



South Texas Project Electric Generating Station P.O. Box 289 Wadsworth, Texas 77483

August 14, 2018  
NOC-AE-18003591  
File No. W13

Brian Holian  
Acting Director, Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
One White Flint North (13H16)  
11555 Rockville Pike  
Rockville, MD 20852

South Texas Project  
Units 1 and 2  
Docket No. STN 50-498 and STN 50-499  
STPNOC Agreement for Disposal of Very Low-Level Radioactive Material

- References:
1. Letter from R.A. Gangluff, STPNOC, to S. Jablonski, TCEQ, "Exemption of Waste Streams Containing Trace Quantities of Radioactive Material", March 5, 2008 (NOC-TX-08017813)
  2. Letter from H. Weger, TCEQ, to R.A. Gangluff, STPNOC, "Exemption Concurrence Request Log No. 2007-11-0007" (TX-NOC-08018077)

During a recent NRC Radiation Safety team inspection, it was brought to the attention of South Texas Project Nuclear Operating Company (STPNOC) that the NRC's position regarding disposal of very low level radioactive waste, hereafter referred to as exempt quantity waste, has changed. STPNOC is writing this letter to request that the NRC acknowledge the existing durable agreement STPNOC has with the State of Texas for disposal of exempt quantity waste streams and that the NRC's change in position does not apply retroactively to STPNOC's existing agreement with the State of Texas.

A recent Radiation Safety team inspection included a review of shipments of exempt quantity waste shipped to an industrial landfill located within the State of Texas pursuant to a determination issued by the Texas Commission on Environmental Quality (TCEQ) in 2008. In its determination, the TCEQ concludes that the specified waste streams are exempt under the relevant provisions of the Texas Administrative Code (TAC) and could be disposed of in a Texas Class 1 or 2 industrial landfill. The shipments are included in the South Texas Project Electric Generating Station (STPEGS) 2017 Radioactive Effluent Release Report (Units 1 and 2).

During the inspection, STPNOC was informed that the NRC was considering issuing a minor violation because, although the TCEQ had concurred with this method of disposal, there was no separate approval issued by the NRC. It is our understanding that the basis for the potential minor violation is STPNOC's alleged failure to comply with Regulatory Issue Summary 2016-11, *Requests to Dispose of Very Low-Level Radioactive Waste Pursuant to 10 CFR 20.2002* (RIS-2016-11), dated November 13, 2016.

STI: 34705831

RIS-2016-11 “makes the clarification that any licensee’s request for approval to dispose of licensed material under 10 CFR 20.2002, or the equivalent Agreement State regulations, must be submitted to the regulatory authority that issued the license for use of the radioactive material.”<sup>1</sup> This direction is contrary to the agency guidance that was previously provided in Information Notice (IN) 86-90: *Requests to Dispose of Very Low-Level Radioactive Waste Pursuant to 10 CFR 20.302* (IN 86-90), dated November 3, 1986. Specifically, IN 86-90 directed reactor licensees located in Agreement States to submit applications for alternate disposal methods to the Agreement State, rather than the NRC. This guidance was in effect until the issuance of RIS-2016-11 in 2016. Although the guidance provided in RIS-2016-11 is described as “supersed[ing] Information Notice (IN) 1986-90,” the RIS also states that it required “no action or written response” from licensees and was not a backfit pursuant to any of the NRC’s backfitting or issue finality provisions.<sup>2</sup>

Consistent with the operative guidance in place at the time (*i.e.*, IN 86-90), and given that the STPEGS is located entirely in the State of Texas and Texas is an Agreement State, in March 2008 STPNOC sought concurrence from the State of Texas for the disposal of certain exempt quantity waste streams within the State of Texas. That same month, STPNOC obtained a determination from the TCEQ that specific waste streams containing trace quantities of radioactive material are considered exempt under the TAC. Under the conditions of its determination, the TCEQ concurred with STPNOC’s request to allow disposal of these specific waste streams, which contain radionuclide concentrations and quantities below the limits specified in the TAC, in Class 1 or 2 industrial landfills within the State of Texas. There is no sunset clause or other time-limiting condition in the TCEQ’s approval of this disposal method. STPNOC’s shipping of specified exempt quantity waste to an industrial landfill under the conditions and terms established by the TCEQ does not constitute a safety issue or hazard to the public or the environment. STPNOC verifies that the activity levels and amounts of exempt quantity waste shipments meet the requirements and conditions specified in the TCEQ’s determination.

Contrary to the express language in RIS-2016-11, STPNOC now understands that the NRC may be interpreting the document to require STPNOC to submit a duplicate request for NRC approval of methods of disposal for exempt quantity wastes that are already covered by the exemption agreement issued by the State of Texas. The potential violation communicated to STPNOC during our recent Radiation Safety team inspection is not safety-significant, but has the potential to significantly impact STPNOC’s low-level radioactive waste management practices and procedures in the near future. Specifically, given the position taken by the NRC during our recent inspection, STPNOC has suspended its practice of shipping exempt quantity waste offsite for disposal, leaving STPNOC in the position of storing this material onsite until the issue has been resolved.

The station currently has approximately two months of onsite storage capacity available to accommodate exempt quantity waste. The station will need to obtain extra storage capacity by October 2018, or begin shipping exempted quantity waste to a Part 61 disposal facility at that time. Both onsite storage and shipment to a Part 61 facility represent a substantial logistical and financial hardship to the station, with no additional safety benefit. Further, shipping exempt quantity waste to a Part 61 disposal facility will result in significantly increased transportation distances and will unnecessarily reduce overall disposal capacity at a Part 61 facility with no commensurate safety benefit.

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<sup>1</sup> RIS-2016-11, pg. 2

<sup>2</sup> RIS-2016-11, at pg. 3, “Any action that licensees take to implement changes or procedures in accordance with the information contained in this RIS ensures compliance with current regulations, is strictly voluntary, and, therefore, is not a backfit...” *Id.*

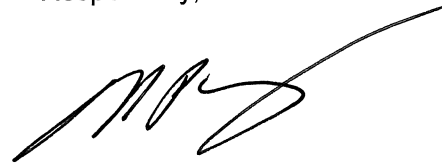
STPNOC believes that the site's disposal practice for exempt quantity waste, undertaken pursuant to a long-standing agreement with TCEQ that predates RIS-2016-11 by eight years, is appropriately authorized. However, given the significant near-term impacts on STPNOC's exempt quantity waste management practices, our specific request focuses on expeditiously resolving this issue rather than disputing the positions in RIS-2016-11 or the merits of the alleged minor violation.<sup>3</sup>

In conclusion, per the discussion provided above, STPNOC requests that the NRC acknowledge the existing durable agreement STPNOC has with the State of Texas for disposal of exempt quantity waste streams and that the NRC's change in position does not apply retroactively to STPNOC's existing agreement with the State of Texas.

There are no commitments in this letter.

Please contact me at (361)972-8164 for questions regarding this manner.

Respectfully,



Michael Murray  
Regulatory Affairs Manager

PLT/WEB

- Attachments:
1. Letter from STPNOC to TCEQ, "Exemption of Waste Streams Containing Trace Quantities of Radioactive Material"
  2. Letter from TCEQ to STPNOC, "Exemption Concurrence Request, Log No. 2007-11-0007"

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<sup>3</sup> While not the focus of this letter, STPNOC reserves the right to dispute any violation that is ultimately issued as a result of the inspection referred to in this letter, pursuant to the NRC's standard inspection and enforcement processes.

cc:

Heather Gepford  
Branch Chief, Region IV  
U.S. Nuclear Regulatory Commission  
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Arlington, TX 76011-4511

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Rockville, MD 20852

NRC Resident Inspector  
U. S. Nuclear Regulatory Commission  
P. O. Box 289, Mail Code: MN116  
Wadsworth, TX 77483

U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555-0001

**Attachment 1**

**Letter from STPNOC to TCEQ,  
“Exemption of Waste Streams Containing Trace Quantities of Radioactive Material”**



South Texas Project Electric Generating Station P.O. Box 289 Wadsworth, Texas 77483

March 5, 2008  
NOC-TX-08017813  
PFN: W13  
STI No. 32272638

Ms. Susan Jablonski, Director  
Radioactive Materials Division  
Texas Commission on Environmental Quality  
P. O. Box 13087  
Austin, Texas 78711-3087

SUBJECT: EXEMPTION OF WASTE STREAMS CONTAINING TRACE QUANTITIES  
OF RADIOACTIVE MATERIAL

Dear Ms. Jablonski,

STP Nuclear Operating Company requests that the Texas Commission on Environmental Quality exempt certain waste streams (dewatered sludge, ion exchange or other purification media, ventilation filtration media, soil and other similar waste streams) generated at the South Texas Project Electric Generation Station (STPEGS) from the radioactive material regulations. Approval for disposal of very low-level radioactive waste generated by Nuclear Regulatory Commission licensed nuclear power plants located within Agreement States is within the regulatory jurisdiction of the Agreement State in which the waste is generated.

The waste to be disposed of is dewatered sludge or sanitary sludge removed from the STPEGS wastewater treatment systems, ion exchange media or other purification media used in water treatment, filter media used in ventilation systems, soil and other similar waste streams. These wastes were previously disposed of in a Texas Class 1 or 2 industrial landfill prior to detection of tritium and trace gamma activity. They have since been shipped to an industrial landfill in Tennessee for disposal as radioactive waste or are being stored onsite. With the exemption, these waste streams could be disposed of in a Texas Class 1 or 2 industrial landfill. These waste streams would not be combined and would be individually profiled with the waste disposal facility based on waste classification.

Exempt concentrations and quantity limits for radioactive material other than source material is established in Chapter 25 Texas Administrative Code Section 289.251(e). These limits suggest that radionuclide concentrations and quantities below these limits do not represent a hazard to the public or environment.

Tritium concentrations are determined using liquid scintillation techniques. Radionuclide analyses are performed using a gamma spectroscopy system. STP Nuclear Operating Company will sample and analyze these waste streams in accordance with station procedures that provide assurance of an accurate determination of the type and quantity of radioactive material in these waste streams prior to shipment for disposal. The quality assurance program for analytical measurements is in accordance with Title 10 of the Code of Federal Regulations, Part 50,

Ms. Susan Jablonski

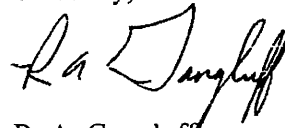
March 5, 2008

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Appendix B. An Interlaboratory Comparison Program is maintained to ensure that independent checks on the precision and accuracy of the measurements of radioactive materials are performed as part of the quality assurance program. The program demonstrates the ability to measure low levels of relevant radionuclides. The intercomparison program maintains National Institute of Standards and Technology traceability. These measurements will ensure that regulatory limits are not exceeded. Records of these surveys, analyses, calculations and shipping manifests will be retained in our Records Management System. The radioactivity in waste shipments is also quantified and reported to the Nuclear Regulatory Commission in the Annual Radioactive Effluent Release Report.

In summary, STP Nuclear Operating Company requests that these very low-level contaminated waste streams generated at the South Texas Project Electric Generating Station be exempted from the radioactive material regulations to allow disposal in a Texas Class 1 or 2 industrial landfill. If you have any questions or require additional information, please contact Ms. S. L. Dannhardt at (361) 972-8328.

Sincerely,

A handwritten signature in black ink, appearing to read 'R. A. Gangluff', with a stylized flourish at the end.

R. A. Gangluff  
Chemistry, Environmental  
and Health Physics Manager

/sld

Ms. Susan Jablonski

March 5, 2008

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bcc: K. L. Coates

S. M. Head

W. T. Bullard

D. J. Bryant

G. E. Williams

K. M. Cunningham

K. W. Reynolds

Correspondence, N2002



**Attachment 2**

**Letter from TCEQ to STPNOC,  
“Exemption Concurrence Request, Log No. 2007-11-0007”**

Buddy Garcia, *Chairman*  
Larry R. Soward, *Commissioner*  
Bryan W. Shaw, Ph.D., *Commissioner*  
Glenn Shankle, *Executive Director*



TX-NOC-08018077  
PFN: W13  
STI No. 32308950

**Texas Commission on Environmental Quality**  
*Protecting Texas by Reducing and Preventing Pollution*

March 7, 2008

STP NUCLEAR OPERATING CO  
SOUTH TEXAS PROJECT  
ELECTRIC GENERATING STATION  
ATTN: R. A. GANGLUFF  
PO BOX 289  
WADSWORTH TX 77483

Re: Exemption Concurrence Request  
Log No. 2007-11-0007

Dear Mr. Gangluff:

Please be advised that the Texas Commission on Environmental Quality has determined that the contaminated dewatered sludge, ion exchange or other purification media, ventilation filtration media, soil and other similar waste streams generated at the South Texas Project Electric Generation Station (STPEGS), described in your letter of March 5, 2008, are exempt under the provisions of Chapter 25 of the Texas Administrative Code (TAC) Section (§) 289.251(e) and 30 TAC §336.5(c) provided that the waste is sampled, as described in your letter of March 5, 2008, to verify that the tritium and other radionuclide levels do not exceed the limits found in 25 TAC §289.251(m).

Please let me know if I may answer any questions regarding this determination. I can be reached by telephone at 512-239-6465 or by e-mail at [hweger@tceq.state.tx.us](mailto:hweger@tceq.state.tx.us).

Sincerely,

A handwritten signature in cursive script, appearing to read "Hans Weger".

Hans Weger, Ph.D.  
Waste License Reviewer  
Radioactive Material Division

cc: Katherine Nelson, TCEQ  
Sandy Dannhardt, STPEGS