



Texas Commission on Environmental Quality
DRAFT RADIOACTIVE MATERIAL LICENSE

Pursuant to the Texas Radiation Control Act (Chapter 401, Health and Safety Code) and the Texas Commission on Environmental Quality (TCEQ, or commission) regulations on radioactive materials, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to possess radioactive material listed herein and to use such radioactive material for the purpose(s) and at the place(s) designated herein. This license is subject to all applicable rules, regulations, and orders of the TCEQ now or hereafter in effect and to any conditions specified herein. The license will be in effect for ten years from the date of approval or until amended or revoked by the commission. If this license is appealed and the licensee does not commence any action authorized by this license during judicial review, the term will not begin until judicial review is concluded.

LICENSEE	This license amendment is issued in response to a letter:	
Customer Name CN600616890 1. Name Waste Control Specialists LLC Attn: Tim Greene 2. Address P. O. Box 1129 Andrews, Texas 79714	Dated: August 2, 2007 Signed by: Guy Crawford, Ph.D.	
	3. License Number R04971	Amendment Number 45
	This license supersedes and replaces License No. L04971, amendment 44	
	4. Expiration Date: November 30, 2004	

RADIOACTIVE MATERIAL AUTHORIZED

5. Radioisotope A. Any radioactive material (includes radioactive waste, byproduct material as defined at Texas Health and Safety Code Section (§) 401.003(3)(B), uranium ore received as waste, NORM waste, and/or oil and gas NORM waste) B. Any radioactive material C. Any radioactive material	6. Form of Material A. Solid or liquid B. Sealed sources C. Solid	7. Maximum Activity* A. Activities per category group as specified under Title 30 of the Texas Administrative Code (30 TAC) Section (§) 336.1207(a), not to exceed the following: Category I: 2,000 Curies (Ci.); Category II: 20,000 Ci.; Category III: 200,000 Ci.; Category IV: 2,000,000 Ci. B. Total activity not to exceed 150,000 Ci. C. Activity for Category I as specified under 30 TAC §336.1207(a), not to exceed 33,000 Ci.	8. Authorized Use A. Receipt, processing of radioactive material received as waste, in-house decontamination, interim storage, and transfer to licensed radioactive waste disposal sites, the licensed generator, or return to an authorized federal agency. B. Receipt, interim storage, and transfer to licensed radioactive waste disposal sites, other licensed recipients, or return to an authorized federal agency. C. Receipt, interim storage, of pre-packaged, stabilized dry-active waste from an authorized federal agency, and transfer to licensed radioactive waste disposal sites, or return to an authorized federal agency.
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* Ci - Curies mCi - Millicuries μCi - Microcuries



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5. Radioisotope (continued)	6. Form of Material (continued)	7. Maximum Activity* (continued)	8. Authorized Use (continued)
D. Sr-90	D. Sealed sources	D. No single source to exceed 1 microCurie, Total: 5 microCuries	D. Calibration reference sources.
E. Any radioactive material	E. Solid or liquid	E. No single isotope to exceed 100 microCuries, no combination of isotopes to exceed 500 microCuries, Total: 2 milliCuries	E. Calibration reference sources.
F. Any radioactive material	F. Plated or sealed sources	F. No single isotope to exceed 15 microCuries, no combination of isotopes to exceed 50 μ Ci, Total: 1 milliCurie	F. Calibration reference sources.
G. Cs-137	G. Sealed source (JL Shepherd model 6810; IPL model 193)	G. Two sources, one not to exceed 330 Curies, and the other not to exceed 300 milliCuries	G. Calibration of survey instruments using a JL Shepherd calibrator device, model 78 (-2M) Series with an attached, shielded JL Shepherd calibration range device, model 89 Series.

9. Radioactive material shall be used only at:

<u>Site Number</u>	<u>Location</u>
000	Andrews - One mile north of State Highway 176, 250 feet east of the Texas and New Mexico State Line (30 miles west of Andrews, TX) RN104392790

10. Copies of all active documents and records required by this license shall be maintained for review **by the Executive Director** at Site 000.



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11. The licensee shall comply with the provisions (as amended) of **30 TAC Chapters 25 (Environmental Testing Laboratory Accreditation and Certification); 35, Subchapter H (Emergency and Temporary Orders and Permits; Temporary Suspension or Amendment of Permit Conditions pertaining to Radioactive Substances and Materials); 39, Subchapters A, H and M; 50 (Action on Applications and Other Authorizations); 55, Subchapter G (Requests for Contested Case Hearing and Public Comment on Certain Applications); 60 (Compliance History); 70 (Enforcement); 80 (Contested Case Hearings); 281, Subchapter A (Application Processing); 305, Subchapters A, B, C, D, and F; 327 (Spill Prevention and Control); and 336, Subchapters A (General Provisions), B (Fees), C (General Disposal Requirements), D (Standards for Protection), E (Notices, Instructions and Reports, and Inspections), G (Decommissioning Standards), and M (Licensing of Radioactive Substances Processing and Storage Facilities), and 25 TAC Section 289.257.**
12. The individual designated to perform the functions of Radiation Safety Officer (RSO) for activities covered by this license is **Tim Greene**.
13. Radioactive material shall be used by individuals designated by the RSO only after each worker has successfully completed the training specified in the Radiological Training Program. Documentation verifying the successful completion of the training for each user shall be maintained by the licensee for inspection by the **Executive Director**. All training shall be supervised by **Tim Greene**.
14. The licensee shall submit a current resume listing all pertinent education, training and experience for any individual who replaces the following positions: Corporate RSO, General Manager, Laboratory Manager, and/or Environmental Health & Safety Director. The licensee shall maintain organizational reporting for radiation safety specialist in accordance with letter dated November 18, 2005.
15. For the purposes of this license, the following definitions apply:
 - A. Appropriately authorized: the activity has been formally authorized by the State or Federal agency, which has jurisdiction over the issue.
 - B. Authorized federal agency: the United States Department of Energy (DOE) or the United States Department of Defense (DOD) without limited purpose, or the United States Environmental Protection Agency (EPA) for the limited purpose of the material derived from the decommissioning of the Gulf Nuclear of Louisiana, Inc. facilities at 202 Medical Center Boulevard in Webster, Texas and 9320 Tavenor Street in Houston, Texas, upon written, executed agreement with the licensee that specifies that the authorized federal agency will take back and assume responsibility for all of its waste currently maintained at the licensee's facility within 30 days of written notification by the **Executive Director** that the waste is ready for removal, and that all associated expenses for such will be borne by the authorized federal agency to the extent



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that they are not covered by the licensee's financial assurance. These provisions will only apply if the licensee has failed to properly decontaminate and decommission the facility or otherwise failed to comply with **an order of the Commission or Executive Director**.

15. (Continued).

- C. Interim storage: Waste packaged in accordance with Title 49 Code of Federal Register (CFR), (as amended), and that meets current or stated acceptance requirements for an authorized disposal facility or an authorized federal agency.
- D. Waste: Radioactive waste, byproduct material as defined in Section 401.003(3)(B) of the Health and Safety Code (as amended), uranium ore, NORM waste, and/or oil and gas NORM waste.
- E. Permacon: refers to the east end of the stabilization building modified in accordance with the references specified in Condition 33.A of this license.

16. Copies of authorized federal agency agreements specified in License Conditions 15.B, 19.C, and 23.D, shall be mailed within seven (7) days of execution and prior written approval of the agreement must be granted by the **Executive Director** prior to receipt of the waste. The written agreement shall be mailed to:

ATTN: Division Director
Radioactive Materials Division
Texas Commission on Environmental Quality
P.O. Box 13087, Mail Code-233
Austin TX 78711

- 17. The licensee is hereby authorized to perform in-house pocket dosimeter calibration. The calibrations shall be performed under the supervision of the RSO.
- 18. The licensee is hereby authorized to perform in-house leak test analysis. The analysis shall be performed under the supervision of the RSO.
- 19. A. In accordance with the Order (Docket No. 70-7005), dated November 5, 2004, issued by the United States Nuclear Regulatory Commission (NRC), the Licensee may possess special nuclear material (SNM) within the restricted area of the Licensee's facility provided that:

(1) Concentrations of SNM in individual waste containers and/or during processing must not exceed the following values:

SNM Radionuclide	Operational Limit (gram SNM/gram waste)	Measurement Uncertainty (gram SNM/gram waste)
U-233	4.7 E - 4	7.1 E - 5
U-235 (10 percent enriched)	9.9 E - 4	1.5 E - 4



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U-235 (100 percent enriched)	6.2 E - 4	9.3 E - 5
Pu-239	2.8 E - 4	4.2 E - 5
Pu-241	2.2 E - 4	3.2 E - 5

When mixtures of these SNM radionuclides are present in the waste, the sum-of-the-fractions rule, as illustrated below, should be used.

$$\frac{U - 233conc}{U - 233lim} + \frac{100wt\%U - 235conc}{100wt\%U - 235lim} + \frac{10wt\%U - 235conc}{10wt\%U - 235lim} + \frac{Pu - 239conc}{Pu - 239lim} +$$

$$\frac{Pu - 241conc}{Pu - 241lim} \leq 1$$

The measurement uncertainty values in column 3 above represent the maximum one-sigma uncertainty associated with the measurement of the concentration of the particular radionuclide.

The SNM must be homogeneously distributed throughout the waste. If the SNM is not homogeneously distributed, then the limiting concentrations must not be exceeded on average in any contiguous mass of 600 kilograms.

- (2) Waste must not contain "pure forms" of chemicals containing carbon, fluorine, magnesium, or bismuth in bulk quantities (e.g., a pallet of drums, a B-25 box). By "pure forms," it is meant that mixtures of the above elements such as magnesium oxide, magnesium carbonate, magnesium fluoride, bismuth oxide, etc. do not contain other elements. The presence of the above materials will be determined and documented by the generator, based on process knowledge or testing.
- (3) Waste accepted must not contain total quantities of beryllium, hydrogenous material enriched in deuterium, or graphite above one tenth of one percent of the total weight of the waste. The presence of the above materials will be determined and documented by the generator, based on process knowledge, or testing.
- (4) Waste packages must not contain highly water-soluble forms of SNM greater than 350 grams of U-235 or 200 grams of U-233 or 200 grams of Pu. The sum of the fractions rule will apply for mixtures of U-233, U-235 and Pu. When multiple containers are processed in a larger container, the total quantity of soluble SNM shall not exceed these mass limits. Highly soluble forms of SNM include, but are not limited to: uranium sulfate, uranyl acetate, uranyl chloride, uranyl formate, uranyl fluoride, uranyl nitrate, uranyl potassium carbonate, uranyl sulfate, plutonium chloride, plutonium fluoride, and plutonium nitrate. The presence of the above materials will be determined and documented by the generator, based on process knowledge or testing.
- (5) Processing of mixed waste containing SNM will be limited to chemical stabilization (i.e., mixing waste with reagents). For batches with more than 600 kilograms of waste, the total mass



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of SNM shall not exceed the concentration limits in Condition 19.A.1., times 600 kilograms of waste.

19. A. (Continued)

- (6) Prior to shipment of waste the Licensee shall require generators to provide a written certification containing the following information for each waste stream:
 - a. Waste Description. The description must detail how the waste was generated, list the physical forms in the waste, and identify uranium chemical composition.
 - b. Waste Characterization Summary. The data must include a general description of how the waste was characterized (including the volumetric extent of the waste, and the number, location, type, and results of any analytical testing), the range of SNM concentrations, and the analytical results with error values used to develop the concentration ranges.
 - c. Uniformity Description. A description of the process by which the waste was generated showing that the spatial distribution of SNM must be uniform, or other information supporting spatial distribution.
 - d. Manifest Concentration. The generator must describe the methods to be used to determine the concentrations on the manifests. These methods could include direct measurement and the use of scaling factors. The generator must describe the uncertainty associated with sampling and testing used to obtain the manifest concentrations.

The Licensee shall review the above information and, if adequate, approve in writing this pre-shipment waste characterization and assurance plan before permitting the shipment of a waste stream. This will include statements that the Licensee has a written copy of all the information required above, that the characterization information is adequate and consistent with the waste description, and that the information is sufficient to demonstrate compliance with Subparts (1) through (4) of this condition. Where generator process knowledge is used to demonstrate compliance with Subparts (1), (2), (3), or (4), the Licensee shall review this information and determine when testing is required to provide additional information in assuring compliance with the Subparts. The Licensee shall retain this information as required by the State of Texas to permit independent review.

At the time the waste is received, the Licensee shall require generators of SNM waste to provide a written certification with each waste manifest that states that the SNM concentrations reported on the manifest do not exceed the limits in Subpart (1) of this condition, that the measurement uncertainty does not exceed the uncertainty value in Subpart (1) of this condition, and that the waste meets Subparts (2) through (4) of this condition.

The Licensee shall require generators to sample and determine the SNM concentration for each



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waste stream at the following frequency: (a) if the concentrations are above one-tenth the SNM limits as specified in Subpart (1) of this condition, once per 600 kg, (b) if the concentrations are below one-tenth and greater than one-hundredth of the SNM limits, once per 6,000 kg, and (c) if the concentrations are below one-hundredth of the SNM limits, once per 60,000 kg.

19. A. (6) (Continued)

If the waste is determined to be not homogeneous (i.e., maximum, which cannot exceed the limits in Subpart (1) of this condition, and minimum testing values performed by the generator are greater than five times the average value), the generator shall sample and determine the SNM concentration once per 600 kg thereafter, regardless of the SNM concentration. In this case, samples shall be a composite consisting of four uniformly sampled aliquots.

The certifications required under this condition shall be made in writing and include the statement that the signer of the certification understands that this information is required to meet the requirements of the NRC and must be complete and accurate in all material respects.

Sealed sources containing SNM from the Waste Isolation Pilot Plant facility, as described in the letters dated August 7, 2007 and September 21, 2007, can be sampled using a wipe test of each source combined with the generator's written certification. This authorization expires within 2 months of the issuance of amendment 45.

- (7) The Licensee shall sample and determine the SNM concentration for each waste stream at the following frequency:
- a. if the concentrations are above one-tenth the SNM limits as specified in Subpart (1) of this condition, once per 1,500 kg for the first shipment and every 6,000 kg thereafter;
 - b. if the concentrations are below one-tenth and greater than one-hundredth of the SNM limits, once per 20,000 kg for the first shipment and every 60,000 kg thereafter; and
 - c. if the concentrations are below one-hundredth of the SNM limits, once per 600,000 kg.

This confirmatory testing is not required for waste to be disposed of at the United States Department of Energy's Waste Isolation Pilot Project facility located near Carlsbad, New Mexico.

If the waste is determined to be not homogeneous (i.e., maximum and minimum testing values performed by the generator are greater than five times the average value), the Licensee shall sample and determine the SNM concentration once per 1,500 kg for the first shipment and every 6,000 kg thereafter, regardless of SNM concentration. In this case, samples shall be a composite consisting of four uniformly sampled aliquots.

- (8) The Licensee shall notify the NRC, Region IV office and **the inspector for the TCEQ, Radioactive Materials Division** within 24 hours if any of the above Subparts of this condition



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are violated. A written notification of the event must be provided within 7 days to both agencies.

19. A. (Continued)

(9) The Licensee shall obtain NRC approval and secure an amendment to this license prior to changing any activities associated with the Subparts of this condition.

B. The licensee shall manage waste containing SNM in accordance with the order from the NRC, as specified in Condition 19.A of this license, and the licensee's operational procedures titled "Special Nuclear Material Exemption Certification" designated OP-1.2.22, Revision 0.

C. Notwithstanding the licensee's procedures, the licensee is authorized to possess transuranic waste (waste generated by USDOE containing alpha emitting nuclides with an atomic number greater than 92) in concentrations greater than 100 nanocuries per gram (nCi/g) and greater than a 20 year half-life. Prior to receipt of transuranic waste with concentrations exceeding 100 nCi/g, the licensee shall obtain an executed, written agreement from an authorized federal agency. The agreement shall meet the terms of the agreement specified in Condition 15.B of this license. Furthermore, in no respect shall this authorization be construed as to allow the limitations specified in Part A of this condition to be exceeded or violated.

20. The licensee is authorized to perform in-house decontamination of surface contaminated objects, contaminated through the course of the licensee's authorized activities or as a consequence of shipment of radioactive waste to the licensee's facility (e.g., containers, coverings, bracing, etc.), and/or surface contaminated objects received in waste streams, in the confines of the "Permacon" portion of the Stabilization Building, in accordance with the following:

A. utilizing the PlasBlast Model 5050, or equivalent, in accordance with procedures submitted in the application dated January 24, 1997; or

B. utilizing the methods and procedures identified in "Decontamination of Material", OP-1.4.8, issue date 4/25/99.

21. Radioactive material described in Parts A and B of Conditions 5, 6, 7 and 8 shall only be transferred to the initial generator, to an appropriately authorized waste disposal facility, or to an appropriately authorized waste processor. Documentation of recipient's authorization shall be maintained for inspection for a minimum of five (5) years.

22. The licensee is authorized to process waste. Such processing shall be performed in accordance with the procedures and commitments submitted in the application dated January 24, 1997, or new or modified procedures specified in Condition 40 of this license, and are limited to the following:

A. Receipt and survey;



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- B. Repackaging;
 - C. Compaction and consolidation utilizing a Model 55R RAMFLAT, or equivalent, compactor. This use is restricted to the Stabilization Building;
22. (Continued)

D. Processing and/or treatment of waste in the following methods:

(1) Solidification/stabilization, chemical fixation, oxidation, reduction, and/or pH adjustment of liquid or solid radioactive waste using media acceptable to low-level waste disposal sites utilizing the following:

- a. a 55-gallon Enrico Barrel Mixer, or equivalent;
- b. a Prentice Arm, or equivalent, in accordance with OP-1.4.10, Revision 0, Issue Date 8/16/00, titled "Bulk Solidification/Stabilization Operations" and OP-1.4.11, Revision 0, Issue Date 8/18/00, titled "Prentice Arm Operations"; and/or
- c. a 450-gallon paddle blender in accordance with OP-1.4.16, Revision 0, Issue Date 5/7/04, titled "Operation of the Marion Paddle Mixer, Model #3061."

The use of these methods is restricted to the "Permacon".

- (2) Treatment of cesium-137 contaminated electric arc furnace dust (United States Environmental Protection Agency designation KO61) and incident related material utilizing the procedure described in module OP-1.4.7, issue date of 9/18/98, revision 1, titled "KO61 And Incident Related Material Stabilization Process." In addition to the procedures described in OP-1.4.7, all doors to the stabilization building shall be closed and remain closed during the processing of the waste.
- (3) Solvated Electron Technology (SET) of mixed-waste using the Commodore D/2 unit for pilot testing in accordance with the commitments made in the letters dated September 9, 1999 (with attachments), October 6, 1999 (with attachments, including the procedures identified as wCs Work Instruction for the Commodore D/2 Unit, WI99-1.16), and October 7, 1999 (with attachments). This treatment method is restricted to the following waste matrices and radionuclides:



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22. D. (3) (Continued)

Waste Matrix	Radionuclides
Soil (degreaser sludge)	U-234, U-235, U-238, Cs-137, K-40
Moist solids, water on top	U-234, U-235, U-238, Cs-137
Oil/Freon	U-234, U-235, U-238, K-40, Co-57, Co-60, Cs-134, Cs-137, Ce-144, Eu-152, Eu-156, Rb-106, Sb-125, Zn-65, Pb-212
Freon soaked soil	U-234, U-235, U-238, Cs-137, K-40
Sodium contaminated metals	Co-60
Floor removal wastes	Ag-116, Co-58, Co-60, Cs-137
Thinners and solvents	Co-60, Cs-137, Ce-144, H-3, C-14, Tc-99, I-129
Spill Cleanup Material	Co-60, Sb-125, Cs-134, Cs-137
Sludge	K-40, Co-60, Sb-125, Cs-134, Ra-226, Cs-137
Waste grease	Co-60, Cs-134, Cs-137
Compactor Sludge	Ag-110, C-14, Co-58, Cs-134, Cs-137, Fe-55, Sb-125, H-3, Mn-54, Ni-63, Sr-90, Tc-99, U-234, U-238, Zn-65
Sludge	Co-60, Cs-134, Cs-137, Eu-154, Eu-155, Mn-54, Sb-125, Zn-65

(4) Solvated Electron Technology (SET) using the Commodore SL2 unit for pilot testing in accordance with the commitments made in the letter dated December 22, 2000 (with attachments), (with attachment titled "SL2 Description and Information" consisting of seven (7) pages).

E. Interim storage of radioactive waste in the Bin Storage Unit 1, Container Storage Area, LSA Storage Area, Container Storage Building and the Stabilization Building.

F. Research and development in the treatment of radioactive waste using the Commodore Mobile Demonstration Unit as described in and in accordance with the limitations and specifications contained in the letters dated February 3, 1999 and April 23, 1999, and attachments and enclosures, including wCs Work Instructions for CMDU2, dated April 9, 1999, WI99-1.2 and Attachment A to WI99-1.2.

G. Shredding, in accordance with OP-1.4.12, Revision 0, Issue Dated 8/18/00, titled "Shredder Operations".

H. Demonstration of the In Container Vitrification Process in accordance with document titled "In-Container Vitrification Treatability Demonstration of Mixed TSCA Low Level Radioactive Waste"



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dated April 2004 (revision 6); drawing titled "Wall Penetration at Permacon for AMEC/Geomelt Melt Cables" date issued 03-25-2003; drawing titled "Wall Penetration at Permacon for

22. H. (Continued)

AMEC/Geomelt Vent Pipe" date issued 03-25-2003; document titled "Intermediate Scale Geomelt

System; Safe Operating Procedure (SOP)" dated May 7, 2003; and responses made in the letter dated May 23, 2003, signed by Stephen L. Cook, P.E.

In spite of the procedures titled "Intermediate Scale Standard Operating Procedures (SOP)" Revision 2, dated 5/7/2003, all components of the In Container Vitrification Process shall meet the criteria for release of equipment to unrestricted use as specified at **30 TAC § 336.364** when the equipment is released from the licensee's facility for unrestricted use. The licensee shall make a record of the surveys made to demonstrate that the release criteria has been met and retain the record of those surveys for inspection by the **Executive Director**, or if transferred as radioactive material, the licensee shall retain a copy of the recipient's radioactive material license for inspection by the **Executive Director**.

23. In addition to the limits specified by Conditions 5, 6, 7 and 8, the licensee shall restrict possession of waste to the following conditions.

A. The total volume physically present shall not exceed 1,802,865 cubic feet and shall be further limited to the following building limitations:

1. Bin Storage Unit 1: 87,480 cubic feet
2. Container Storage Building: 36,750 cubic feet
3. Stabilization Building: 8,000 cubic feet
4. LSA Storage Area: 1,500,000 cubic feet
5. Container Storage Area: 174,960 cubic feet

B. Any waste container shall be counted as a full container in the volume inventory unless it can be readily verified as empty.

C. Waste stored in the Bin Storage Unit 1, Container Storage Area, or LSA Storage Area that is not contained within a High Integrity Container will be restricted to Low Specific Activity or Surface Contaminated Object, as defined by Title 10 of the Code of Federal Regulations (CFR) Part 71 (as amended), or depleted uranium. Waste that meets the requirements of Condition 15.B of this license may also be stored in a U. S. Department of Transportation Type B container, or a Dufrane Secure Environmental Container, or the equivalent.

D. The volume authorized in License Condition No. 23.A shall be further limited in accordance with



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the amount of Financial Assurance in place with the **Commission**:

23. D. (Continued)

1. Financial Assurance = \$18,467,478. No more than 1,039 cubic feet of waste that has a current commercial disposal option, 58,320 cubic feet of cesium-137-contaminated electric arc furnace dust (U. S. Environmental Protection Agency designation KO61) or waste from authorized federal agencies, and 1,743,506 cubic feet of waste from authorized federal agencies; or
2. Financial Assurance = \$32,881,617. No more than 19,211 cubic feet of waste that has a current commercial disposal option, 58,320 cubic feet of cesium-137-contaminated electric arc furnace dust (U. S. Environmental Protection Agency designation KO61) or waste from authorized federal agencies, and 1,725,334 cubic feet of waste from authorized federal agencies.
3. The volume of waste that has a current commercial disposal option authorized in License Condition Nos. 23.D.1 and 23.D.2 may include up to 2,700 cubic feet of commercial mixed waste that cannot be processed into a form that has a current disposal option.

24. All waste not in storage shall be physically restricted in the following ways:

- A. (1) waste meeting the requirements of low specific activity group I radioactive material, as specified in Title 49 of the CFR (as amended), shall be processed within the confines of the Stabilization Building; and
 - (2) all other waste shall be processed within the confines of a PERMACON, or equivalent, structure; or
- B. waste shall be packaged in accordance with Title 49 of the CFR (as amended) requirements while in transit between the Bin Storage Unit 1, Container Storage Area, LSA Storage Area, Container Storage Building, Stabilization Building, or offsite.

25. All waste holding times shall be limited to the following:

- A. All waste received for purposes of processing, shall be initially processed within 30 days of placement within the Stabilization Building. All waste shall be transferred out of the Stabilization Building within 90 days of placement within the Stabilization Building;
- B. Except for approximately 1,940 cubic feet of low-level mixed waste generated at the Safety Light Superfund Site which must be placed into interim storage or transferred to an authorized recipient within 545 days of the initial date of receipt, all waste shall be placed into interim storage or transferred to an authorized recipient within 365 days of the initial date of receipt; and
- C. All waste authorized under License Condition No. 23.D.3 shall be returned to the generator or an appropriately authorized waste processor within 180 days of determining the waste is subject to License Condition No. 23.D.3.



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25. (Continued)

D. Regardless of the holding time limits, waste with hazardous constituents requiring a permit issued by the TCEQ to possess, treat, and store, that is mixed waste, shall meet the conditions for treatability studies in 40 CFR 261.4(f)(5) or the conditions for accumulation of adequate quantities in 40 CFR 268.50. Holding times will be consistent with that permitted under the provisions of the licensee's permit issued by the TCEQ.

- (1) Containers of such waste shall be clearly identifiable and each container shall bear legible and unique identification.
- (2) Records shall be maintained that identify the containers and their contents in terms of radionuclides, activity and volume for inspection by the **Executive Director**.
- (3) Written notifications of intent submitted to TCEQ for each treatability study and/or any requested extensions for holding times for specific containers or batches of mixed waste shall be maintained for inspection by the **Executive Director** to document that the waste in question is subject and in compliance with the holding time provisions.
- (4) Quarterly reports documenting compliance with this condition shall be made available during inspections.

E. The Licensee is authorized interim storage of waste materials as defined by Texas Health and Safety Code Section 401.003(3)(B) from Silos 1 and 2 located at the DOE Fernald Closure Project, Fernald Ohio, ("Fernald waste") as set forth in Items A, B and C of Conditions 5, 6, 7, and 8, for a period ending October 31, 2009, and shall then transfer the Fernald waste to an authorized facility as described in Condition 25F. No later than 30 days prior to the receipt of the Fernald waste, the Licensee shall obtain a written commitment from the DOE that it: 1) retains title to the Fernald waste, and 2) that it will store or dispose of the Fernald waste at another authorized facility within six months of a request to do so by the **Executive Director**. The Licensee shall obtain the written approval of the **Executive Director** for the DOE commitment prior to receipt of the Fernald waste. Financial assurance held by the **Commission** under Condition 23 may be used by the **Executive Director** to transfer the Fernald waste for storage or disposal at an authorized facility should the licensee or DOE fail to do so by the prescribed dates. The Licensee shall be required to comply with any standards, taxes, and fees applicable to the activities authorized by this license that may be imposed by law after the amendment date.

F. In the event licensee has received into interim storage byproduct material as defined by Texas Health and Safety Code Section 401.003(3)(B) from Silos 1 and 2 located at the Department of Energy Fernald site in Ohio, the licensee shall, no later than October 31, 2009, transfer the byproduct material to:

1. a site licensed by the **TCEQ** for the disposal of byproduct material;



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25. F. (Continued)
2. a site licensed for the disposal of byproduct material by the Texas Department of State Health Services in coordination with and with input from the **TCEQ** on binding license conditions for the technical requirements for the disposal of byproduct material;
 3. another facility licensed to receive or dispose of byproduct material outside the State of Texas; or
 4. an authorized federal agency outside the State of Texas.

In accordance with Health and Safety Code §401.381 and §401.384, the **Commission** shall assess the licensee an administrative penalty of up to \$10,000 a day or the licensee shall be liable for a civil penalty of up to \$25,000 a day if the Fernald Silos 1 and 2 byproduct material is stored by licensee under this license in violation of this Condition. Condition 25.F. shall not apply and licensee shall have no liability under this Condition contingent upon the passage of legislation during the Regular Session of the 79th Texas Legislature that:

- a. transfers jurisdiction over this license and any new or pending radioactive waste and byproduct material as defined by Texas Health and Safety Code Section 401.003(3)(B) storage, processing, and disposal licenses by licensee to the **TCEQ**;
 - b. creates state revenue measures for the disposal of byproduct material as defined by Texas Health and Safety Code Section 401.003(3)(B); and
 - c. is made effective by September 1, 2005.
26. A. No waste shall be commingled with material requiring a separate disposal methodology.
- B. In spite of the licensee's procedures, no waste from an authorized Federal agency shall be commingled with waste from another generator.
27. The licensee shall maintain for inspection by the **Executive Director** an inventory of all waste possessed under this license. The inventory shall show the radionuclide, date received, from whom received, amount of activity, physical form, date processed, original and reassigned drum or container number, and the date transferred for disposal. In addition, the licensee shall at least monthly generate a cumulative inventory that demonstrates compliance with License Condition Nos. 19, 23, and 25 (including waste form requirements for interim storage), and the appropriate processing category limits of **30 TAC § 336.1207**. The licensee shall maintain a copy of the inventories, for a minimum of five (5) years from the date of generation, for inspection by the **Executive Director**.
28. A summary of all waste processing activities for the preceding calendar year shall be generated no later than March 1 of each year and maintained for inspection until disposition is authorized by the **Executive Director**. This report shall include total throughput for each individual process; all material received; all material transferred; all spills outside of primary containment; and a current inventory at the end of the report. Material transferred and received shall also be listed by licensee. All categories shall include activity by isotope and total volume.



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- 29. A. Waste containers containing radioactive waste meeting the requirements of low specific activity material, group I (LSA-I), as specified in Title 49 of the Code of Federal Regulations, Section 173.403, may be opened for sampling of the contents or container maintenance or repair in an approved, enclosed structure.
- B. All other waste containers shall only be opened in PERMACON or equivalent structures.
- 30. A. If air sample results indicate that an airborne release in excess of ten times the limits of **30 TAC §336.359**, Table I, Column 3 occurred in any 24-hour workday period to a restricted area or to any portion of a restricted area, the licensee shall, within three (3) working days of the occurrence, perform bioassays on all individuals who were present.
- B. The licensee is relieved of complying with the frequency for the fecal analysis as specified under article 521(5) of the licensee's Radcon Manual. Fecal analysis may be performed at the discretion of and as directed by the RSO.
- C. The licensee's Radcon Manual at both articles 521(4) and 521(5) shall both specify an annual frequency for performing whole body counting.
- 31. A. The licensee shall notify the **Executive Director** in writing or via facsimile at least three (3) working days in advance of shipping its low-level radioactive waste to a commercial treatment, storage, or disposal site.
- B. The licensee shall notify the **Executive Director** in writing or via facsimile at least three (3) working days in advance of initial receipt of waste pursuant to this license.
- C. Notification required by this Condition shall be made to:

LLRW Notification
ATTN: Division Director
Radioactive Materials Division
Texas Commission on Environmental Quality
P.O. Box 13087, Mail Code-233
Austin, Texas 78711 or
by facsimile to: (512) 239-6464.

- 32. A. In accordance with the application dated January 24, 1997, the licensee may only modify the following procedures: Operations Procedures; Occupational Health and Safety Procedures; Quality Assurance Procedures; Emergency Procedures; Laboratory Procedures and/or Radiation Safety Procedures. All modifications shall provide at least equivalent levels of radiation safety and administrative control. Documentation of all modifications, and the corresponding internal review, shall be maintained for inspection for a minimum of five (5) years.
- B. In the radiation safety procedure RS-3.3.62, wherever Form RS 3.3.61-1 is referenced, it shall be understood that Form RS 3.3.62-1 is meant.



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33. Modification of the facility or the processes described in the documents listed in License Condition No. 40 is prohibited except as authorized pursuant to amendment of this license.
33. A. (Continued)
- A. The licensee may modify the facility as requested in the licensee's letter dated August 21, 2000 regarding the Permacon and shall construct the loading bay and employee center attached to or abutting the Permacon in accordance with the following:
- (1) Drawing titled "Loading Bay & Employee Center Addition", Sheet A1, dated 7-10-00, Rev. 1 dated 7-20-00, depicting Floor Plan, from the firm of Nesser, Prestidge, Smith, Razloznik Architects, Inc. of Carlsbad, NM, received in the Bureau of Radiation Control on October 10, 2000;
 - (2) Drawing titled "Loading Bay & Employee Center Addition", Sheet A2, 4 of 9, dated 7-10-00, Rev 1 dated 7-20-00, depicting Enlarged Partial Floor Plan, from the firm of Nesser, Prestidge, Smith, Razloznik Architects, Inc. of Carlsbad, NM, received in the Bureau of Radiation Control on October 10, 2000;
 - (3) Drawing titled "Loading Bay & Employee Center Addition", Sheet A3, 5 of 9, dated 7-10-00, Rev 1 dated 7-20-00, depicting (1) North, (2) East, (3) South and (4) West Exterior Elevations, from the firm of Nesser, Prestidge, Smith, Razloznik Architects, Inc. of Carlsbad, NM, received in the Bureau of Radiation Control on October 10, 2000;
 - (4) Drawing titled "Loading Bay & Employee Center Addition", Sheet A4, 6 of 9, dated 7-10-00, Rev 1 dated 7-20-00, depicting (1) Enlarged Partial Building Section and (2) Building Section, from the firm of Nesser, Prestidge, Smith, Razloznik Architects, Inc. of Carlsbad, NM, received in the Bureau of Radiation Control on October 10, 2000;
 - (5) Drawing titled "Loading Bay & Employee Center Addition", Sheet A5, 7 of 9, dated 7-10-00, Rev 1 dated 7-20-00, depicting (1) Enlarged Partial Building Section, (2) Enlarged Partial Building Section, and (3) wall section, from the firm of Nesser, Prestidge, Smith, Razloznik Architects, Inc. of Carlsbad, NM, received in the Bureau of Radiation Control on October 10, 2000;
 - (6) Drawing titled "Loading Bay & Employee Center Addition", Sheet S1, 1 of 2, dated 7-10-00, Rev 1 dated 7-20-00, identified as Foundation Plan depicting (1) Bollard Detail and (2) Column Tie Footing, (3) Grade Beam Footing @ Door, (4) Grade Beam Footing, and (5) Main Frame Footing, from the firm of Nesser, Prestidge, Smith, Razloznik Architects, Inc. of Carlsbad, NM, received in the Bureau of Radiation Control on October 10, 2000;
 - (7) Drawing titled "Loading Bay & Employee Center Addition", Sheet S2, 2 of 2, dated 7-10-00, Rev 1 dated 7-20-00, identified as Foundation Plan and Framing Plan, from the firm of Nesser, Prestidge, Smith, Razloznik Architects, Inc. of Carlsbad, NM, received in the Bureau of



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Radiation Control on October 10, 2000;

33. A. (Continued)

- (8) Drawing titled "Loading Bay & Employee Center Addition", Sheet M101, dated 7/19/00, identified as Plumbing Plan, from the firms of Smith Engineering Company of Albuquerque, NM, James O. Coupland, and Nesser, Prestidge, Smith, Razloznik Architects, Inc. of Carlsbad, NM, received in the Bureau of Radiation Control on October 10, 2000;
- (9) Drawing titled "Loading Bay & Employee Center Addition", Sheet M201, dated 7/19/00, depicting (1) HVAC Plan and (2) Enlarged Mechanical Plan, from the firms of Smith Engineering Company of Albuquerque, NM, James O. Coupland, and Nesser, Prestidge, Smith, Razloznik Architects, Inc. of Carlsbad, NM, received in the Bureau of Radiation Control on October 10, 2000;
- (10) Drawing titled "Loading Bay & Employee Center Addition", Sheet M401, dated 7/19/00, depicting (1) Filtered Exhaust System Control Diagram, (2) Breathing Air Alarm System, and (3) Air Handling Unit Detail, from the firms of Smith Engineering Company of Albuquerque, NM, James O. Coupland, and Nesser, Prestidge, Smith, Razloznik Architects, Inc. of Carlsbad, NM, received in the Bureau of Radiation Control on October 10, 2000;
- (11) Drawing titled "Loading Bay & Employee Center Addition", Sheet M501, dated 7/19/00, depicting (1) Gooseneck Detail, (2) Holding Tank Detail, (3) Exhaust Fan EF-3 Support, (4) Valve Box Detail, (5) Vent Thru Roof Detail, (6) Water Heater Detail, (7) Flue Thru Roof Detail, and (8) Clean Out Detail, from the firms of Smith Engineering Company of Albuquerque, NM, James O. Coupland, and Nesser, Prestidge, Smith, Razloznik Architects, Inc. of Carlsbad, NM, received in the Bureau of Radiation Control on October 10, 2000;
- (12) Drawing titled "Loading Bay & Employee Center Addition", Sheet M602, dated 7/19/00, depicting the Equipment Schedule, from the firms of Smith Engineering Company of Albuquerque, NM, James O. Coupland, and Nesser, Prestidge, Smith, Razloznik Architects, Inc. of Carlsbad, NM, received in the Bureau of Radiation Control on October 10, 2000;
- (13) Attachment B titled "Submittals of Ventilation Equipment Specifications", to the August 21, 2000 letter;
- (14) Attachment C titled "Map of Equipment Locations", to the August 21, 2000 letter;
- (15) Letter dated October 19, 2000 pertaining to the operation of the Permacon ventilation system and the oversight of the Permacon modification and addition of the loading bay and employee center;
- (16) The responses to items 6, 7, 8, 9, 10, 12, 13, and 14 in the licensee's letter dated October 6, 2000 pertaining to the facility modifications (i.e., Permacon) and additions (i.e., loading bay



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and employee center);

33. A. (Continued)

(17) The air effluent monitoring system for the Permacon shall conform to the description provided in the letter dated October 10, 2000, including the attachments titled "Waste Control Specialists Stack Sampling Configuration" and "Generic Stack Schematic"; and

(18) The term "air lock" used in the licensee's submissions describing this facility modification shall be understood to refer to the feature identified as "loading bay" on the submitted drawings.

B. All waste (liquid and solids) in the holding tank receiving waste from the decontamination area of the Employee Center shall be disposed of as radioactive waste.

C. The licensee may modify the bin storage area as described in the letters dated January 14, 1998 and May 3, 1999.

D. The licensee may modify the Stabilization Building as described in the letter dated January 14, 1998 and May 3, 1999.

E. The licensee may construct and utilize for storage, Container Storage Area and LSA Storage Area pads for interim waste storage in accordance with inspection frequencies and design criteria specified in letters dated May 19, 2004, August 12, 2004, October 28, 2004, and June 15, 2006. Waste container types for the Container Storage Area pad, their placement and content characterization shall be in accordance with Item 2 of letter dated July 27, 2004.

34. The licensee must secure all applicable licenses, permits, and/or authorizations from the appropriate regulatory authorities before engaging in the authorizations granted by this license.

35. The licensee is relieved of the requirements of Conditions 15.C and 24.B of this license, for no more than 23,590 cubic feet of waste that requires additional packaging/overpacks to meet US DOT, that is, 49 CFR, requirements. Such waste may be packaged in metal or polyethylene containers that meet the requirements for a strong, tight container in 49 CFR regulations when in storage or in transport between the Bin Storage Unit 1, Container Storage Area, LSA Storage Area, Container Storage Building, and Stabilization Building at the licensee's facility. All other waste shall be packaged to meet US DOT transportation requirements when in storage or in transit between the Bin Storage Unit 1, Container Storage Area, LSA Storage Area, Container Storage Building, and Stabilization Building at the licensee's facility.

36. The licensee is authorized to dispose of certain radioactive material authorized in Conditions 5, 6, 7 and 8 and listed in **30 TAC §336.365**, whose half lives do not exceed 300 days, in accordance with the provisions of **336.225 (c) - (g)** and procedures dated November 13, 2003, May 17, 2004 and July 26, 2004.

A. The waste authorized for disposal is limited to that generated by customers under specific radioactive material licenses **issued by the Department of State Health Services** in accordance with **25 TAC §289.252**.



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- B. Changes in the Licensee's contractor who analyzes radiochemical samples from this waste stream must be addressed through a license amendment.
36. (Continued)
- C. Disposal is authorized in a Type I municipal solid waste facility permitted by the **TCEQ**, unless the generator's waste also contained hazardous waste when presented that would allow for burial in a hazardous waste site, also permitted by TCEQ.
- D. The records for annual activity and container concentration limits shall reflect the ratios for radionuclide mixtures and these limits shall apply only once, regardless of the number of original generators.
37. The licensee shall implement the Emergency Plan enclosed with correspondence dated March 11, 2004, and additional correspondences dated July 27, 2004 and August 31, 2004. Execution of the plan shall include records of any required training, quarterly communication checks at intervals not to exceed three months and biennial onsite exercises. Critiques of exercises shall evaluate the appropriateness of the plan, emergency procedures, facilities, equipment, training of personnel, and overall effectiveness of the response. Deficiencies found by the critiques shall be corrected, and copies of those changes retained for **Executive Director** inspection.
38. In accordance with correspondence and procedures dated November 11, 2004, the licensee is hereby authorized to perform calibrations of in-house radiation survey instruments. The calibrations shall be performed by, or under the supervision of, **Tim Greene**.
- 39. The Licensee has a duty to comply with all license conditions. Failure to comply with any license condition is a violation of the license and statutes under which the license is issued and is grounds for enforcement action, for license amendment, revocation, or suspension, or for denial of a license renewal application or an application for a license or permit for another facility.**
- 40. The Licensee must apply for an amendment or renewal before the expiration of the existing license in order to continue storage and processing of radioactive material after the expiration of the license. Authorization to continue such activity terminates upon the effective denial of said application. Obligations or requirements for decommissioning, environmental monitoring, financial assurance, radiation safety, and control of entry to restricted areas continue in effect beyond the expiration date of this license until the executive director notifies the licensee in writing that the provisions of the license are no longer binding.**
- 41. It is not a defense in an enforcement action that it would have been necessary to halt or reduce the licensed activity to maintain compliance with the license conditions.**
- 42. The Licensee shall take all reasonable steps to minimize or prevent any discharge, disposal, or other license violation which has a reasonable likelihood of adversely affecting human health or the environment.**
- 43. The Licensee shall at all times properly operate and maintain all facilities and systems of treatment**



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- and control (and related appurtenances) installed or used by the Licensee to achieve compliance with the license conditions.
44. The Licensee shall furnish to the executive director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending, or terminating the license, and copies of records required to be kept by the Licensee.
 45. The Licensee shall give notice to the executive director before physical alterations or additions to the licensed facility if such alterations or additions would require a license amendment or result in a violation of license requirements.
 46. Authorization from the commission is required before beginning any change in the licensed facility or activity that would result in noncompliance with other license requirements.
 47. Unless subject to a different reporting requirement in this license or under 30 TAC Section 336.335 (relating to Reporting Requirements for Incidents), the Licensee shall report any noncompliance to the executive director which may endanger human health or safety or the environment. Such information must be provided orally within 24 hours from the time the Licensee becomes aware of the noncompliance. A written submission must also be provided within five days of the time the Licensee becomes aware of the noncompliance. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.
 48. Inspection and entry by the executive director to the licensed site must be allowed under Texas Water Code, Chapters 26 - 28 and 32, Texas Health and Safety Code, §§361.032, 361.033, 361.037, 401.057(a), and 401.063, and Title 40 Code of Federal Regulations (CFR) §122.41(i). The statement in Texas Water Code, §26.014, that commission entry of a facility shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection is not grounds for denial or restriction of entry to any part of the facility, but merely describes the commission's duty to observe appropriate rules and regulations during an inspection.
 49. This license may not be transferred except on approval of the Commission.
 50. All reports and other information requested by the executive director must be signed by the person and in the manner required by 30 TAC §305.128 of this title (relating to Signatories to Reports).
 51. This license may be amended, suspended and reissued, or revoked for cause. The filing of a request by the Licensee for a license amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any license condition.
 52. This license does not convey any property rights of any sort, or any exclusive privilege.
 53. Where the Licensee becomes aware that it failed to submit any relevant facts in a license



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- application, or submitted incorrect information in an application, or in any report to the executive director, the Licensee shall promptly submit such facts or information.
54. A. The Licensee shall notify the executive director, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of Title 11 (Bankruptcy) of the United States Code (11 USC) by or against:
- (1) The Licensee;
 - (2) An entity (as that term is defined in 11 USC, §101(14)) controlling the Licensee or listing the license or Licensee as property of the estate; or
 - (3) An affiliate (as that term is defined in 11 USC, §101(2)) of the Licensee.
- B. This notification must indicate:
- (1) The name of the Licensee;
 - (2) The license number(s);
 - (3) The bankruptcy court in which the petition for bankruptcy was filed; and
 - (4) The date of filing of the petition.
55. At any time before termination of the license, the Licensee shall submit written statements under oath upon request of the commission or executive director to enable the commission to determine whether or not the license should be modified, suspended or revoked.
56. The Licensee shall be subject to the applicable provisions of Texas Health and Safety Code, Chapter 401, also known as the Texas Radiation Control Act (TRCA) now or hereafter in effect and to applicable rules and orders of the commission. The terms and conditions of the license are subject to amendment, revision, or modification, by reason of amendments to the TRCA or other applicable law, or by reason of rules and orders issued in accordance with terms of the TRCA.
57. Any license may be revoked, suspended, or modified, in whole or in part, for any material false statement in the application or any statement of fact required under provisions of the TRCA, or because of conditions revealed by any application or statement of fact or any report, record, or inspection or other means that would warrant the Commission to refuse to grant a license on the original application, or for failure to operate the facility in accordance with the terms of the license, or for any violation of or failure to observe any of the terms and conditions of the TRCA or other applicable law or the license or of any rule or order of the Commission.
58. The Commission may incorporate in this license at the time of issuance, or thereafter, by appropriate rule or order, additional requirements and conditions with respect to the Licensee's receipt, possession, and disposal of by-product material as it deems appropriate or necessary in order to: (1) protect the health and safety of the public and the environment; or (2) require reports and recordkeeping and to provide for inspections of activities under the license that may be necessary or appropriate to effectuate the purposes of the TRCA and rules thereunder.



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59. A. Except as specifically provided otherwise by this license, the licensee shall possess and use the radioactive material authorized by this license in accordance with statements, representations, and procedures contained in the following:

application dated January 24, 1997 and amendment dated May 2, 1997, including Appendices Volume I-V, Site and Facility Drawings, and Drawing Specification;

letters dated January 14, 1998 (signed by Allen Messenger); March 5, 1998 (with Andrews Site Organizational Chart and vice president operations/facility manager, radiation safety officer, and operations manager position descriptions attachments) and October 6, 1998 (with attachments); February 3, 1999; and April 23, 1999 (with attachments and enclosures, including WCS Work Instructions for CMDU2, dated April 9, 1999, WI99-1.2 and Attachment A to WI99-1.2); May 3, 1999 (signed by Allen Messenger); September 9, 1999 (with attachments), October 6, 1999 (with attachments, including wCs Work Instruction for the Commodore D/2 Unit, WI99-1.16) and October 7, 1999 (with attachments); August 21, 2000 (with attachments); October 6, 2000 (with attachments); October 10, 2000 (with enclosures titled "Waste Control Specialists Stack Sampling Configuration" and "Generic Stack Schematic"); December 22, 2000 (with enclosure titled "SL2 Description and Information" consisting of 7 pages); May 23, 2003 (signed by Stephen L. Cook, P.E.); October 28, 2004;

Drawing titled "Loading Bay & Employee Center Addition", Sheet A1, dated 7-10-00, Rev. 1 dated 7-20-00, depicting Floor Plan, from the firm of Nesser, Prestidge, Smith, Razloznik Architects, Inc. of Carlsbad, NM, received in the Bureau of Radiation Control on October 10, 2000;

Drawing titled "Loading Bay & Employee Center Addition", Sheet A2, 4 of 9, dated 7-10-00, Rev 1 dated 7-20-00, depicting Enlarged Partial Floor Plan, from the firm of Nesser, Prestidge, Smith, Razloznik Architects, Inc. of Carlsbad, NM, received in the Bureau of Radiation Control on October 10, 2000;

Drawing titled "Loading Bay & Employee Center Addition", Sheet A3, 5 of 9, dated 7-10-00, Rev 1 dated 7-20-00, depicting (1) North, (2) East, (3) South and (4) West Exterior Elevations, from the firm of Nesser, Prestidge, Smith, Razloznik Architects, Inc. of Carlsbad, NM, received in the Bureau of Radiation Control on October 10, 2000;

Drawing titled "Loading Bay & Employee Center Addition", Sheet A4, 6 of 9, dated 7-10-00, Rev 1 dated 7-20-00, depicting (1) Enlarged Partial Building Section and (2) Building Section, from the firm of Nesser, Prestidge, Smith, Razloznik Architects, Inc. of Carlsbad, NM, received in the Bureau of Radiation Control on October 10, 2000;

Drawing titled "Loading Bay & Employee Center Addition", Sheet A5, 7 of 9, dated 7-10-00, Rev 1 dated 7-20-00, depicting (1) Enlarged Partial Building Section, (2) Enlarged Partial Building Section, and (3) wall section, from the firm of Nesser, Prestidge, Smith, Razloznik Architects, Inc. of Carlsbad, NM, received in the Bureau of Radiation Control on October 10, 2000;



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Drawing titled "Loading Bay & Employee Center Addition", Sheet S1, 1 of 2, dated 7-10-00, Rev 1 dated 7-20-00, identified as Foundation Plan depicting (1) Bollard Detail and (2) Column Tie Footing, (3) Grade Beam Footing @ Door, (4) Grade Beam Footing, and (5) Main Frame Footing, from the firm of Nesser, Prestidge, Smith, Razloznik Architects, Inc. of Carlsbad, NM, received in the Bureau of Radiation Control on October 10, 2000;

Drawing titled "Loading Bay & Employee Center Addition", Sheet S2, 2 of 2, dated 7-10-00, Rev 1 dated 7-20-00, identified as Foundation Plan and Framing Plan, from the firm of Nesser,

Prestidge, Smith, Razloznik Architects, Inc. of Carlsbad, NM, received in the Bureau of Radiation Control on October 10, 2000;

Drawing titled "Loading Bay & Employee Center Addition", Sheet M101, dated 7/19/00, identified as plumbing Plan, from the firms of Smith Engineering Company of Albuquerque, NM, James O. Coupland, and Nesser, Prestidge, Smith, Razloznik Architects, Inc. of Carlsbad, NM, received in the Bureau of Radiation Control on October 10, 2000;

Drawing titled "Loading Bay & Employee Center Addition", Sheet M201, dated 7/19/00, depicting (1) HVAC Plan and (2) Enlarged Mechanical Plan, from the firms of Smith Engineering Company of Albuquerque, NM, James O. Coupland, and Nesser, Prestidge, Smith, Razloznik Architects, Inc. of Carlsbad, NM, received in the Bureau of Radiation Control on October 10, 2000;

Drawing titled "Loading Bay & Employee Center Addition", Sheet M401, dated 7/19/00, depicting (1) Filtered Exhaust System Control Diagram, (2) Breathing Air Alarm System, and (3) Air Handling Unit Detail, from the firms of Smith Engineering Company of Albuquerque, NM, James O. Coupland, and Nesser, Prestidge, Smith, Razloznik Architects, Inc. of Carlsbad, NM, received in the Bureau of Radiation Control on October 10, 2000;

Drawing titled "Loading Bay & Employee Center Addition", Sheet M501, dated 7/19/00, depicting (1) Gooseneck Detail, (2) Holding Tank Detail, (3) Exhaust Fan EF-3 Support, (4) Valve Box Detail, (5) Vent Thru Roof Detail, (6) Water Heater Detail, (7) Flue Thru Roof Detail, and (8) Clean Out Detail, from the firms of Smith Engineering Company of Albuquerque, NM, James O. Coupland, and Nesser, Prestidge, Smith, Razloznik Architects, Inc. of Carlsbad, NM, received in the Bureau of Radiation Control on October 10, 2000;

Drawing titled "Loading Bay & Employee Center Addition", Sheet M602, dated 7/19/00, depicting the Equipment Schedule, from the firms of Smith Engineering Company of Albuquerque, NM, James O. Coupland, and Nesser, Prestidge, Smith, Razloznik Architects, Inc. of Carlsbad, NM, received in the Bureau of Radiation Control on October 10, 2000;

Drawing titled "Wall Penetration at Permacon for AMEC/Geomelt Melt Cables" date issued 03-25-



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59. A. (Continued)

Drawing titled "Wall Penetration at Permacon for AMEC/Geomelt Vent Pipe" date issued 03-25-2003;

Procedure titled "Processing Mixed Waste," Issue Date: 9/18/98, Rev. 1 (replaces Rev. 0);

Procedure titled "Receipt and Storage of Radioactive and Mixed Waste," Issue Date: 9/18/98, Rev. 1 (replaces Rev. 0);

Procedure titled "KO61 and Incident Related Material Stabilization Process," reference no.: OP-1.4.7, Issue Date: 9/18/98, Rev. 1 (replaces Rev. 0); and

Procedure titled "Survey Sample Analysis and Activity Calculation," reference no.: RS-3.3.62, Issue Date: 6/23/98, Rev. 0.

Procedure titled "Bulk Solidification/Stabilization Operations", reference no.: OP-1.4.10, Revision 0, Issue Date 8/16/00;

Procedure titled "Prentice Arm Operations", reference no.: OP-1.4.11, Revision 0, Issue Date 8/18/00;

Procedure titled "Shredder Operations", reference no.: OP-1.4.12, Revision 0, Issue Dated 8/18/00;

Procedure titled "Decontamination of Material", reference no.: OP-1.4.8, Revision 0, Issue Date 4/25/99;

Procedure titled "Release of Items from Controlled Areas and the Facility", reference no.: RS-4.4.1, Revision 1, Issue Date 1/16/01 (excluding Section 3.7), new section 4.6 (see letter dated May 17, 2004), and Sampling Protocol reference no.: AL-2.0.1, Revision 0;

Responses for TDH dated January 16, 2001 (enclosure of letter dated January 16, 2001);

Procedure titled "Special Nuclear Material Exemption Certification", reference no.: OP-1.2.22, Revision 0 (With respect to special nuclear material, the provisions of this procedure will supercede any other procedures in which there is conflict, the word "should" in these procedures shall be interpreted as meaning "shall", and the title of the referenced procedure RS-1.4.2 is understood to actually be "Chain of Custody Record".);

Procedure titled "Chain of Custody Record", reference no.: RS-1.4.2, Revision 5, Effective Date 08/11/00;



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59. A. (Continued)

Document titled “In-Container Vitrification Treatability Demonstration of Mixed TSCA Low Level Radioactive Waste” dated April 2004 (revision 6);

Document titled “Intermediate Scale Geomelt System; Safe Operating Procedure (SOP)” dated May 7, 2003; and responses made in the letter dated May 23, 2003, signed by Stephen L. Cook, P.E; and

Procedure titled “Operation of the Marion Paddle Mixer, Model #3061”, reference no.: OP-

1.4.16 Revision 0, Issue Date 5/7/04.

Title 30 of the TAC Chapter 336 shall prevail over statements contained in the above documents, unless such statements are more restrictive than the regulations.

B. The licensee shall comply with the requirements described in the DSHS letter dated October 24, 2005, and attached document entitled "Increased Controls for Licensees that Possess Sources Containing Radioactive Material Quantities of Concern." The licensee shall complete implementation of said requirements within 6 months from the issuance of license amendment 37 or the first day that radionuclides in quantities of concern are possessed at or above the limits specified in Table 1 of the attachment, whichever is later. Within 30 days after the implementation of the requirements of this condition, the licensee shall notify the Radiation Safety Licensing Branch in writing that it has completed the requirements of this condition.

C. **The licensee shall comply with the requirements described in the Nuclear Regulatory Commission Order EA-07-305 (the Order). The licensee shall complete implementation of said requirements by October 1, 2008. The licensee shall notify the Executive Director when the licensee has achieved full compliance with the requirements described in the Order. The notification shall be made within twenty-five (25) days after full compliance has been achieved. This notification shall include a certification that the Trustworthiness and Reliability (T&R) Official (and any subsequent T&R Official) have themselves been deemed trustworthy and reliable by the Licensee as required in paragraph B.2. of the Order. The licensee shall notify the Executive Director within 24 hours if the results from a criminal history records check indicate that an individual is identified on the FBI’s Terrorist Screening Data Base.**

HTW:hw

FOR THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Date

Susan Jablonski, Division Director



Texas Commission on Environmental Quality
RADIOACTIVE MATERIAL LICENSE

DRAFT

LICENSE NUMBER	AMENDMENT NUMBER
R04971	45

Radioactive Materials Division