.

Though one would have to agree with the State of Washington that the Congress' overall intent of the Act is to encourage regional disposal, the law also reflects Congress' intent to allow the host states and compacts to establish regional interstate commerce restrictions gradually over time and not to be granted that full authority until January 1, 1993. The imposition of a surcharge on the sited region generators would therefore seem to go beyond the states "timely" assumption of interstate powers as authorized under the LLRWPAA. **

LLRW LIABILITY INSURANCE STUDY LAUNCHED BY WASHINGTON STATE

Within the next few weeks LLRW generators, transporters, brokers and waste processors who use the Hanford Disposal Facility should be receiving a letter from the State of Washington's Department of Ecology requesting actual copies of their general liability insurance agreement now in force. The request for the actual policies is the first step of a comprehensive legislatively-mandated study of liability insurance available to cover the packaging, transport, storage, treatment and disposal of LLRW. The Ecology staff decided to request the actual policies, rather than develop a survey vehicle, in order to assure consistency of their analysis.

In addition to completing a review of the existing coverage carried by the various elements of the LLRW management industry, the Department will carry out a risk assessment study regarding the operation of the Hanford burial site. The risk assessment will probably involve the use of an outside contractor. A Request-for-Proposals (RFP) to carry out this task is expected to be issued in the coming months. For more information write Elaine Carlin, NW Compact Committee, Department of Ecology, LLRW Management Program, Mail Stop PV-11, Olympia, WA 98504. **

US ECOLOGY NARROWS SEARCH FOR LLRW DISPOSAL SITE IN CALIFORNIA

An "exclusion and high-avoidance" screening of 18 basins in three California counties has removed large tracts of land from consideration as possible sites for the disposal of the state's low-level radioactive waste (LLRW). According to Ronald K. Gaynor, Vice President and Project Manager for US Ecology "Potential sites still remain in each of three counties -- Inyo, Riverside and San Bernardino. By the end of the year, " added Gaynor, "we expect to identify three to five specific sites, which will then undergo detailed testing."

US Ecology refined the list of potential siting areas to the current 18 desert basins earlier this year, following an initial

screening conducted by the California Department of Health Services. It then began a more detailed screening process to identify those specific areas within each basin to be excluded from further study, or to be highly avoided.

Exclusionary Criteria

Tracts have been excluded for either technical reasons -- flood or earthquake fault hazards -- or because of land use restrictions. Automatically ruled out are national monuments and state parks, military bases, areas recommended by the Bureau of Land Management (BLM) for wilderness preservation, wildlife preserves, scientific study areas, and the entire East Mojave National Scenic Area.

Locations regarded as high-avoidance areas include existing cultivated lands or property under agricultural development, plus all BLM Wilderness Study Areas in the California Desert Conservation Area. These areas are to be studied before wilderness recommendations are made. Two basins, Sheephole (San Bernardino County) and Saline (Inyo County) are entirely covered by exclusion and high-avoidance factors. High-avoidance areas will be further considered only in the event no suitable sites are available in the remaining areas.

Public Hearings Underway

US Ecology is currently holding a series of public meetings in the three desert counties to explain the "exclusion" and "high-avoidance" criteria. Vice President Gaynor emphasized that because many technically suitable sites still remain, public views on preferred site locations will weigh heavily in the selection process.

Basins Under Consideration

The 18 basins in Inyo, San Bernardino and Riverside Counties are: Bristol Lake, Broadwell, Cadiz, Coyote Lake, Cronese, Danby, Ford Dry Lake, Mesquite Hills, Pahrump, Palen, Panamint, Saline, Searles Lake, Sheephole, Silurian Lake, Silver Lake, Soda Lake and Superior Lake. US Ecology officials believe that within these basins they can find specific locations that meet all state and federal regulatory requirements. Among those requirements are low population density, lack of potential for future growth, sufficient geotechnical data to permit full environmental monitoring and analysis, low rainfall, and avoidance of flooding, earthquake and unstable slope hazards. **

CHEM NUCLEAR STARTS RESEARCH REACTOR DECOMMISSIONING AT VIRGINIA TECH

Chem-Nuclear started work last week on decommisioning an ARGONAUT research reactor at Virginia Technological Unviersity in Blacksburg, Va. This is the second reactor decommissioning project that Chem-Nuclear has undertaken during the past year. In June the South Carolina-based disposal and waste services company completed the decommissiong and dismantling of a TRIGA reactor for Northrop Corporation. As the turnkey contractor for both efforts, Chem-Nuclear was resposible for all aspects of the decommissioning, from dismantling and waste and fuel transport, to disposal and NRC termination of the license.

Waste for Disposal

The dismantling and decommissioning of the 1 MW Northrop TRIGA reactor resulted in approximately 4,300 cubic feet of LLRW, primarily activated concrete and steel reinforcing bars. The fuel from the reactor was shipped by Chem-Nuclear to three other research facilities. The total cost of the project was about $1.25 million.

The decommisioning of the Virginia Tech reactor is expected to produce about 1,800 cubic feet of LLRW and cost in the neighborhood of $500,000. The dismantling and decommissioning should be completed by mid-December of this year. **

STATE COMPLIANCE WITH LLRWPAA

The Department of Energy (DOE) has "officially" determined that all the non-sited compacts consented to by Congress (Central States (CS), Midwest (MW), Central Midwest (CM), Northeast (NE), and the Appalachian Compact) and the states of Texas, Massachusetts, New York and Maine are in compliance with the July 1, 1986 milestone set in the Low-Level Radioactive Waste Policy Amendments Act (LLRWPAA) and will receive the 25 percent rebate of the surcharges collected from their respective regional or state generators. [EDITORS NOTE: The July 1, 1986 milestone requires that a state be a member of a compact, enact legislation to site a disposal facility, or have the Governor certify that the state intends to develop a disposal facility.]

The DOE has requested further information from **Arizona** and **South Dakota** regarding their joint Compact. **Rhode Island** has also been requested to explain the enactment of a compact with **Massachusetts**, when Massachusetts has informed DOE that it is "going alone." **Vermont** has been determined to be out of compliance. No determination of compliance has been made for **North Dakota, Puerto Rico** and **New Hampshire** since no surcharge funds have been deposited in the Escrow Fund from generators within these states.

The milestone compliance determinations were made by the Department in order to decide on the respective Compact and State requests for their rebate from the surcharge monies deposited in the LLRWPAA "Escrow Fund". **California**, as this issue went to print, interestingly enough has not yet requested their rebate. When the request is made DOE will judge the State in compliance and forward their rebate of the surcharge.

AT THE DISPOSAL SITES -- The Facts and an EXCHANGE Perspective

Prior to the enactment of the LLRWPAA many were expressing the belief that the volume disposal caps set for the operating LLRW burial sites would cause a disposal capacity crisis for LLRW generators. In fact, somewhat of a "business crisis" may be occurring, not because of lack of disposal capacity but because a lack of waste!

Through August of this year Hanford and Barnwell had received 425,441 cubic feet and 657,109 cubic feet respectively. Hanford accepted only 46,709 cubic feet in August; Barnwell 79,892 cu. ft. If the waste acceptance for Hanford over the next four months averages what it has for the past eight, the year end volume disposed of at the facility would be down about 55 percent from the previous year intake of 1.4 million cubic feet. Barnwell would experience about half that decrease if the current trend continues. This all adds up to a potential decrease of waste delivered for disposal of somewhere around 75 percent to 80 percent!

This definitely amounts to a critical situation for the "business" of waste disposal. If this all has happened because of just a $10.00 surcharge, what will happen when the levy is increased or when new sites are added?.

Volume reduction cannot account for the decrease. The waste processing firms are still struggling and no new major waste reduction facility has been started. Reduction at the source and deployment of long term storage options are the other factors that could account for the decrease. The States and industry should spend some time sorting this situation out now in order to get some real perspective on the amount of disposal capacity intended to be developed and the associated cost of the disposal business before someone puts up a store and the merchandise is priced so high a government subsidy is needed to help the customer buy the product -- a lot of excess regional disposal capacity!

The proposed **utility reactor LLRW volume allocation schedule** developed by the sited states under the criteria set out in the LLRWPAA is still under review (See **Disposal Site Use Notification,** EXCHANGE, Vol. 5, No. 9). Ms. Carlin, Executive Director of the Northwest Compact informed the EXCHANGE that the comments received are being

analyzed and the allocations should be finalized in the coming months.

IN THE NORTHEAST

Denise Drace, Executive Director of the Northeast Compact Commission reports that a Request-for-Proposal (RFP) to assist the Commission in developing a Regional Management Plan should be released prior to the end of October. Firms interested in receiving the RFP should contact Denise at the Commission's new office: 55 Princeton-Heights Town Road, Princeton, NJ 08550. The telephone number is (609) 799-1193.

IN THE SOUTHEAST

The **North Carolina** legislature has authorized two independent studies -- one dealing with compact membership, the other with LLRW disposal regulation. The first will be conducted under the auspices of a newly established Join Select Committee on Low-Level Radioactive Waste. The intent is to develop recommendations on the options available with regard to the management and disposal of the state's LLRW. Earlier this year a report completed by EBASCO, the NY-based consulting firm, outlined the pros and cons of various options open to the state, ranging from remaining in the SE Compact to going it alone. The Joint Select Committee on LLRW is primarily made up of members of the Joint Legislative Utility Review Committee plus six additional members from the legislature -- three from the House and three from the Senate. The Committee is cochaired by Representative Joe Johnson and Senator George Miller. Senator Miller is a SE Compact Commissioner.

The regulatory study is the responsibility of the LLRW Regulatory Study Committee established by the Legislative Research Commission. It will examine the state capacity to regulate a LLRW disposal facility, the possible need to set some regulatory criteria in legislation, and pending regulatory initiatives. The Regulatory Study Committee is cochaired by Senator Lura Tally and Representative John J. Hunt.

Currently, the state's Radiation Protection Agency is considering a petition for rulemaking on LLRW disposal filed by the State's Conservation Council. The petition requested that the Agency consider regulations to ban the use of shallow-land disposal techniques for the burial of LLRW; require utilities to store their own waste on-site; and set specific criteria for a LLRW disposal facility. The recommendation for a regulation to require utilities to store their own waste on-site was rejected on the basis that such a requirement could only be issued by the Nuclear Regulatory Commission.

In an earlier edition of the EXCHANGE it was erroneously reported that legislation to rescind North Carolina's membership in the SE Compact was still active. The bill died in committee when the legislative session ended. However, legislative interest in reintroducing the measure upon the recovening of the legislature remains.

IN THE CENTRAL STATES

The **Central States Compact Commission** has circulated a **draft RFP** that is intended to be issued to solicit proposals from contractors interested in developing and operating a Central States regional disposal facility. The Commission is scheduled to adopt the final RFP in November 1986 and issue it on December 1, 1986.

According to the procedures agreed to by the Central States Commission the RFP will request that proposals submitted by would-be contractors include sufficient detail on actual proposed sites **without** naming either the host state or the sites. Following the Commission's selection of the best proposal, the developer is then to name the state within which it will seek to license and develop the disposal facility. Selection of the contractor-developer is to be made in April, 1987, and the host state is to be named by the selected contractor in June, 1987.

IN THE CENTRAL MIDWEST

A **Request for Proposals (RFP)** from outside contractors has been issued by the **Central**

Midwest Compact Commission to obtain technical support in developing a **a Regional Management Plan.** The RFP calls for completion of three tasks: (1) study the effects of source volume reduction on the state's waste stream; (2) analyze the pros and cons of source and waste volume reduction techniques; and (3) assess the options available for a LLRW tracking system. The resulting report will form the basis for developing a Regional Management Plan. The total budget estimate is $100,000. Proposals are due by October 22, 1986 at 1:00 p.m. Central Daylight Time. The contract award will be announced on December 8, 1986. Copies of the RFP can be obtained from Gail Melson (217) 546-8100.

Illinois Governor James Thompson has signed into law an amendment to the State's Low Level Radioactive Waste Act that prohibits the Department of Nuclear Safety from issuing a license to any off-site treatment, storage or disposal facility unless the Central Midwest Compact commission has adopted a Regional Management Plan and designated Illinois as the host state for such facility. The storage facility operated by ADCO and licensed by the NRC is exempted from the law. However, according to sources in the state, ADCO's state permit will expire on January 1, 1993 unless it has been designated a regional facility by the Commission. The measure was actively supported by the League of Women Voters of Illinois and Citizens for a Better Environment.

The **Illinois Department of Nuclear Safety (IDNS)** has awarded two study contracts to **Sargent & Lundy (S&L).** One contract is for professional services relating to the development of standards for the treatment of low-level radioactive waste to be disposed of at an Illinois regional LLRW disposal facility. The second contract, starting simultaneously with the first, is for professional services relating to the characterization of low-level radioactive waste streams in Illinois. S&L is to develop a combined data base including technical and regulatory information as well as numerical and descriptive data as needed by IDNS for the design, operation, and regulation of a waste disposal site using an alternative to shallow land burial.

SGN of France has also been awarded a contract by IDNS to provide information on their LLRW tracking system.

IN THE MIDWEST

The **Midwest Compact Commission** and its various committees are scheduled to meet October 14-15 in Des Moines, Iowa. The agenda includes adoption of party state plans to implement provisions of the Compact and setting a schedule for the Regional Management Plan hearings. The Management Plan Committee is also expected to discuss host state selection criteria.

The Regional Management Plan recently released by the Compact Commission includes a Host State Committee Incentives Package. For more information and copies of the plan call Greg Larson, the Executive Director, or Susan Olsson (617) 293-0126.

IN CALIFORNIA

State responsibility for the LLRW disposal facility program has been administratively transferred within the **California Department of Health Services'** Environmental Health Division, from the Radiological Health Branch to the **Vector Surveillance and Control Branch** headed by Don J. Womeldorf. Chief Womeldorf can be reached at 714 P Street, Room 616, Sacramento, CA 95814; (916) 323-3019.

IN THE NORTHWEST

Nancy Kirner's responsibilities with the **State of Washington's** Office of Radiation Protection for regulatory oversight of the Hanford LLRW burial site have been shifted over to **Earl Ingersol,** head of the Waste Management Section within the Department of Health Services. The shift was prompted by both the loss of funds due to the decrease in waste being delivered to the site and Nancy's increased workload in support of the state's Nuclear Advisory Board study of the radiation health effects from operation of the Hanford processing facility. Though she has given up her role

regarding day-to-day regulatory oversite of the Hanford LLRW Burial site, Nancy will continue to work on the long-awaited renewal of US Ecology's license to operate the facility. She reported to the EXCHANGE that the license should be issued "shortly."

The decrease in LLRW delivered to Hanford has meant that the State's regulatory program, which is supported by at $.27 per cubic foot assessment on the waste delivered to the site, has lost about half of its funding support. The shift of site regulatory responsibility from Ms. Kirner to Mr. Ingersol amounts to a doubling of his responsibilities. According to the state's administrative procedures he is now holding a "temporary double-fill" position, with responsibility for Ms. Kirner's regulatory oversight role added to his current duties. The loss of revenues has also resulted in the cutting back from two to one state inspectors at the burial site.

IN THE INDUSTRY

The **Department of Energy's Oak Ridge Operations Office** has selected three firms to participate in a demonstration program to **decontaminate radioactive metallic scrap.** The three firms are: **Babcock and Wilcox; Bechtel Corporation** and a joint venture between **Scientific Ecology Group** and **Westinghouse.** Each of these three firms will decontaminate and process approximately 25 to 75 tons of contaminated scrap metal including copper, nickel, carbon steel, stainless steel, monet and aluminum. These materials were generated by various DOE operations at four sites in Tennessee, Kentucky and Ohio. The amount of material processed by each company will vary depending on what is deemed necessary for demonstrating capabilities and gathering sufficient data to plan for the second phase.

The companies involved may process the material at the Oak Ridge Gaseous Diffusion Plant or at a licensed site of their choice before transporting the decontaminated material back to Oak Ridge. After processing, all metals and radioactive wastes will be returned to the DOE.

One or more of the three firms selected for phase one will be chosen to participate in phase two, which will involve the large-scale decontamination and processing of approximately 80,000 tons of radioactively contaminated metallic scrap. This material, ranging from little or no contamination in some pieces to substantial degrees of contamination in others, is currently stored at four DOE sites. These include the Oak Ridge Gaseous Diffusion Plant, the Paducah (Kentucky) Gaseous Diffusion Plant, the Portsmouth (Ohio) Gaseous Diffusion Plant and the Feed Materials Production Center in Fernald, Ohio.

The **NRC public hearing** on **Babcock & Wilcox**'s application for license amendment to allow for the operation of a LLRW compactor and incinerator at their Apollo facility was held as scheduled on September 30-October 1 in Apollo, PA. According to the Administrative Judge presiding in the case a recommendation on the license will not be issued until the first part of December. Further details on the testimony will be reported in the next edition of the EXCHANGE.

CALL FOR PAPERS

The **1987 International Decommissioning Symposium** to be held October 4-8, 1987 is seeking papers in the field of nuclear facility decommissioning dealing with the following topics: Policy, Regulations and Standards; Decommissioning Experience/Tooling/Techniques; Planning, Engineering and Estimates; Radiological Concerns; Management of Decommissioning Wastes; and, Shippingport Decommissioning Experience.

This symposium is sponsored by the U.S. Department of Energy (DOE) and organized in cooperation with the International Atomic Energy Agency (IAEA) and the Nuclear Energy Agency of the Organization for Economic Cooperation and Development (NEA), and will be held at the D.L. Lawrence Convention Center in Pittsburgh, PA. The program will include technical presentations, Shippingport site tours, a trade show and other opportunities for the exchange of

technology and experience in the field of nuclear facility decommissioning.

Summaries (500-900 words) are due January 30, 1987 and full papers are due June 12, 1987 and are to be submitted to: K. M. Edwards, Program Assistant, 1987 International Decommissioning Symposium, P.O. Box 1370, Richland, WA 99352.

REPORTS OF NOTE (LLRW)

Plans and Schedules for Implementation of U.S. Nuclear Regulatory Commission Responsibilities Under the Low-Level Radioactive Waste Policy Amendments Acto of 1985 (P.L. 99-240) (NUREG-1213), Division of Waste Management, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555; The purpose of this document is to make available to the states and other interested parties, the plans and schedules for the U.S. Nuclear Regulatory Commission's (NRC's) implementation of its responsibilities under Public Law 99-240, the Low-Level Radioactive Waste Policy Amendments Act of 1985 (LLRWPAA). This document identifies the provisions of the LLRWPAA which affect the programs of the NRC, identifies what the NRC must do to fulfill each of its requirements under the LLRWPAA, and establishes schedules for carrying out these requirements. The plans and schedules are current as of June 1986.

Los Alamos Low-Level Waste Performance Assessment Status (LA-10768-MS); Los Alamos National Laboratory, Los Alamos, New Mexico 87545; This report reviews the documented Los Alamos studies done to assess the containment of buried hazardous wastes. Five sections logically present the environmental studies, operational source terms, transport pathways, environmental dosimetry, and computer model development and use. This review gives a general picture of the Los Alamos solid waste disposal and liquid effluent sites and is intended for technical readers with waste management and environmental science backgrounds but without a detailed familiarization with Los Alamos.

Guide for Obtaining Regulatory Approval to Dispose of Very Low Level Wastes by Alternative Means (AIF/NESP-037); National Environmental Studies Project, Atomic Industrial Forum, Inc., 7101 Wisconsin Avenue, Bethesda, MD 20814-4891. The report is a follow on to AIF/NESP-035, published in May of this year, which provided the industry and regulators with a data base for use in developing generic rulemakings to exclude specific very low level waste streams from the stringent provisions of 10 CFR 61. While a generic rulemaking exempting an entire waste stream from those requirements would be the most efficient way to proceed, federal regulations do provide other options. The purpose of this new study is to explore those alternatives, specifically the process by which an individual licensee may obtain approval to dispose of a particular very low level waste under the provisions of 10 CFR 20.302(a). The study reviews the applications for individual exemptions submitted to the NRC as of the end of 1985 and identifies the information needed to complete the process successfully. A completed sample application is included which recommends a format for presenting information to the NRC staff. Following this example should facilitate the process for both the applicant and the regulator. The report is available to non-NESP sponsors and the public through the AIF Publication office at the above address at a cost of $75.00. For more information contact Scott Leiper or Melinda Renner at (301) 654-9260.

(GAO from pg.1)

Less Than Adequate Participation

According to the draft report the state and tribal representatives contacted by GAO place the blame for their poor relationship primarily on DOE headquarters staff. Both groups cited the lack of time to respond to technical documents, their exclusion from key meetings on critical aspects of the site selection process, and short notice of crucial meetings as key factors contributing toward the lack of being able to establish any substantive institutional relationship.

The report cites several specific instances where states or tribes were unable to obtain timely, if any, response to several requests for information forwarded to DOE. This despite the fact that DOE held the states and tribes to firm schedules for the review and comment on extensive technical documents.

Major Environmental Concerns

The states' and tribes' lack of confidence in the DOE HLW program is not only attributed to their inadequate involvement in DOE decisionmaking. GAO cites several major environmental and socioeconomic concerns identified by the state and tribal officials. According to the draft "...the environmental risks associated with a repository, as states and tribes perceive them, far outweigh any economic benefits now tied to a future waste facility."

Intergovernmental Agreements Non-existent

GAO attributes DOE's inability to negotiate intergovernmental consultation and cooperation agreements, as called for under the Nuclear Waste Policy Act, to major unanswered policy issues. The principle one being the extent of the federal government's liability for accidents related to nuclear waste activities. In order to obtain working intergovernmental agreements, GAO recommends attempting to reach agreements on an issue-by-issue or activity-by-activity basis while the major policy issues are being resolved.

Advisory Committees Recommended

Having concluded that the current status of the institutional relationship between DOE and the states and Tribes could severely hamper the repository program and significantly impact overall costs, the GAO recommends that DOE:

-- provide states and tribes access, on at least a trial basis, to all OCRWM coordinating group meetings;

-- employ advisory groups during site characterization and other program activities;

-- adopt a strategy of negotiating incremental agreements with the states and tribes in an effort to build a foundation for resolving controversial issues; and,

-- better define consultation and cooperation in the Mission Plan.**

STUDY SAYS USING SEATTLE FOR PORT OF ENTRY OF SPENT FUEL CARRIES HIGH RISK

An independent study has outlined severe impacts that could result from an accident if Seattle were to be used as a port of entry for foreign spent fuel being returned to this country. The study, conducted by Dr. W. Jackson Davis of the University of California, Santa Cruz, concluded that if a fire occurred in the spent fuel some 1,500 cancer deaths could occur and that most of the Seattle area would be contaminated.

The study was initiated about two years ago. About six months ago it focused on the effects of a fire in Seattle after DOE announced a plan to move spent fuel from Taiwan through Seattle on its way to South Carolina. Dr. Davis said that the transport casks lack design requirements to withstand submersions of more than 20 meters or fires lasting longer than 30 minutes. He said that the casks are "not suitable for maritime transportation of nuclear materials." If there was an accident, the radioactivity could inundate the city and clean-up and decontamination could cost up to $150 billion. The Northwest Inland Waters Coalition has sued the Department of Energy on its proposed transit plan asking for the preparation of an EIS on the program. **

Wrap Up (HLW)

IN THE CONGRESS

HLW APPROPRIATIONS As expected, the Energy and Water Appropriations, including funds for the HLW program, has been folded into a massive Continuing Resolution (CR). Congress, however, failed to act on this overall FY87 CR by October 1, adopting instead an emergency measure to keep the government functioning for eight more days. This extends Congress' stay in the Capital for a week, delaying their campaign break. It is hoped that final passage of the CR will be completed by October 8. Then there is the possibility of a Presidential Veto.

Conversations with various Congressional staffers have so far confirmed what the EXCHANGE had previously reported that DOE should receive about $500 million in appropriations for the HLW program. This amount added to the unexpended FY86 funds estimated to be between $125 and $225 million, will give DOE between $625 and $725 million for FY87. DOE officials contacted by the EXCHANGE say this level of funding would mean a cut of $275-$375 million in their planned FY87 activities. According to DOE, the initial submitted budget request of $769 took into account the availability of about $125 million or so of unexpended FY86 funds.

PRICE ANDERSON REAUTHORIZATION As this edition goes to print final agreement on Price-Anderson reauthorization has not been reached.

IN THE OCRWM

DEFENSE HLW FEE Despite the EXCHANGE's prediction that the Office of Civilian Radioactive Waste Management's recommendation on Defense's contribution to the Nuclear Waste Trust Fund would be published the **Federal Register** by the end of September, final action has still not been completed as this edition went to print. Now we have been told the recommendation has cleared all the crucial levels of concurrence and should be signed by the Secretary this week, October 5th or so, and reach the **Federal Register** by October 15.

SPENT FUEL CANNISTERS The OCRWM report on the use of copper for the spent fuel disposal cannisters is to be released within the next couple of weeks. From what the EXCHANGE has learned, it will recommend continued research into the possible use of copper cannisters in "geological media other than salt."

ABOVE CLASS C WASTE Though the low level waste program within the jurisdiction of the Assistant Secretary for Nuclear Energy is responsible for the study of Above Class C radioactive waste and possible alternatives to handle the material, OCRWM management is apparently providing a good deal of direction to the effort. OCRWM's interest in the study is most assuredly warranted. Since the Low Level Waste Policy Amendments Act explicitly provides that the federal government is responsible for the disposal of all radioactive waste above Class C waste, one of the options that always comes up in discussions is the inclusion of this waste in the HLW repository. Under current law the only other available option would be the development of another special disposal facility (and another federal site selection process!).

On Friday, October 3, a draft of the Above Class C study completed by outside contrctor Envirosphere was circulated by the DOE LLRW program staff to various DOE offices participating in the Department's Above Class C Waste Policy Committee.

MRS PROPOSAL OCRWM staff and Tennessee officials have no clear indication on the timing for release of the Court's decision on the state's challenge to the DOE MRS proposal to construct the spent fuel storage facility in Knoxville, Tennessee. DOE is prohibited from submitting the proposal to Congress until the court decision is rendered.

MISSION PLAN AMENDMENT OCRWM is not expected to submit an Amended Mission Plan to Congress providing the details on the Department's decision to indefinitely delay the second repository program until November, after the elections.

Plans also seem to have changed with regard to obtaining comments from the states and tribes prior to forwarding the document to Congress. Apparently the amended plan will be released to all when it is submitted to Congress.

PERSONNEL CHANGES As reported in the previous issue of the EXCHANGE, OCRWM Director Ben Rusche has selected a former Westinghouse manager, **Mr. Stephen Kale**, to replace Bill Purcell as Associate Director of the Office of Geologic Repositories. Mr. Kale's most recent position was with Energy Impact Associates where he was responsible for the development of programs for the New York Power Authority. Mr. Kale began his career as a Reactor Staff Engineer with the E. I. du Pont de Nemours & Company at the Savannah River Laboratory in 1961, following three years of service in the U.S. Navy. In 1964 he joined the Westinghouse Electric Corporation in Pittsburgh, Pa., as a Lead Engineer in the Atomic Power Divisions. Mr. Kale Has held several project positions with Westinghouse with responsibility for the coordination of Westinghouse engineering and licensing activities, as well as the delivery and installation of nuclear equipment in the U.S. and four foreign countries. He also served for many years on the Westinghouse Safety Review Committee. Mr. Kale assumed his new duties on September 22.

IN THE NRC

The Nuclear Regulatory Commission's Waste Management staff's proposed **redefinition of high-level nuclear waste** is still being reviewed by the various NRC offices. The proposal is scheduled to reach the Executive Director's office on October 17, and be reviewed by the Commissioners at the end of the month.

CALL FOR PAPERS

The **28th U.S. Symposium on Rock Mechanics** to be held June 29-July 1, 1987 at the University of Arizona, Tucson, Arizona is requesting papers in several areas of rock mechanics including (1) Use of Underground Space-Particularly for nuclear Waste Isolation and (2) Case Histories of Investigation and Construction. Those wishing to present papers are invited to submit three copies of abstracts up to 1,000 words with revelant figures. Abstracts should include

sufficient detail for review and pre-selection by the organizing committee and nominated refereees.

Abstracts are due **October 20, 1986** and should be sent to: Ian Farmer, Symposium Chairman, Office of Special Professional Education (602-621-4994) Box 9, Harvill Building, University of Arizona, Tucson, Arizona 85721. Concurrent session of the 2nd U.S./Mexico Bi-National Symposium will be sponsored jointly by the U.S. National Committee for Rock Mechanics and the Sociedad Mexicana de Mecanica de Rocas. Information on exhibition, industrial support and organization may be obtained from the same Office of Special Professional Education (602-621-5104/3054).

UPDATE

STATUS OF UPCOMING REPORTS AND MILESTONES OF THE OCRWM
(9/31/86)

Proposal for Defense Contribution to the HLW Fund -- 10/14/86

Submit Amended Mission Plan to Congress -- 11/86

Issue OCRWM Safety Plan -- 10/86.

MRS Proposal -- Submission to Congress prohibited by Court Order. Oral arguments in Sixth Circuit Court of Appeals heard on July 24. No date set for decision.

Transportation Institutional Plan -- Issued 8/11/86.

Announce Licensing Support System design and implementation procurement in Commerce Business Daily -- 8/11/86.

Begin licensing support system document collection -- 10/86.

Issue Program-Level Financial Assistance Guidelines -- (Draft issued mid-July)

Issue annual update of Spent Fuel Storage Requirements Report -- 9/86.(?)

Complete annual OCRWM Quality Assurance assessment -- 9/86.(?)

SPECTRUM '86 -- ANS TOPICAL MEETING ON WASTE MANAGEMENT AND DECOMMISSIONING

The five day conference was highlighted by an opening Sunday Plenary featuring Congressman Stan Lundine and speakers from several foreign countries who provided excellent overviews of their countries respective decommissioning and nuclear waste managment programs.

The presentations given throughout the conference by the foreign participants provided fairly substantial information about their current programs. It was an excellent opportunity for international and domestic person-to-person exchange of views.

Several high-ranking officials for foreign countries were in attendance for the entire session. In contrast, DOE's Ben Rsuche addressed the group on Sunday, Asistant Secretary Rossin at the midweek evening banquet and in between there didn't seem to be another high ranking manager from the high or low level waste program. Westinghouse senior managers were well represented, as were other private sector consulting and engineering firms.

A session including several papers on commercial LLRW management in the United States attracted a large audience. Many in attendance and some of the speakers seem to have a very dim view of the states succeeding in developing new disposal capacity under the new system of regional compacts. One speaker presented the view that it was not unlikely that by 1993 commercial waste disposal will either be taken over by the federal government or there will be another U.S. disposal capacity crisis.

Waste disposal operators, states and compacts committed to developing disposal capacity, and waste processors should be very interested in a paper on Nuclear Facility Decommissioning presented at the poster session by Warren Witzig of Penn State. After presenting an analysis of the results of a survey of utilities regarding the status of their decommissionin plans, Dr. Witzig's paper concludes that: **"Decommissioning of nuclear power facilities will be a very small part of the nuclear industry's activity over the next five years and virtually non-existent during the following ten year period."** The EXCHANGE will feature an Information Brief on this study in the upcoming edition. For those who can't wait, contact Dr. Witzig at 1330 Park Hills Avenue East, State College, PA 16803. **

THE EIGHTH ANNUAL DOE LLW MANAGEMENT FORUM -- AN EXCHANGE SYNOPSIS: PART I

OVERVIEW

This year's DOE LLW Management Forum was sparked by revelations by all the relevant federal agencies regarding their upcoming actions, and frank interactions between utility representatives, and state and federal officials. Hopefully the full proceedings will be published in the very near future because several of the presentations are worthy of reading by a broad spectrum of the radioactive waste community.

In the interim, in addition to providing a two part synopsis of the panel session presentations of particular significance (in this and the next issue), the EXCHANGE will publish several of the key presentations in the next three issues.

Ed Jennrich and his group deserves a hearty congratulations for their success in having all the elements of the LLRW management community represented at this year's session, in particular "working level" senior staff from the federal agencies and national laboratories. Concurrent sessions still need to be better coordinated, some topics still need to be recognized as not relevant, the opening plenary could be done away with, but all-in-all most attendees came away with a sense of time well spent.

The EXCHANGE two part synopses is not organized according to the schedule of panel sessions

convened during the Forum, but according to key topics of interest to the radwaste community. What follows is Part I of a two part synposes. It highlights EPA's presentation on the economic evaluation of waste disposal technologies and the ensuing issues raised by attendees. The next edition will highlight BRC and mixed waste, and the economics of VR and waste disposal from perspectives outside EPA.

EPA LLRW STANDARD DEVELOPMENT

The Environmental Protection Agency's Office of Radiation Programs staff deserves some credit for getting the Forum off on the right foot by being quite forthcoming on the studies and analyses completed thus far in support of the development of the low-level radioactive waste standard. The presentations on their Risk Assessment Study (Meyer, Hony, et.al.) and Economic Evaluations of Alternative LLW Disposal Methods (Foutes, et.al.) provoked the kind of interactive discussion that should be the objective of the Forum.

The Economic Evaluation presentation of cost comparisons among various alternative disposal technologies sparked a good debate on the assumptions made in conducting the analyses, the relationship of their estimates with real world costs, and the "merit" of concrete cannisters.

Before highlighting the conclusions of the Economic Evaluation it should be duly noted by the reader (as EPA cautioned at the session) that their cost estimates for the various disposal technologies analyzed were not based on current market costs, except for transportation, and sould be used to compare costs among the alternatives.

The analysis investigated ten alternatives: regulated sanitary landfill; shallow-land disposal; improved shallow-land disposal (ISLB); 10 CFR 61 type disposal; intermediate depth disposal; hydrofracture; deep well injection; deep geological disposal; concrete cannister (ala Westinghouse SURPAK) disposal; and, the earth mounded concrete bunker (EMCB). Most of the data presented focused on the first nine.

According to the EPA data presented at the session:

- The total cost for near surface burial of LLRW and NARM waste ranged from $1.03 billion for a shallow land fill, to $5.46 billion for EMCB, with 10 CFR 61 burial estimated to cost $1.63 billion. (The total cost estimates represent the cost of disposing the waste volume of commercial LLRW and NARM generated over a twenty year period, with the costs discounted at a ten percent real rate and expressed in 1985 dollars.

- 10 CFR 61 burial meets a 25 millirem CPG standard and also appears to be the least cost option.

[Editor's Note: EPA expects to issue the LLRW standard in the form of a CPG dose limit which is defined "as the maximum annual whole body exposure in millirems per year to an individual within the Critical Population Group (CPG).]

In arriving at the least cost option conclusion, EPA performed a cost-benefit analyses of the various disposal options and found that CPG dose estimated ranged from 62 millirems/year for landfill burial to about one millirem/year for concrete cannister burial. **The CPG dose estimate for 10 CFR 61 disposal was found to be 9 millirem per year.**

The estimates and cost benefit analyses presented raised several questions:

How do these costs relate to current costs?

Why did the concrete cannister method result in an appreciable decrease in health

effects and CPG?

What credit was given to the concrete with regard to impeding the radionuclide pathway?

And the resounding comment --

Who cares about cost benefit when the public is demanding technology beyond 10 CFR 61!

In the ensuing discussion EPA emphasized that the cost estimates were of value so as to have a comparison of the alternative disposal options. It was also explained that the concrete cannister was basically given credit only for its mechanical strength (holding up the trench cap, etc.).

One of the more telling comments was made by a state official who questioned the value of any of this information at this point -- "Three years ago, yes. But now the public could care less about cost-benefit. They will not be satisfied with current technology."

Following the EPA economic evaluation EPRI's Bob Shaw presented a paper on their efforts to evaluate disposal technologies. This study will be highlighted in the next edition. **

Calendar

October

8(?) CONGRESS ADJOURNS FOR ELECTIONS.

5-8 Workshop: Radiation Issues; Boston, MA; Spons: Atomic Industrial Forum, Inc.; Contact: AIF (301) 654-9260.

13-17 Seminar: Management Options for Low and Intermediate Level Wastes in Latin America; Rio de Janeiro, Brazil; Contact: International Atomic Energy Agency.

14-15 Meeting: Midwest Commission; Savery Hotel, 4th & Locust, Des Moines, Iowa; Contact: (612) 293-0126.

19-22 Meeting: The High Level Waste Business--Transportation, Storage and Disposal; Charleston, SC; Spons: Atomic Industrial Forum, Inc.; Contact: Patrice Boulanger (301) 654-9260.

20 Symposium: Low Level Rad Waste; NY and NE Health Physics Chapters; Hotel Thayer, West Point, NY; Contact: Carl Gogolak (212) 620-3635.

21-23 Workshop: Radioactive Waste Packaging, Transportation and Disposal; Sheraton Charleston Hotel, Charleston, SC; Spons: Chem-Nuclear Systems, Inc.; Registration Fee: $650 prior to Sept. 20, $750 after Sept. 20; Contact: Chris Achelpohl (803) 256-0450, ext. 321.

20-22 Seminar: High-Level Nuclear Waste Management; Radisson Mark Plaza, Alexandria, VA; Spons: Westinghouse Electric Corporation, Waste Technology Services Division; Contact: Dr. Yolanda Willis, (412) 722-5728.

22-23 OCRWM Meeting: Quality Assurance Coordinating Group; Columbus, OH; Contact: Carl Newton (202) 252-9300.

24 Meeting: Northwest Interstate Compact Committee; Pacific Beach Hotel, 2490 Kalakaua Avenue, Honolulu, Hawaii; Contact: Elaine Carlin (206) 459-6244.

28-29 Meeting: LLRW Forum (The Organization of LLRW Managment Site and Compact Officials); Austin, TX.

29-30 Conference: Illinois Agreement State Conference for Radioactive Material Licenses; Contact: Illinois Department of Nuclear Safety (IDNS) (217) 546-8100.

30 Seminar: Transporting Hazardous Materials and Waste Safely, Chicago Marriott O'Hare Hotel, Chicago, Illinois. Spons: Hazardous Materials Advisory Council (HMAC); Registration: $135 HMAC Members; $175 non-members. Contact: HMAC, 1012 14th St., NW, Washington, D.C., 20005; (202) 783-7460.

November

12-13 Conference: 4th Annual Fall Conference of the CA Radioactive Materials Mgmt Forum (CALRAD); Los Angeles Airport Marriott; Contact: Jean Parker (415) 647-3353.

16-21 Meeting: American Nuclear Society Winter Meeting, Sheraton Hotel, Washington, D.C.; Spons: ANS; Technical Program Chairman, David L. Black, Westinghouse, 1801 K Street, N.W. - 9th Floor, Washington, D.C. 20006 (202) 835-2300; Contact: ANS Meetings Dept. (312) 352-6611.

16-19 Atomic Industrial Forum Annual Conference for 1986; Washington, D.C.; Contact: AIF (301) 654-9260.

19-20 Fourth Annual Midwest Workshop: "Low-Level Radioactive Waste Management: Implementing a Second Generation System"; Mariott Inn East, Columbus, Ohio; Spons: ERM-Midwest, Inc.; The Ohio Rad Materials Users Group (Inc.); Ohio Dept. of Health; and the OSU Nuclear Engineering Program; Registration Fee: $345 advance, $390 at the door; Contact: Brenda Higgins, 2000 West Henderson Road, Columbus, OH 43220, (614) 451-8406.

December

2-3 Seminar: Packaging and Transportation of Radioactive Waste Material; Raleigh, NC; Spons: US Ecology; Regis: $425; Contact: Peggy Thompson, (800) 626-5334.

3-5 Conference: Hazardous Materials Management Conference and Exhibition/West; Long Beach Convention Center, Long Beach, California; Contact: Tower Conference Management Co., 331 W. Wesley St., Wheaton, IL 60187, (312) 668-8100; Telex: 350427.

10-11 Conference: 3rd Annual Illinois LLRW Generators Conference: "Integrating the Waste Management System"; Spons. Illinois Department of Nuclear Safety (IDNS); Contact: IDNS (217) 546-8100.

1987

January

21-22 OCRWM Meeting: Quality Assurance Coordinating Group; Albuquerque, N.M.; Contact: Carl Newton (202) 252-9300.

February

9-11 Conference: 2nd Annual Topical Conference on Nuclear Waste Management Quality Assurance; Las Vegas, NV; Contact: Judy Kail (619) 455-2627.

March

1-5 Conference: Waste Management '87; Spons. University of Arizona, ANS, EPEI, ASME, numerous commercial firms; Tucson, Arizona; Registration Contact: (602) 621-3054.

April

22-25 Conference: Sixth Annual Incineration Conference on Incineration of Mixed and LLRW; Pheasant Run Resort, St. Charles, Illinois; Spons. University of California in cooperation with DOE, ASME, Health Physics Society; Contact: Charlotte (714) 856-7066.

(Changes from previous calendar in bold print)

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