



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

November 30, 2022

Mr. G. T. Powell
President and Chief Executive Officer
STP Nuclear Operating Company
P.O. Box 289
Wadsworth, TX 77483
Addressee

SUBJECT: SOUTH TEXAS PROJECT, UNITS 1 AND 2 – ENVIRONMENTAL
ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT RELATED TO
ALTERNATE DISPOSAL PROCEDURES FOR VERY LOW-LEVEL
RADIOACTIVE MATERIAL (EPID L-2021-LLL-0022)

Dear Mr. Powell:

Enclosed is a copy of the Environmental Assessment and Finding of No Significant Impact related to your alternate disposal request dated November 4, 2021, as supplemented on December 3, 2021, August 19, 2022, and November 22, 2022. The proposed alternate disposal request would allow the disposal of specific low-level waste generated at South Texas Project, Units 1 and 2 at Texas Class 1 and 2 industrial landfills.

The Environmental Assessment and Finding of No Significant Impact is being forwarded to the Office of the Federal Register for publication. If you have any questions, please contact me at 301-415-6256 or via email at Dennis.Galvin@nrc.gov.

Sincerely,

/RA/

Dennis J Galvin, Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-498 and 50-499

Enclosure:
Environmental Assessment

cc: Listserv

ENCLOSURE

ENVIRONMENTAL ASSESSMENT AND FINDING OF NO
SIGNIFICANT IMPACT

STP NUCLEAR OPERATING COMPANY

SOUTH TEXAS PROJECT, UNITS 1 AND 2

DOCKET NOS. 50-498 AND 50-499

NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50-498 and 50-499; NRC-2022-0206]

STP Nuclear Operating Company

South Texas Project, Units 1 and 2

AGENCY: Nuclear Regulatory Commission.

ACTION: Environmental assessment and finding of no significant impact; issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is issuing an environmental assessment (EA) and finding of no significant impact (FONSI) under the National Environmental Policy Act of 1969 (NEPA) and NRC's regulations. This EA summarizes the results of the NRC staff's environmental review, which evaluates the potential environmental impacts of approving an alternate disposal request in response to a request from STP Nuclear Operating Company (STPNOC) for Renewed Facility Operating Licenses NPF-76 and NPF-80 for South Texas Project, Units 1 and 2 (STP). Specifically, the alternate disposal request, if approved, would allow the licensee to dispose of very-low-level waste (VLLW) generated during day-to-day operations at the STP reactor site at Texas Class 1 or Class 2 industrial landfills.

DATES: The EA and FONSI referenced in this document are available on December 5, 2022.

ADDRESSES: Please refer to Docket ID **NRC-2022-0206** when contacting the NRC about the availability of information regarding this document. You may obtain publicly available information related to this document using any of the following methods:

- **Federal Rulemaking Website:** Go to <https://www.regulations.gov> and search for Docket ID **NRC-2022-0206**. Address questions about Docket IDs in Regulations.gov to Stacy Schumann; telephone: 301-415-0624; email:

Stacy.Schumann@nrc.gov. For technical questions, contact the individual listed in the “For Further Information Contact” section of this document.

- **NRC’s Agencywide Documents Access and Management System**

(ADAMS): You may obtain publicly available documents online in the ADAMS Public Documents collection at <https://www.nrc.gov/reading-rm/adams.html>. To begin the search, select “Begin Web-based ADAMS Search.” For problems with ADAMS, please contact the NRC’s Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by email to PDR.Resource@nrc.gov. For the convenience of the reader, instructions about obtaining materials referenced in this document are provide in the “Availability of Documents” section.

- **NRC’s PDR:** You may examine and purchase copies of public documents, by appointment, at the NRC’s PDR, Room P1 B35, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852. To make an appointment to visit the PDR, please send an email to PDR.Resource@nrc.gov or call 1-800-397-4209 or 301-415-4737, between 8:00 a.m. and 4:00 p.m. Eastern Time (ET), Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Dennis Galvin, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, telephone: 301-415-6256, email: Dennis.Galvin@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Introduction

The NRC is considering the approval of an alternate disposal request, dated November 4, 2021, as supplemented by letters dated December 3, 2021, August 19, 2022, and November 22, 2022, from STPNOC for waste material containing VLLW generated during day-to-day operations at the STP reactor site, located in

Matagorda County, Texas, for ultimate disposal at Texas Class 1 or Class 2 industrial landfills.¹ The August 19, 2022, STPNOC letter was in response to the NRC request for information, dated July 20, 2022. The term “VLLW” is generally understood as material created during the conduct of NRC- or Agreement State-licensed activities that contains some residual radioactivity, including naturally occurring radionuclides, that may be safely disposed in hazardous or municipal solid waste landfills. VLLW represents a small fraction of the hazard of waste at the Class A limits in Part 61 of title 10 of the *Code of Federal Regulations* (10 CFR), “Licensing Requirements for Land Disposal of Radioactive Waste.”

NUREG-1437, “Generic Environmental Impact Statement for License Renewal of Nuclear Plants” dated June 2013 (hereafter, the Generic Environmental Impact Statement or GEIS), Section 3.1.4.3, “Solid Radioactive Waste,” addresses solid low-level waste (LLW) as follows:

Solid [LLW] from nuclear power plants is generated from the removal of radionuclides from liquid waste streams, filtration of airborne gaseous emissions, and removal of contaminated material from various reactor areas. Liquid contaminated with radionuclides comes from primary and secondary coolant systems, spent fuel pools, decontaminated wastewater, and laboratory operations.

Solid waste is packaged in containers to meet the applicable requirements of [Department of Transportation’s regulations at] 49 CFR Parts 171 through 177. Disposal and transportation are performed in accordance with the NRC’s applicable requirements of 10 CFR Part 61 and 10 CFR Part 71, respectively.

Solid radioactive waste generated during operations is shipped to a LLW processor or directly to a [10 CFR Part 61] LLW disposal site.

As noted in Supplement 48 to NUREG-1437, “Generic Environmental Impact State for License Renewal, Supplement 48: Regarding South Texas Project, Units 1

¹ Texas Class 1 or Class 2 industrial landfills refer to landfills permitted to accept Class 1 or Class 2 waste as defined by Texas regulations in 30 Texas Administrative Code 335 Subchapter R.

and 2” dated November 2013 (hereafter, the Supplemental Environmental Impact Statement or SEIS), the SEIS generated as part of the STP license renewal process,² a solid waste processing system is maintained onsite at STP designed to process, package, and store solid radioactive wastes generated by plant operations until they are shipped offsite to a vendor for further processing or for permanent disposal at a 10 CFR Part 61 LLW disposal facility.

The waste being considered in the licensee’s alternate disposal request includes dewatered sewage sludge, ion exchange media, desiccant, ventilation filtration media, and soil that originated from the secondary side of plant operations. Rather than disposal at a 10 CFR Part 61 LLW disposal site, the licensee is requesting approval to dispose of the waste at Texas Class 1 or Class 2 industrial landfills in accordance with 10 CFR 20.2002, “Method for obtaining approval of proposed disposal procedures.”

In accordance with NRC guidance outlined in All Agreement States letter Office of Federal and State Materials and Environmental Management Programs (FSME)-12-025, “Clarification of the Authorization for Alternate Disposal of Material Issued Under 10 CFR 20.2002 and Exemption Provisions In 10 CFR,” dated March 13, 2012, and Regulatory Information Summary-2016-11, “Requests to Dispose of Very Low-Level Radioactive Waste Pursuant to 10 CFR 20.2002,” dated November 13, 2016, approval of the requested action requires authorization from both the NRC and the State of Texas. In order to release the waste from the NRC license and allow it to be disposed in accordance with the request, a review must be performed by the NRC as the regulatory agency that issued the license. Texas, which is an NRC Agreement State, maintains the regulatory authority over the Class 1 and Class 2 industrial landfills being considered for the disposal of the waste in question and, thus, maintains responsibility for approving the

² The license was renewed on September 28, 2017.

disposal of the requested waste and ensuring that the disposal actions are performed in accordance with regulations described in the Texas Administrative Code (TAC).³

The requested action of releasing the waste from the licensee's authority is a licensing action and, per NRC requirements in 10 CFR Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions," this action requires an evaluation of environmental impacts associated with the requested action. The NRC staff has prepared this EA⁴ in accordance with NRC requirements in 10 CFR 51.21, "Criteria for and identification of licensing and regulatory actions requiring environmental assessments," and 51.30, "Environmental assessment," and with the associated guidance in NUREG-1748, "Environmental Review Guidance for Licensing Actions Associated with NMSS [the Office of Nuclear Material Safety and Safeguards] Programs," dated August 2003, and the Office of Nuclear Reactor Regulation (NRR) Office Instruction LIC-203, "Procedural Guidance for Categorical Exclusions, Environmental Assessments, and Considering Environmental Issues," dated July 2020. This EA evaluates the licensee's requested action of releasing the waste which is regulated by the NRC and the connected action⁵ of transporting the waste for disposal at an industrial landfill, which is regulated by Texas.

³ Specific regulations can be found at: <https://www.sos.state.tx.us/tac/index.html>.

⁴ In 10 CFR 51.14, "Definitions," an EA is defined as "a concise public document for which the Commission is responsible that serves to: (1) [b]riefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact; (2) [a]id the Commission's compliance with NEPA when no environmental impact statement is necessary; and (3) [f]acilitate preparation of an environmental impact statement when one is necessary."

⁵ Connected actions are actions that are closely related and therefore should be discussed in the same assessment. Actions are connected if they: (i) Automatically trigger other actions that may require environmental impact statements; (ii) Cannot or will not proceed unless other actions are taken previously or simultaneously; or (iii) Are interdependent parts of a larger action and depend on the larger action for their justification.

II. Environmental Assessment

Description of the Proposed Action

The proposed action consists of the licensee's 10 CFR 20.2002 alternate disposal request to release the VLLW waste generated from STP waste management operational activities and disposing of it at an existing Texas Class 1 or Class 2 industrial landfill. Per established procedures and in compliance with NRC regulations, the licensee would continue onsite operations related to the processing, packaging, and shipping of the VLLW offsite, which are described in Section 11.4, "Solid Waste Management System," of the STP Updated Final Safety Analysis Report. For example, waste is held, pending transport, in the STP Environmental Yard as described in plant procedures for packaging and shipment of waste materials, as discussed in the STPNOC letter, dated December 3, 2021. No additional construction activities or operational changes at STP are required to prepare the waste onsite for transportation and for ultimate disposal, as discussed in the STPNOC letter, dated August 19, 2022.

The proposed action, which involves annual shipments of approximately 51 cubic meters (m^3) per year of material, results in individual shipping volumes ranging from 4.25 m^3 to 10.2 m^3 per shipment depending on the number of shipments. These volumes are minimal relative to annual volumes being disposed at Texas Class 1 or Class 2 industrial landfills. For example, according to the STPNOC 2020 annual radioactive effluent release report, the licensee disposed of a total of 59.6 m^3 of VLLW at the Blue Ridge Landfill. A review of the Texas Commission on Environmental Quality (TCEQ) reports, "Municipal Solid Waste in Texas: A Year in Review, 2019 Data Summary and Analysis" and "Municipal Solid Waste in Texas: A Year in Review, 2020 Data Summary and Analysis," indicated that the Blue Ridge Landfill received and disposed of approximately $1,300,000 \text{ m}^3$ of similar material in the 2020 reporting year.

The waste would be transported per Department of Transportation regulations to Texas Class 1 or Class 2 industrial landfills authorized to accept the material. The material being considered for disposal in the requested action will be shipped from STP to the industrial landfill in B-25 boxes or 55-gallon drums on trucks or, in some cases, vacuum trucks. Upon arrival at the landfill, disposal actions will be performed in accordance with established procedures and consistent with Texas regulations. Texas would maintain oversight and regulatory authority of the disposal actions related to the proposed action.

Need for the Proposed Action

The purpose and need for the proposed action are to authorize a safe and appropriate method for disposing of material containing VLLW generated during operations at STP. The proposed action would expand the licensee's options for dispositioning this VLLW, allowing disposal at Texas Class 1 or Class 2 industrial landfills, as well as at a 10 CFR Part 61 LLW disposal site. Approval of the proposed action would allow the specified waste generated during operations to be sent to industrial landfills permitted by Texas to receive the waste for disposal and allow STP to continue operation. The proposed action would also satisfy the regulatory requirements regarding the disposal of VLLW in accordance with NRC regulations as noted in the NRC's letter to STPNOC, dated August 10, 2021.

Alternatives to the Proposed Action

As an alternative to the proposed action, the NRC staff considered the no-action alternative in which the NRC staff would deny the disposal request. Denial of the request would require STP to dispose of the VLLW at a 10 CFR Part 61 LLW disposal site or submit an alternate disposal request that considers another option for disposing of the material.

Affected Environment including Environmental Characteristics

The affected environment of the facilities and processes associated with the onsite waste management activities at STP is described in Chapter 2, “Affected Environment,” of the SEIS.

The environmental characteristics would be expected to vary among approved Texas Class 1 or Class 2 industrial landfills due to their locations and modes of operation. Texas is responsible for approving the construction of landfills within the state and overseeing their operations. Specifically, Texas regulations in TAC Title 30 Chapter 330, “Municipal Solid Waste,” which address siting, construction, and operations of specific landfills, consider the environmental characteristics of individual landfills at the time of permitting.

Ideally for the licensee, due to increase cost for transportation and radiological risk, the landfill selected for disposal would be close to the STP site in Matagorda County, Texas. Therefore, the affected environment described for the STP SEIS, specifically Chapter 2, “Affected Environment,” could be similar to the selected landfill affected environment. In addition, the NRC staff considered the affected environment for a landfill (1) located close to the STP site in Matagorda County, (2) known to have been used previously by STP (i.e., Blue Ridge Landfill), and (3) located outside of Matagorda County.

If the licensee chooses a landfill that is outside of Matagorda County, it makes sense that the selected landfill would be a short distance from STP in order to minimize potential transportation and radiological impacts. In the past, STP has disposed of waste at Blue Ridge Landfill located in Fresno, Texas (Fort Bend County). In addition, several neighboring counties surrounding Matagorda County have operating landfills (e.g., Fort Bend, Brazoria, Wharton, and Jackson).

Several Federal and State agencies have prepared environmental impact statements (EISs) for their proposed actions, which include a description of the affected environment in these counties, including “U.S. Department of Energy W.A. Parish Post-Combustion CO₂ Capture and Sequestration Project Final Environmental Impact Statement.” The W.A. Parish EIS describes the affected environment of Fort Bend County (which is where the Blue Ridge Landfill is located) covering the resource areas of air quality and climate (Section 3.2); geology, soils, and land use (Sections 3.4, 3.5 and 3.11); water resources (Sections 3.6, 3.7 and 3.8); ecological resources (Section 3.9); cultural resources (Section 3.10); traffic and transportation (Section 3.12); and socioeconomics (Section 3.18).

Should STP choose a landfill besides Blue Ridge Landfill which is located outside of Matagorda County, the W.A. Parish EIS also describes the previously mentioned affected resources areas in Jackson County, Brazoria, or Wharton Counties.

Environmental Impacts of the Proposed Action

This section identifies and evaluates the anticipated environmental impacts associated with implementing the proposed action. This includes consideration of the actions performed at STP, the transportation of the material to the selected Texas Class 1 or Class 2 industrial landfill, and impacts related to the actions performed at the industrial landfill.

The first part of the proposed action considered waste management operational tasks previously evaluated and approved by the NRC as part of the STP license renewal. Impacts to STP from these waste management operational tasks are documented in Chapter 2, “Alternatives Including the Proposed Action,” of the GEIS and Chapter 4.0, “Environmental Impacts of Operation,” and Chapter 6.0, “Environmental Impacts of the Uranium Fuel Cycle, Waste Management, and Greenhouse Gas

Emissions,” of the SEIS. Specially, these specific sections discuss impacts of STP operational activities, including waste management, which impact the affected environment:

- Sections 4.1 and 4.11 of the SEIS evaluate impacts to land use, geology, and soils. The impacts would be small.
- Sections 4.3 and 4.4 of the SEIS evaluate impacts to water resources. The impacts would be small.
- Sections 4.5 - 4.7 of the SEIS evaluate impacts to ecological resources. The impacts would be small.
- Section 4.2 of the SEIS evaluates impacts to air quality. The impacts would be small.
- Section 4.9 of the SEIS evaluates impacts to socioeconomic issues including to noise and visual aesthetics, housing, public services, and historical and archeological resources. The impacts would be small.
- Section 4.9.7 of the SEIS addresses environmental justice. The NRC staff has determined that there would be no disproportionately high and adverse impacts to these populations from the continued operation of STP during the license renewal period.
- Section 4.8 of the SEIS evaluates license renewal impacts to overall human health and concludes that the impacts would be small to moderate. However, as noted in the following bullet, specific impacts related to waste management activities were identified as being small.
- Section 4.11.1.1 of the GEIS and Section 6.1 of the SEIS evaluate waste management activities. The impacts from LLW storage and disposal would be small.

The NRC staff did not identify any new or significant information related to waste management operational activities being performed at STP if the alternate disposal request is approved, which were not considered in the GEIS and SEIS and which would result in changes to the findings or conclusions of their impact analysis.

Transportation of the waste for disposal was evaluated as part of the STP renewal in Section 4.11.1.1 of the GEIS. In the GEIS, the impact of LLW storage and disposal is considered small. The waste in the GEIS is transported from the nuclear power plant to a 10 CFR Part 61 LLW disposal site. In this case, the nearest 10 CFR Part 61 LLW disposal site would be over 500 miles away. Therefore, the impact assessment of the GEIS would bound the analysis of transporting from the STP site to a local landfill in one of the surrounding counties (i.e., the landfill would be less than 500 miles). The Department of Transportation regulations govern the transport of radioactive material by truck on public highways. The NRC staff evaluated the risk to human health from the transportation of all radioactive material in the U.S. in NUREG-0170, "Final Environmental Statement on the Transportation of Radioactive Materials by Air and Other Modes," December 1977). The principal radiological environmental impact during normal transportation by trucks is direct radiation exposure to transport workers and nearby persons from radioactive material in the package. The average annual individual dose from all radioactive material transportation in the U.S. was calculated as approximately 0.005 millisievert (mSv) per year (0.5 millirem (mrem) per year), well below the 10 CFR 20.1301, "Dose limits for individual members of the public," limit of 1 mSv per year (100 mrem per year) for a member of the public.

Regarding the second part of the proposed action (i.e., disposal at Texas Class 1 or Class 2 industrial landfills), Texas regulations permit Class 1 and Class 2 industrial landfills to accept waste exempt by rule for disposal. The exempt waste is defined as

waste with radionuclide content that meets the concentration or activity limits in 25 TAC 289.251(l)(1) and 25 TAC 289.251(l)(2), respectively, in accordance with 25 TAC §289.251(e)(1) and 25 TAC §289.251(e)(2). Since the permit provided by Texas for the construction of landfills requires a discussion of the total amount of material that will be disposed of at the landfill and consideration of the construction of cells or facilities, there would be no additional environmental impacts or significant operational changes when accepting exempted waste. The proposed action would be part of Texas permitted waste management operational activities at the landfill and if the disposal operator complies with the Texas regulations, there would be minimal impacts from the proposed action. Specific impacts related to the disposal of 5 – 12 shipments of VLLW from STP at Texas Class 1 or Class 2 industrial landfills are addressed in the following subsections.

Land Use, Geology, and Soils

Regulatory requirements related to potential impacts to these resource areas are overseen by TCEQ in accordance with Texas regulations, including TAC Title 30 Rule 330.61(g), “Land-use map,” TAC Title 30 Rule 330.61(h), “Impact on surrounding area,” and TAC Title 30 Rule 330.61(j), “General geology and soils statement.” These regulations discuss specific details an owner or operator requesting a permit for a landfill must include in their application in order to identify potential land use, geology, and soils impacts, as well as how the landfill may impact surrounding cities, communities, groups, and individuals. Provided the landfill permit is approved in accordance with these regulations and the landfill remains in compliance with the operational regulations in TAC Title 30 Chapter 30 Subchapter D, “Operational Standards for Municipal Solid Waste Landfill Facilities,” the NRC staff does not expect the proposed action to significantly impact land use, geology, or soils.

Transportation

Offsite transportation impacts from the shipment of VLLW to Texas Class 1 or Class 2 industrial landfills may vary due to distances and routes travelled.

Transportation of VLLW would be in accordance with Department of Transportation's regulations. Any onsite transportation of VLLW at the landfill is expected to be in accordance with Texas regulations. Considering the number of shipments (i.e., 5 – 12 per year), the proposed action would have no significant transportation impacts.

Water Resources

Regulatory requirements related to potential impacts to water resources, including surface water and groundwater at industrial landfills are overseen by TCEQ in accordance with TAC Title 30 Chapter 330. These include the regulation of drainage options, liner system design and operation, groundwater sampling and monitoring, as well as closure and post-closure requirements. Therefore, provided that the landfill remains in compliance with Texas regulations, the NRC staff does not expect the proposed action to significantly impact water resources on and around the site.

Ecological Resources

Potential impacts to ecological resources from the proposed action at Texas Class 1 or Class 2 industrial landfills and associated lands are site-specific as disposal site locations range from urban to rural landscapes. Texas permitting requirements, including TAC Title 30 Rule 330.157, "Endangered Species Protection"; TAC Title 30 Rule 330.61(n), "Endangered or Threatened Species"; TAC Title 30 Rule 330.23, "Relationships with other Governmental Entities," (h), "Texas Parks and Wildlife Department (TPWD)"; and TAC Title 30 Rule 330.61(m), "Floodplains and wetlands statement," are considered by Texas when approving the use of land for a landfill. Therefore, provided that the landfill remains in compliance with Texas regulations, the

NRC staff does not expect the proposed action to significantly impact the ecological resources on and around the site. The proposed action does not involve the development or disturbance of additional land. Hence, the NRC staff has determined that the proposed action will not affect listed endangered or threatened species or their critical habitat.

Air Quality

Regulatory requirements and oversight of potential impacts from the proposed action at the landfill are overseen by Texas in accordance with multiple rules identified in TAC Title 30 Chapter 330. Considering the number of shipments and small volumes associated with the proposed action and provided that the landfill remains in compliance with Texas regulations, the NRC staff does not expect the proposed action to significantly impact the air quality on and around the site.

Socioeconomics

The regulations discussed in TAC Title 30 Rule 330.57(d), "Required Information," ensure that the operation of disposal sites permitted by Texas pose no reasonable probability of adversely affecting the health, welfare, environment, or physical property of nearby residents and property owners. In addition, Texas regulations in TAC Title 30 Rule 330.61 require that applicants requesting a permit for a municipal solid waste landfill include documentation of surrounding historical structures and sites that may be impacted by the existence of the landfill or disposal operations that would occur on the site. Considering the number of shipments and small volume of VLLW, the proposed action would have no significant socioeconomic impact.

Waste Management

Waste management activities at Texas Class 1 or Class 2 industrial landfills are conducted in compliance with TAC Title 30 Chapter 330. Therefore, considering the

number of shipments and small volume of VLLW, the proposed action would not significantly impact waste management activities at the landfills.

Public and Occupational Human Health

The NRC staff does not expect the proposed action to significantly impact public and occupational health on or near landfills. Texas landfill regulatory requirements were established to minimize exposures to workers and members of the public. Doses calculated using the proposed STP Administrative Concentration Limits provided by the licensee confirmed that doses associated with the transport and disposal would be less than 2 mrem per year. Therefore, the proposed action would not significantly impact public and occupational health.

Environmental Justice

Existing Texas Class 1 and Class 2 industrial landfills are located in a variety of environmental settings, including urban, suburban, and rural locations. As previously noted, Texas permitting regulations, TAC Title 30 Rule 330.61(h) require information regarding how a landfill may impact surrounding cities, communities, groups, and individuals. In accordance with this regulation, the NRC staff does not expect the proposed action to have a noticeable effect on populations near Texas Class 1 or Class 2 industrial landfills. Thus, because the Texas regulations aim to minimize impacts to human health and environment and considering the number of shipments (i.e., 5 – 12 per year), the proposed action is not expected to result in disproportionately high and adverse human health and environmental effects on minority or low-income populations near these landfills.

Environmental Impacts of the Alternatives to the Proposed Action

As an alternative to the proposed action, the NRC staff considered the no-action alternative in which the NRC would deny the alternate disposal request. The portion of

the proposed action performed at STP is part of the current waste management operational activities and thus, would not be impacted by denying the alternate disposal request. As previously noted, since STP does not maintain the ability to store this material onsite for a long period of time and Texas does not have the authority to approve the disposal of material outside of their state, denial of the request would require the licensee to transport the material to a 10 CFR Part 61 LLW disposal site (e.g., Waste Control Specialists LLC).

Multiple Class 1 and Class 2 industrial landfills are located in the counties surrounding the STP site while the nearest 10 CFR Part 61 LLW disposal site is located more than 500 miles from the site. Thus, pursuing this alternative would change the location in which the material is disposed, while other factors related to the disposal of the material would be expected to be similar to the proposed action.

Cumulative Impacts

Section 4.13.11 of the GEIS evaluated the cumulative impacts from STP waste management operational activities and found the impacts to be minimal. Regarding disposal at the landfills, given the occasional nature of these activities, the small amounts of waste to be disposed, and the expected limited number of workers needed to perform the disposal actions, the NRC staff considers the cumulative impacts of landfill activities, when added to existing activities, to be minimal.

Agencies and Persons Consulted

On November 17, 2022, the NRC staff consulted with the TCEQ by providing a draft of the EA for review and comment. By email dated November 28, 2022, TCEQ provided comments regarding the use of VLLW versus waste that has been exempt by rule when defining the waste being considered as well as the NRC's performance of dose calculations when assessing impacts related to the transportation and disposal of

the waste being considered in the requested action. NRC staff acknowledge the difference between the two terms and modified the section in the “Environmental Impacts of the Proposed Action” to clarify the type of material being discussed. Regarding the comments related to dose calculations, although an evaluation of doses to members of the public is not required by TAC regulations for exempted waste it is the NRC’s policy to consider doses associated with these exposure scenarios when evaluating alternate disposal requests.

As previously noted, the NRC has determined that the proposed action will not affect listed endangered or threatened species or their critical habitat. Therefore, no further consultation is required under Section 7 of the Endangered Species Act. Likewise, the NRC staff has determined that the proposed action does not have the potential to adversely affect cultural resources because no ground disturbing activities are associated with the proposed action. Therefore, no consultation is required under Section 106 of the National Historic Preservation Act.

III. Finding of No Significant Impact

Based on the findings in this EA, the NRC staff has concluded that the proposed action would have no significant environmental impacts and that this request does not require the preparation of an EIS. Accordingly, the NRC staff has determined that a FONSI is appropriate.

IV. Availability of Documents

The documents identified in the following table are available to interested persons through one or more of the following methods, as indicated.

DOCUMENT DESCRIPTION	ADAMS ACCESSION NO. / WEBSITE
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STP Nuclear Operating Company, "Response to End of Enforcement Discretion and Request for Approval of Alternate Disposal Procedures for Very Low-Level Radioactive Material," dated November 4, 2021	ML21308A603
STP Nuclear Operating Company, "Revised Response to End of Enforcement Discretion and Request for Approval of Alternate Disposal Procedures for Very Low-Level Radioactive Material (EPID: L-2021-LLL-0022)," dated December 3, 2021	ML21337A126
STP Nuclear Operating Company, "STPNOC Response to Request for Additional Information Regarding Request for Approval of Alternate Disposal Procedures for Very Low-Level Radioactive Material (EPID: L 2021-LLL-0022)," dated August 19, 2022	ML22231A469
STP Nuclear Operating Company, "Clarification on STPNOC Response to Request for Additional Information Regarding Request for Approval of Alternate Disposal Procedures for Very Low-Level Radioactive Material (EPID: L 2021-LLL-0022)," dated November 22, 2022	ML22326A296
STP Nuclear Operating Company, "Updated Final Safety Analysis Report, Revision 20," dated April 29, 2020	ML20133J932 (Package)
STP Nuclear Operating Company, "2020 Radioactive Effluent Release Report," dated April 19, 2021	ML21110A153
U.S. Nuclear Regulatory Commission, "South Texas Project - Request for Additional Information – 10 CFR 20.2002 Alternate Disposal Request (EPID: L-2021-LLL-0022)," email dated July 20, 2022	ML22206A014
U.S. Nuclear Regulatory Commission, "South Texas Project, Units 1 and 2 – End of Enforcement Discretion Related to Alternate Disposal Procedures for Very Low-Level Radioactive Waste," dated August 10, 2021	ML21180A195
U.S. Nuclear Regulatory Commission, NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Main Report," Volume 1, Revision 1, dated June 2013	ML13106A241
U.S. Nuclear Regulatory Commission, Supplement 48 to NUREG-1437, "Generic Environmental Impact State for License Renewal, Supplement 48: Regarding South Texas Project, Units 1 and 2," Final Report, dated November 2013	ML13322A890

U.S. Nuclear Regulatory Commission, All Agreement States Letter, "Clarification of the Authorization for Alternate Disposal of Material Issued Under 10 CFR 20.2002 and Exemption Provisions In 10 CFR (FSME 12-025)," dated March 13, 2012	ML12065A038
U.S. Nuclear Regulatory Commission, Regulatory Information Summary 2016-11, "Requests to Dispose of Very Low-Level Radioactive Waste Pursuant to 10 CFR 20.2002," dated November 13, 2016	ML16007A488
U.S. Nuclear Regulatory Commission, NUREG-1748, "Environmental Review Guidance for Licensing Actions Associated with NMSS Programs," Final Report, dated August 2003	ML032450279
U.S. Nuclear Regulatory Commission, Office of Nuclear Reactor Regulation Office Instruction LIC-203, Revision 4 "Procedural Guidance for Categorical Exclusions, Environmental Assessments, and Considering Environmental Issues," dated July 7, 2020	ML20016A379
U.S. Nuclear Regulatory Commission, NUREG-0170, "Final Environmental Statement on the Transportation of Radioactive Materials by Air and Other Modes," Volume 1, dated December 1977	ML022590355 (Package)
Texas Commission on Environmental Quality, Annual Summaries, FY2020 "Municipal Solid Waste in Texas: A Year in Review, 2020 Data Summary and Analysis," dated September 2021	https://www.tceq.texas.gov/permitting/waste_permits/waste_planning/wp_swasteplan.html Retrieved September 30, 2022
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Dated: November 30, 2022.

For the Nuclear Regulatory Commission.

/RA/

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SUBJECT: SOUTH TEXAS PROJECT, UNITS 1 AND 2 – ENVIRONMENTAL
ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT RELATED TO
ALTERNATE DISPOSAL PROCEDURES FOR VERY LOW-LEVEL
RADIOACTIVE MATERIAL (EPID L-2021-LLL-0022) DATED
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