

Waste Control Specialists— *Where They Are and Where They're Going*

Radwaste Solutions (RS): *Your compact waste facility has been open for about a year now. How are things going? Are you seeing the waste volumes you had hoped for?*

Waste Control Specialists (WCS): The operations at our commercial, compact waste facility are going very well. Our disposal operations for this facility started in April of 2012, the first out-of-compact import agreements were established at the end of June, and we began full-scale operations in July. This facility is operating even more smoothly and efficiently than we had hoped. Typical cask processing is less than a half day from arrival of the shipment to releasing the

A Q&A with Waste Control Specialists' Daniel D. Burns, senior vice president for Planning and Business Development.

truck. To date we have had no demurrage charges.

WCS has an outstanding safety record. We are particularly proud of our recent handling of some irradiated hardware with radiation levels in the 10 000–15 000 rem-per-hour range. With our state-of-the-art equipment and modernized processes, we have been able to perform these operations safely at half the normal industry standard time, allowing us to keep

our total dose in the tens of millirems per evolution. Certainly we have faced some minor issues in our learning curve, but our operations and safety groups responded, evaluated the situations, and implemented controlled responses.



An aerial view of the WCS LLW disposal facility in Andrews County, Texas.



WCS personnel removing TNRAM lid bolts. TNRAM is a type B transportation cask for irradiated hardware.

Imported volumes since we began operations are as expected. We have disposed of all the processor waste that was stored onsite and have seen consistent shipments from some of the larger utilities. We have consciously emphasized service to Texas and smaller generators in concert with the Texas Low-Level-Waste Compact Commission. We believe that there is need for disposal in this arena, but because the generators have not shipped for several years, there will be a ramp-up period as they reinstitute their disposal programs. Specifically, Vermont Yankee has made several shipments, and both of the Texas utilities have campaigns planned for before the end of the first half of 2013.

RS: *You accept all classes of low-level waste, including the higher activity B and C wastes, making your site the only option for many states for disposing of this type of waste. [The EnergySolutions Clive site, which is open to waste generators from all states, accepts only Class A waste.] Have you been receiving imported [i.e., out-of-compact] waste, as you expected?*

WCS: For 36 states, WCS is the only disposal facility available to them for the disposal of their Class B and C low-level waste. As expected, the majority of our waste has been Class B and C waste received from out-of-compact generators. We believe we are the best option for the disposition of Class B and C low-level waste, since all other options involve continued storage, retention of liability by the generator, and higher future disposal costs. Even processing prior to disposal includes additional operational risks and more radiation exposure, as well as a less certain transfer of liability.

RS: *Are Texas and Vermont utilities using your facility to dispose of Class A*

waste? Are they required to under compact regulations?

WCS: We are receiving Class A waste from in-compact generators and expect that to continue. Most of the Class A waste is from Vermont Yankee and small generators. It is important to understand that there are generally two kinds of Class A waste: high-dose-rate waste [e.g., greater than 100 mrem/hour] and what is typically described as dry active waste or bulk operational and maintenance waste. We have received primarily the high-dose-rate Class A waste. We are also expecting to receive this type of Class A waste from out-of-compact generators. We believe our success with winning these procurements for the disposal of this type of waste is our competitive pricing.

Under the Low-Level Waste Policy Act, the in-compact generators are required to dispose of all waste, including both types of Class A waste, at the compact facility. The Texas Compact Commission has the authority to allow exportation of waste to other disposal facilities and has been authorizing the export of Class A bulk dry active waste. We expect that to continue in the near term and have supported the export of dry active waste. The industry has developed economic services for the Class A bulk waste, which at this time makes exporting this waste for disposal a better solution for the in-compact generators. However, WCS has committed to the state of Texas, the Texas Compact Commission, and our generators to enhance our services to offer similarly economical solutions for dry active waste. We are in the process of developing these services and expect that in the near future, the WCS compact facility will be able to meet all the needs of our in-compact generators.

RS: *Have the constraints on curie disposal capacity laid out in your license affected your operations? Do you expect these constraints to have any effect in the future?*

WCS: The radioactivity controls as currently stated in our



Up-righting TNRAM containing irradiated hardware.



Modified stacker (60-ton capacity) with modular concrete canister.

license have not generally affected our services, as our modernized business and licensing solutions have allowed us to manage the constraints on total activity and for some specific isotopes. Our facility has ideal site characteristics and is the most protective low-level waste disposal facility in the country. We believe our facility has raised a new bar for low-level waste disposal, and we are confident that our facility has been designed and engineered to allow us to more than meet the needs of Texas, Vermont, and the out-of-compact generators.

Our regulator, the Texas Commission on Environmental Quality [TCEQ] recently completed a capacity evaluation, which showed that our facility can meet the compact needs and continue to be a resource for out-of-compact generators.

RS: *Operations at the compact facility have been constrained by the lack of transport casks. When do you expect delivery on your own casks, and what impact do you think that will have on your operations?*

WCS: At this time there are a total of five Type B casks available in the United States, and we do not believe this fleet is sufficient to meet the needs of our generators. We have contracted with Robatel to design, license, and build three Type B casks and expect delivery by the end of the year. In addition to the casks we have under contract, it is our understanding that EnergySolutions is constructing some additional Type B casks. It is unclear to us what will

happen with the current fleet, as we understand that modifications to the existing casks may be required prior to August 2013.

Certainly our ability to service our customers will be improved with the availability of our own casks because we will then be able to guarantee them transportation on scheduled dates. While this cask shortage has been challenging, the situation has pushed generators to utilize Type B casks only when necessary and to utilize Type A casks when allowable. Type A casks are more readily available and are offered by more transporters, which increases shipping options for the customers. By the end of this calendar year, we expect the current cask shortage to be a thing of the past. In addition, our customers will be able to make larger waste shipments, as our new casks have a 30 percent larger volume capacity and can handle higher dose rates, allowing our customers to reduce their number of overall shipments and keep their transportation costs down.

RS: *What is the status of your federal waste facility? When do you expect to begin disposing of federal waste?*

WCS: The federal facility is fully licensed, constructed, and operational. We have yet to take our first waste for disposal in the federal facility, but we expect that to occur in the near future. One of the significant differences between WCS and other disposal sites is the complete separation of the compact and federal disposal facilities, with

the state of Texas taking ownership of the compact waste and the U.S. Department of Energy taking ownership of the federal waste. This is significant and very important from a liability perspective to our customers.

While both facilities are authorized in our disposal license, the conditions in the license require the licensee and operator, WCS, to conduct separate operations and fully fund the closure of both facilities prior to operations commencing. In both facilities WCS provides the most up-to-date, high-tech, environmentally sound, environmentally friendly, and safe waste disposal available today. We believe our state-of-the-art facility to be the new paradigm in waste disposal.

RS: *Given the recent cutbacks in the DOE's cleanup budget and almost certain additional federal budget cuts, what is your long-term outlook for the federal disposal facility?*

WCS: We are optimistic about our prospects with DOE utilization of the federal facility. The DOE has and will continue to have need of waste treatment and disposal. Our facility is unique, and we offer the most environmentally safe, up-to-date, and comprehensive services in the industry at one location.

As with the compact facility, we are a new option. For years, the DOE has expressed the need for more options and competition for treatment and disposal services, and our federal facility answers that need. We don't believe we are the answer for all of the DOE's waste, but we are the best option for some of it. We have identified where we are unique and can offer the DOE some valuable options. We are concentrating our efforts there.

Our immediate task is to begin federal disposal and earn the chance to provide DOE treatment and disposal service and gain their trust. Going forward, we want to assist DOE in its management of the planning for waste generation and disposition. We want to partner with DOE to reduce the overall life-cycle costs of their waste disposal by offering our expertise and capabilities. We carefully selected our facility operational and customer support staff to include some of the waste disposal industry's best personnel. Our people have robust experience with all aspects of

waste disposal, including generation, treatment, processing, characterization, packaging, and shipping, as well as project management. We believe a partnership with DOE to address certain waste matters will save DOE money in the long run, and that is certainly needed in today's budgetary climate.

RS: *What is your relationship with Andrews County? With the state of Texas? Do you have support from these government entities for your work?*

WCS: We have very good relationships with our host county and the state. The vision for the Andrews facility was conceived and started by the Andrews County leadership. We have great respect for our host community and work diligently to maintain good communications. Likewise, the state has been a great partner in working through matters associated with opening the only new compact site in the last 30 years.

The opening of our compact facility has been an interesting journey,

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LLW Compact waste facility: "walking" irradiated hardware shipment on Goldhofer.

and it is important to remember that this is the only facility to open under the federal compact legislation that was passed almost 30 years ago. As with anything new, there is always uncertainty, especially with something as sensitive as the disposal of low-level radioactive waste, but the response by the state of Texas has been nothing short of remarkable. The successful opening of our facility is the result of the joint efforts of the Texas State legislature, the TCEQ, the Texas Compact Commission, the Texas Department of State Health Services, and many other state agencies along with Andrews County. This has been a dynamic process with all parties involved acting in an open, cooperative manner and being responsive to changes and lessons learned.

RS: *Several nuclear power plants are scheduled to shut down this year: Kewaunee, Crystal River, possibly Oyster Creek. What opportunities are you seeing in these plant closures?*

WCS: It is simply too early to know the effect of the Kewaunee and Crystal River closures. Oyster Creek is served by Barnwell. We will follow the development of plans and be prepared to support the waste needs.

RS: *What is your vision for the company in, say, five years from now? Ten years?*

WCS: WCS has always had the vision to be a one-stop shop. In addition to low-level and mixed low-level waste disposal, we have built comprehensive capabilities, licenses, facilities, and staff to provide disposal of exempt low-level waste, hazardous waste, and by-product (11e2) waste. To complement our disposal capability, we also offer industrial-scale hazardous and mixed waste treatment capabilities.

We provide services for the processing and conditioning of radioactive material and waste. Since all of our ad-

ditional capabilities are physically located near our disposal facility, we can offer our customers greater cost savings.

As far as the growth of our business, we are continually evaluating opportunities, looking first at building on and complementing our disposal capabilities. We continue to add to our existing capabilities and services. In fact, we recently added waste conditioning services to the utilities in the form of dewatering and void elimination to replace more expensive generator site or third-party processing. In the transport sector, we are also purchasing three new type B casks to place into service to better serve the industry.

WCS expects to be the premier disposal site in the nation in five years, and we look forward to partnering with generators to ensure they have the most cost-effective, technically sound solutions to meet their waste management needs. We hope others partner with us to provide support services, but WCS is willing to develop those services as well if there is a market-driven need.

RS: *Your property lies on the Texas-New Mexico border, and indeed your property extends into New Mexico. Lea and Eddy Counties in New Mexico are actively pursuing hosting a spent nuclear fuel storage facility or some other nuclear storage or disposal facility. Have you given any thought to freeing up some of your land in New Mexico for that purpose or to joining in on some of these ventures?*

WCS: WCS sees spent nuclear fuel storage as a viable opportunity, and we believe our facility has some unique attributes that would be needed to safely and securely store this material, but we have not developed any plans to date. We believe any initiative such as this would have to be community led and driven. If our host community decides to pursue this opportunity, we will work together with them as we do in the operation of our low-level waste facility. ■