ABSTRACT

WCS received a final license order on January 14, 2009 for two new low-level radioactive waste (LLW) landfills. The process started on August 4, 2004, when Waste Control Specialists LLC (WCS) submitted a license application to the Texas Commission on Environmental Quality (TCEQ) seeking authorization to dispose of LLW in two enhanced near-surface landfills at its 5.4 square kilometers (1,338-acre) site in Andrews County, Texas. On August 11, 2008, TCEQ issued a final draft license for developing and operating the two proposed LLW-disposal landfills at the site. One landfill, the Compact Waste Facility (CWF), is allowed to contain 65,420 cubic meters (m$^3$) (2,310,000 cubic feet {ft$^3$}) of Class A, B, and C LLW generated in the member states of the Texas Compact (Texas and Vermont). The other landfill, the Federal Waste Facility (FWF), is allowed to contain 736,000 m$^3$ (26,000,000 ft$^3$) of Class A, B, and C LLW generated by the U.S. Government, including LLW mixed with regulated hazardous and/or toxic constituents (MLLW). (The applicable Texas law allows the FDF to contain up to 4,587,600 m$^3$ (6,000,000 cubic yards) of LLW.)

The public comment period ended September 16, 2008 and the TCEQ Executive Director filed his response to comments received on December 2, 2008. On December 12, 2008 the TCEQ Executive Director recommended the Commission deny the requests for a contested case hearing. The Commission denied the requests for a hearing and ordered a final license on January 14, 2009. This will enable WCS to commence LLW-disposal operations by June 2010. When opened, the Texas Compact will be the first facility of its kind under the Low-Level Radioactive Waste Policy Act of 1980 (LLWPA), as amended in 1985. It will also provide a partial solution to the nation’s current lack of disposal options for Class B and C LLW.

INTRODUCTION AND BACKGROUND

Waste Control Specialists LLC (WCS) has been responsibly engaged in (1) the safe treatment, storage, and disposal of hazardous and toxic wastes regulated under the Resource Conservations and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and the Toxic Substances Control Act (TSCA), and (2) the safe treatment and storage of radioactive wastes, including greater than Class C (GTCC) LLW, and MLLW for more than a decade at its 5.4-square-kilometer (km$^2$) (1,338-acre) site in Andrews County, Texas (Fig 1). The WCS site is located north of Texas State Highway 176 along the Texas border with New Mexico and is surrounded by a 54.7 km$^2$ (13,527-acre) land parcel also owned by WCS. Waste can be shipped to the site by truck and rail in bulk or packaged/containerized.
Fig. 1. View from southwest of the western and central portions of the WCS Treatment, Storage and Disposal Facility (TSDF) site (the proposed new landfills will be located adjacent to and north of the current landfill)

Fig. 2. Plan map of the 5.4 km$^2$ (1,338-acre) WCS site showing the proposed locations of the CWF and the FWF
On August 4, 2004, WCS submitted a license application to the TCEQ seeking authorization to construct and operate two enhanced near-surface landfills at the WCS site for safe disposal of Class A, B, and C LLW.\[1\] One of the proposed landfills, referred to as the Compact Waste Facility or CWF, will be dedicated to safe disposal of LLW generated within the member/party states of the Texas LLW Compact. The other, referred to as the Federal Waste Facility or FWF, will be dedicated to safe disposal of LLW generated by the federal government, i.e., the U.S. Department of Energy (DOE), the U.S. Nuclear Navy and nuclear weapons production. Figure 2 shows the location of the proposed landfills in relation to current facilities.

WCS has also submitted a permit application to TCEQ seeking authorization to safely dispose of MLLW in the FWF.\[2\] The final permit to allow disposal of hazardous waste in the FWF landfill was received on December 23, 2008.\[3\] The schedule for the LLW-disposal license application is shown in Fig. 3.

Fig. 3. WCS’ Vision of the Future.
LICENSING PROGRESS IN THE PAST YEAR

There was significant licensing progress in the past year on several fronts, including approval of a byproduct disposal license, issuance of a draft LLW license, conclusion of public meetings and public comment period for the LLW license, recommendations to the TCEQ Commission and approval of a final license by the Commission.

Byproduct License Approval

A discussion of the WCS byproduct disposal license decision is important because the rules and process are the same as those that were used for the LLW disposal license decision.

In June 2004, WCS submitted an application to the Texas Department of State Health Services (DSHS) seeking authorization to safely dispose of byproduct material in a dedicated enhanced near-surface landfill (Fig. 2).[4] The byproduct material disposal application was transferred from DSHS to TCEQ in July 2007.[5]

In May 2008, the TCEQ determined that no parties had standing for a contested case hearing and issued a final byproduct material disposal license [6]. Construction of the byproduct-material disposal facilities commenced in September 2008 and disposal should begin in June 2009. The first byproduct material to be disposed of will be from the DOE’s clean up of the Fernald site, which are currently in storage at the WCS site. Additional information about the byproduct license is available in Abstract #9307.

Low-Level License Draft and Public Comments

In August 2008, TCEQ issued a draft LLW disposal license and related draft environmental and safety analysis.[7,8] WCS published notices that the drafts were available on the WCS website (www.wcstexas.com) and the local public library to start the 30-day public comment period.

On September 8, 2008, a public meeting was held by TCEQ in Andrews County, Texas, the host county for the LLW disposal facility. Approximately 400 people attended. A former US Representative for Andrews County asked the crowd to stand if they were in favor of the disposal facility and all but three people stood in favor of the WCS site.

The public comment period ended September 16, 2008 with four parties requesting a contested case hearing. Three of the parties requesting a contested case hearing are the same parties who were denied a contested case hearing on the WCS byproduct disposal license. On December 12, 2008 the TCEQ Executive Director recommended the Commission deny the requests for a contested case hearing.

Low-Level License Decision

On January 14, 2009, the TCEQ Commissioners decided by a 2-0 vote (one Commissioner abstained) that none of the parties that requested a contested case hearing had standing and that WCS should be granted a final license.

The Commission did not believe that the requestors demonstrated concerns that were different from the general population. The technical review performed by TCEQ staff was designed to be protective of the general population and the four-year review was extremely thorough.

The Commissioners then decided that the license should not be conditional, but that it would not be signed until all mineral interests were acquired by WCS. At the time, WCS owned over 98% of the
mineral interests, but Texas law requires that all of the mineral interests be owned. The outstanding mineral interests are in the process of being condemned by the Texas Attorney General.

Construction of the LLW disposal facility will take approximately 12-months, so WCS is planning to commence LLW/MLLW disposal around June 2010. When opened, the WCS site will achieve a national milestone; it will be the first new Compact LLW-disposal site in the USA to open under the LLW Policy Act of 1980, as amended in 1985.[9,10] It will also provide a partial solution to the nation’s current lack of disposal options for Class B and C LLW.

**Outstanding Items**

In order to operate the disposal facilities, WCS must complete two outstanding items. These items are to acquire the remaining mineral interests and enter into an agreement with DOE for ownership of the FWF.

Texas law requires that the license holder for the LLW disposal facility must transfer the mineral rights for the facility to the State of Texas. This will ensure that exploration of minerals is not performed in or through the LLW landfill. WCS has acquired over 98% of the mineral interests and has requested the TCEQ to condemn the remaining interests. The TCEQ Commissioners requested the Texas Attorney General to move forward and condemn the mineral interests in accordance with Texas law at an agenda meeting on November 19, 2008.[11] Condemnation has not been completed as of January 14, 2009.

Texas law also requires that the DOE take ownership of the FWF. WCS requested an exemption so that DOE need only take ownership at the end of operations. TCEQ requested guidance from the Nuclear Regulatory Commission to determine if an exemption was acceptable and NRC stated that “Theoretically, private ownership of the facility up to the beginning of the institutional control period would appear to be able [to] meet the essential objectives of the government land ownership provisions of Part 61.”[12] The TCEQ Commissioners approved the exemption with their final order. WCS is in the process of negotiating an agreement with DOE.

**Compact Commission**

The Texas Compact Commission is responsible for the import and export of waste into and out of the Texas Compact.[13] The Governor of Texas named the members from Texas to the Texas Compact Commission on November 26, 2008. The Texas Compact Commission is now formed and has a full contingent of seven Commissioners from Vermont (1), Andrews County, Texas (1) and Texas at large (5).

The Texas Compact Commissioners are in the process of developing rules for both import and export of low-level radioactive waste for the Texas Compact.

**Community Support**

A common domestic and international challenge to the siting and development of nuclear-related facilities is public fear and opposition to anything containing the words nuclear or radioactive, commonly referred to as the “Not In My Backyard” (NIMBY) syndrome. WCS and its waste management operations in Andrews County benefit from more than 10 years of unwavering acceptance by and support from near-by residents and local public and political organizations and institutions. This support was instrumental in the successful permitting and licensing of the currently-operating hazardous (RCRA Subtitle C) waste landfill and the mixed waste treatment and storage facilities as well as the recently received byproduct material disposal license.
In order to maintain that support and ensure the local public was well informed of the project and the need for LLW disposal, WCS initiated an outreach program. This program included public meetings, newspaper articles, paid television and radio commercials and video segments that were shown to numerous small community groups. Most of the video segments are now on the WCS website at www.wcstexas.com. Additional information on WCS’ community outreach initiatives is available in Abstract # 9028.

CONCLUSION

WCS received an order for a final license for the disposal of Class A, B and C federal LLW and MLLW as well as Texas Compact LLW on January 14, 2009. Construction should take approximately one-year and allow operations to begin by June 2010.

When opened, the Texas Compact will be the first facility of its kind licensed under the Low-Level Radioactive Waste Policy Act of 1980 (LLWPA), as amended in 1985. It will also provide a partial solution to the nation’s current lack of disposal options for Class B and C LLW.

REFERENCES

5. The 80th Legislature of Texas, “Senate Bill 1604 - An Act relating to responsibilities of certain state agencies concerning radioactive substances; imposing fees and surcharges; providing administrative and civil penalties” (2007).