The following Report from the Texas Low Level Radioactive Waste Disposal Compact Commission concerning a Contingency Plan required under TEXAS HEALTH & SAFETY CODE § 403.006 is meant to be an informational document that interested parties can use as a guide for their own planning purposes. The Report is based on statues, regulations, rules the and circumstances that are in effect as of the date of the publication of the Report. Nothing in the Report is meant to be a legal opinion or a statement in contravention of, or intended to alter, any existing policy, rule or statute.



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# <u>REPORT OF THE TLLRWDCC ON</u> <u>CONTINGENCY PLANNING</u>

The Texas Low Level Radioactive Waste Disposal Compact Commission (the "Commission") at its March 12, 2020, meeting voted to create a Contingency Committee to prepare a report to the full Commission to meet certain statutory mandates set forth below. After the Committee delivered its reported, the Commission adopted this Report to communicate its current guidance on contingency planning.

### ACTIVITY

The Contingency Committee members are Chairman Brandon Hurley, Commissioner Jeff Mundy, chair of the committee, Commissioner Linda Morris, Commissioner Peter Bradford representing Vermont, and Mr. David Gordon from the Texas Attorney General's Office provided legal support to the Committee. The Contingency Committee met weekly on conference calls due to the Covid-19 limitations. The Contingency Committee invited public comment, reached out to stakeholders, and sought input from the Texas Commission on Environmental Quality for input from its staff on this subject matter.

The Commission wishes to emphasize that this contingency planning is the result of statutory mandates. The importance of the contingency planning called for in the statutes is confirmed by the events of 2020 and 2021, that have proven that contingency plans covering unexpected circumstances should be crafted with all information available long before the circumstances come into being. Nevertheless, the Commission emphasizes it has no reason at this time to expect any disruption of the operation of the Compact Waste Facility at this time. This work resumes work last undertaken in 2018, which generated many questions, which largely remain without adequate answers.

Nonetheless, the goal of this Commission and Committee was and will continue to be to attempt to provide practical guidance for the stakeholders of the Compact Waste Facility (CWF) based on the legal framework and facts as they exist at this time. The Commission fully intends to continue working on this issue on a go-forward basis since it anticipates that the issues will evolve and change over time.

## **RELEVANT STATUTES**

Texas Health & Safety Code § 403.006 and analogous provisions in federal and Vermont statutes provide that the Commission must:

Sec. 3.04(7) Prepare, adopt, and implement contingency plans for the disposal and management of low-level radioactive waste in the event that the compact facility should be closed. Any plan which requires the host state to store or otherwise manage the low-level radioactive waste from all the party states must be approved by at least four host state members of the commission. The commission, in a contingency plan or otherwise, may not require a non-host party state to store low-level radioactive waste generated outside of the state.

In addition, the Compact law in Section 4 places certain obligations on the State of Texas that include:

Sec. 4.01. The host state shall develop and have full administrative control over the development, management, and operation of a facility for the disposal of low-level radioactive waste generated within the party states. The host state shall be entitled to unlimited use of the facility over its operating life....

Sec. 4.04 (3) Close the facility when reasonably necessary to protect the public health and safety of its citizens or to protect its natural resources from harm. However, the host state shall notify the commission of the closure within three days of its action and shall, within 30 working days of its action, provide a written explanation to the commission of the closure, and implement any adopted contingency plan. (emphasis added)

(5) Submit an annual report to the commission on the status of the facility, including projections of the facility's anticipated future capacity, and on the related funds.

(6) Notify the commission immediately upon the occurrence of any event that could cause a possible temporary or permanent closure of the facility and identify all reasonable options for the disposal of low-level radioactive waste at alternate compact facilities or, by arrangement and commission vote, at non-compact facilities.

# WHAT CONSTITUTES A "CONTINGENCY TRIGGER EVENT"?

This simple question defies a simple definition that encompasses all the possible scenarios. Therefore, the Commission has adopted a functional test - *Contingency events are those that cause a disruption of the normal operation of the Compact Waste Facility*. Some events could cause disruption for a matter of hours or days requiring no response plan other than to delay or stop shipments in transit, others could cause disruptions for months, and some could cause a disruption of operations for years or even indefinitely. A disruption of operations for a matter of months or even years might pose no problem whatsoever for a large generator with storage capacity and capability, but might cause a serious problem for certain businesses with limited or no storage capability. Accordingly, any plan must be intentionally broad and reserve full discretion and flexibility that the Commission and other appropriate regulators may need to address any disruption in operations at the Compact Waste Facility and tailor solutions as appropriate to the situation and needs of the individual stakeholders.

Stakeholders are advised that the Commission can meet and act very quickly, generally with 72 hours advance notice. In emergencies, the Commission can act essentially as soon as a quorum can be gathered, if necessary. The stakeholders of this facility that appear before this Commission are dealing with advanced waste disposal issues and should develop their own contingency and emergency planning. If they begin to experience or foresee disruptions or potential disruptions to the operation of the facility, they should notify members of the Contingency Committee and/or Chairman of the Commission as soon as reasonably possible to allow for planning of any response that might be needed. However, again, the users of the Compact Waste Facility should be prepared by having their own plans in place in the event that their low-level wastes cannot be disposed of at the CWF.

## **LOW-LEVEL RADIOACTIVE WASTE SHIPMENTS IN TRANSIT**

The Commission will amend the current application for permits to include multiple emergency contacts that may contacted if a contingency event occurs while shipments are in transit in the event that they need to delay or divert such shipments. The permittees should also provide multiple emergency contacts to all relevant agencies. These contacts will be used in the event a contingency trigger event would prohibits shipments in transit from being disposed of at the CWF.

## **LONGER TERM DISRUPTION OF OPERATIONS**

Much to the Commission's consternation, after exploring many ideas and suggestions, none of which led to workable solutions, the Commission at this time has limited options available in the event of a long-term disruption or cessation of the operation of the Compact Waste Facility being available to receive waste shipments. Under the Commission's authority, it can only:

1. suspend all current import agreements;

2. not consider any new import requests; and,

3. issue export permits to in-compact generators, as reasonably necessary, for waste they generate that can be disposed of at other low level waste facilities.

Beyond these basic actions by the Commission, the following are the Commission's recommendations and guidance in general by waste class.

### CLASS A WASTES

Under current law and existing licenses, the Clive, Utah, facility is the only other facility in the United States that currently is generally positioned to accept most types of Class A radioactive waste from Texas or Vermont, if this Commission grants export permits. Specific forms of LLW such as animal carcasses or liquid scintillation cocktail may be sent to other facilities for alternate processing and disposal using incineration. Some low-activity waste may potentially be able to be sent a RCRA hazardous waste facility.

If the Commission determines that the Compact Waste Facility cannot receive Class A waste for an extended period and such waste cannot reasonably be stored by the generator (or the generator cannot reasonably find another option for storage) until the Compact Waste Facility is expected to be able to receive the wastes, then this Commission will consider granting export permits on an expedited basis, as reasonably necessary.

## CLASS B AND CLASS C WASTES

The CWF in Andrews County, Texas, serves as the sole option for disposal of Class B and Class C radioactive wastes for thirty-two states and to some degree provides service to all fifty states and even some territories of the United States. The Commission is legally authorized to grant export permits for Class B and Class C wastes. However, there currently is no low level waste disposal facility legally authorized to receive such wastes from Texas and Vermont generators. *Therefore, granting export permits is not currently an option for most Class B or Class C wastes for Texas and Vermont generators or sources as there is no destination facility to receive it.* 

The Committee tried to identify potentially impacted in-compact stakeholders for Class B and Class C wastes and consider options available to these stakeholders.

The in-compact nuclear power plants are the major users of the Compact Waste Facility by both volume and curie count. This industry seems to have reduced the amount of Class B and Class C waste it generates as compared to earlier estimates of the expected volume of such waste. While a suboptimal solution, the power plant stakeholders are sophisticated and appear capable of dealing with a long-term disruption of operations of the Compact Waste Facility through onsite storage of Class B and Class C wastes as they were required to do prior to the opening of the CWF in 2012. Other methods for the management of nuclear power plant Class B and C LLW include waste treatment to reduce volume and the possible use of the NRC Branch Technical Position on Concentration Averaging (CA BTP). <u>However, this approach would potentially disrupt the schedule for decommissioning at Vermont Yankee and any other reactor undergoing decommissioning.</u>

The Committee identified non-nuclear power generators of LLW, who provide important medical diagnosis and treatment using radioactive materials. These generators produce smaller quantities of Class B and C wastes, but may have limited capability to accumulate and store waste on-site on a long-term basis. Medical generators do use several methods to reduce LLW production (decay-instorage, return to manufacturer for disposal, etc.). They also possess and use medical irradiators and strong beta/gamma emitting sources which require special provisions for disposal. Some of these larger devices may be sent for disposal through a federal program such as the Off-Site Source Recovery Program. Others, however, would have no pathway or disposal if the CWF becomes unavailable. This would not impact routine patient diagnosis and therapy, but would be a storage and security burden.

Another category of Class B or Class C wastes is industrial gauges and devices. Texas is one of largest users of industrial gauges and devices in the United States. Examples include density gauges, Nondestructive Testing Devices (NDT), and flow measuring instruments. A significant number of the devices would be classified as Class A, but many have large radioisotope activities that would be considered Class B or C waste. Once the device is removed from service due to radioactive source decay, some can be returned to the manufacturer for disposal, but for those that cannot, other options for disposal are needed. Without the CWF, there are no viable options at this time for disposal of these Class B and C products beyond limited acceptance of some items into the federal source disposal programs. Without a disposal pathway, these sources will have to be stored.

If the Compact Waste Facility sustains a long-term disruption of operations or closure for an indefinite period, it could take years to find an alternative disposal facility for Class B or Class C wastes or an alternative may not come to fruition at all.

As a prudent planning measure, if a generator has accumulated a large amount of Class B or Class C wastes, they are encouraged to clear out their backlog of stored Class B and Class C wastes as soon as reasonably practical. If clearing storage of Class B and Class C wastes is cost prohibitive based on associated disposal fees, generators are encouraged to explore creative arrangements to dispose of all of the accumulated Class B and Class C, or possibly arrange with the Compact Waste Facility operator, State of Texas, and Andrews County, if necessary, to accept payments over time or to find other financing options to allow immediate disposal in order to reserve storage for Class B and Class C for the future in light of a potentially extended disruption of the operations of the Compact Waste Facility. This suggestion is subject to any limitations or restrictions imposed by applicable law.

Regulatory bodies, such as the Nuclear Regulatory Commission and Texas Departments of State Health Services, currently have limits prohibiting longerterm storage. This Commission strongly recommends both agencies adopt policies that encourage and facilitate disposal of wastes as soon as reasonably practical in ordinary operations, but also allow exceptions and/or waivers as necessary to remove the limits on storage in the event generators need to store waste that would have otherwise gone to the Compact Waste Facility, but are unable to do so due in the event of extended disruptions to the operation of the Andrews County Compact Waste Facility.

### **ADDITIONAL RECOMMENDATIONS**

The Compact Waste Facility serves as an alternative disposal option to the other low level waste facilities. However, the converse is not true. The Clive, Utah, facility is limited to accepting Class A wastes. The other low level disposal facilities are currently legally prohibited from accepting waste from generators located outside their respective compacts or compact with whom they have agreements. Therefore, there are no backstops to accept waste from generators that would have otherwise gone to the Texas-Vermont Compact Waste Facility in the event of a sustained disruption of operation. Therefore, the leadership of Texas, Vermont, and the other states currently sending waste to the Compact Waste Facility in Andrews County, Texas, are strongly encouraged to seek solutions from the federal government in a manner which recognizes the important service of the WCS Compact Waste Facility to the United States.

Currently, there is no plan in place for the State of Texas to assume operation of the Compact Waste Facility in the event of a disruption or cessation of operations due to economic or business decisions of a private operator of the facility. In response to inquiries from the Contingency Committee, TCEQ expressed concerns about significant limitations on its ability to step into operating the facility and is very unlikely to do so. In the event of a cessation of operations of the Compact Waste Facility due to economics or business decisions of a current operator, leadership of the State of Texas and Vermont, leaders for stakeholders and generators may wish to seek other qualified operators to explore operation of the Compact Waste Facility consistent with the rights and obligations of the current operator/licensee of the Compact Waste Facility. There is currently no funding mechanism for the ongoing operation of the CWF by the State of Texas or to supplement a third party operator's operation of the CWF.

Another option for operation of the Compact Waste Facility is to resurrect the Texas Low-Level Radioactive Waste Disposal Authority or create or expand the authority of an existing similar agency and issue bonds to allow for a resumption of operation. This option will also require legislation and funding.

### **CONCLUSION**

As stated in the beginning, the Commission has undertaken this work to fulfill statutory mandates, which the events of the past two years with the pandemic and weather events have shown require planning, while maintaining flexibility to adapt and respond to unforeseen and often unpredictably complex situations. The work of the Contingency Committee and Commission has resulted in this report to provide information and guidance to potentially impacted stakeholders. This report and the work of the Contingency Committee are a beginning point, which is anticipated to continue into the future and evolve with changing needs, resources, and laws. However, as discussed, the options available to this Commission at this time are very limited.

Therefore, the users of the Compact Waste Facility, both in and out of Compact users, are encouraged in the strongest possible terms to regularly dispose of all wastes, especially Class B and Class C wastes, as soon as reasonably practical. These same generators or intermediaries handling especially Class B and Class C wastes are also encouraged to reserve as much onsite storage as possible should the need for onsite storage arise due to a sustained disruption Compact Waste Facility's operations.

Leaders of all states have a stake in maintaining a safe and viable disposal facility for their low level radioactive wastes and are strongly encouraged to develop backup alternatives should this facility sustain a longterm disruption of its ability to receive shipments.

Nothing in this report modifies any rule, law, duties, rights or responsibilities.

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