

## DRAFT COMPLETION REVIEW REPORT

**Date:** September 16, 2024

**Licensee:** Rio Grande Resources Corporation (RGR)

**Radioactive Material License (RML) Number:** R06063

**Facility Name:** Panna Maria In-Situ Recovery (ISR) Plant

**Location:** 1350 CR. 240 Hobson, TX 78117, Karnes County, Texas (GPS coordinates 28.967844, -97.941704)

**Licensed Area Being Terminated:** 26.26 acres

**Manager:** Chance Goodin, Radioactive Materials Section, Radioactive Materials Division, Texas Commission on Environmental Quality (TCEQ)

**Technical Reviewer:** Zhenwen Jia, P.E., Ph.D. Radioactive Materials Section, TCEQ

### I. SUMMARY

RGR's Panna Maria In-Situ Recovery (ISR) site is a licensed *in situ* leach (ISL) uranium mining site that is authorized for possession of uranium in pregnant lixiviant from ISL uranium mining activities, concentrating uranium onto ion-exchange resin, and transfer to authorized recipients. The site has had no activity since the license issued on November 6, 2012.

RGR has requested the license termination of the Panna Maria In-Situ Recovery (ISR) site in a letter dated September 27, 2022 (**RGR - 2022**) and submitted the project closure plan on February 5, 2024 (**RGR - 2024**). TCEQ has since completed its review. The purpose of this Completion Review Report (CRR) is to document the basis for which TCEQ has determined to grant this license termination, and to request the Nuclear Regulatory Commission's (NRC)'s concurrence.

The primary applicable standards/regulations for uranium mill reclamation in the State of Texas (State) are found in Title 30 of the Texas Administrative Code (TAC), Chapter 336, Subchapter L titled "Licensing of Source Material Recovery and Byproduct Material Disposal Facilities". The state regulations have been determined by the NRC to be consistent with and compatible with NRC regulations, as required by the state's Agreement State status with the NRC. This report was prepared in accordance with the applicable NRC State Agreement Procedure SA-900 titled "Termination of Uranium Milling Licenses in Agreement States".

In 2012, TCEQ issued the Radioactive Materials License (RML) - No. R06063 to RGR for an ISL operation at the Panna Maria site (**TCEQ - 2012**). This RML is for property adjacent to and separate from the reclaimed the Panna Maria mill site and tailings storage facility (RML No. R02402). However, due to economic factors, the ISL facility was not developed or operated, and RGR terminated plans for future ISL operations at this site.

### II. DOCUMENTATION OF BASES FOR CONCLUSION

#### 1. Description of licensee's activities associated with decommissioning.

The RGR project site is located in Karnes County, Texas, approximately 7 miles northwest of Karnes City, as shown in **Figure 1**. The total licensed area for the Panna Maria site comprises 387 acres which includes approximately 360.74 acres for the RML No. R02402 and 26.26 acres for the ISR processing facility, shown in **Figure 2**. Since RGR has acquired this license on November 6, 2012, it has not conducted any mining activities in the site, therefore, there is no activity associated with decommissioning.

**2. Discussion of environmental impacts.**

For the site conditions, the proposed ISL processing facility is not expected to have any significant impacts on the environment, as the project was never developed and constructed. Since the license was issued, the background conditions should not have changed.

**3. Discussion of Closure Plan.**

For the proposed facilities site, the key closure plan components are summarized below.

The site should be released for unrestricted use. However, since this site (R06063) is adjacent to the reclaimed Panna Maria mill site and tailings impoundment (R02402), future land use will be farming for grazing and hay production (similar to the reclaimed Panna Maria tailings impoundment site). Future site access will be as needed through the Panna Maria site.

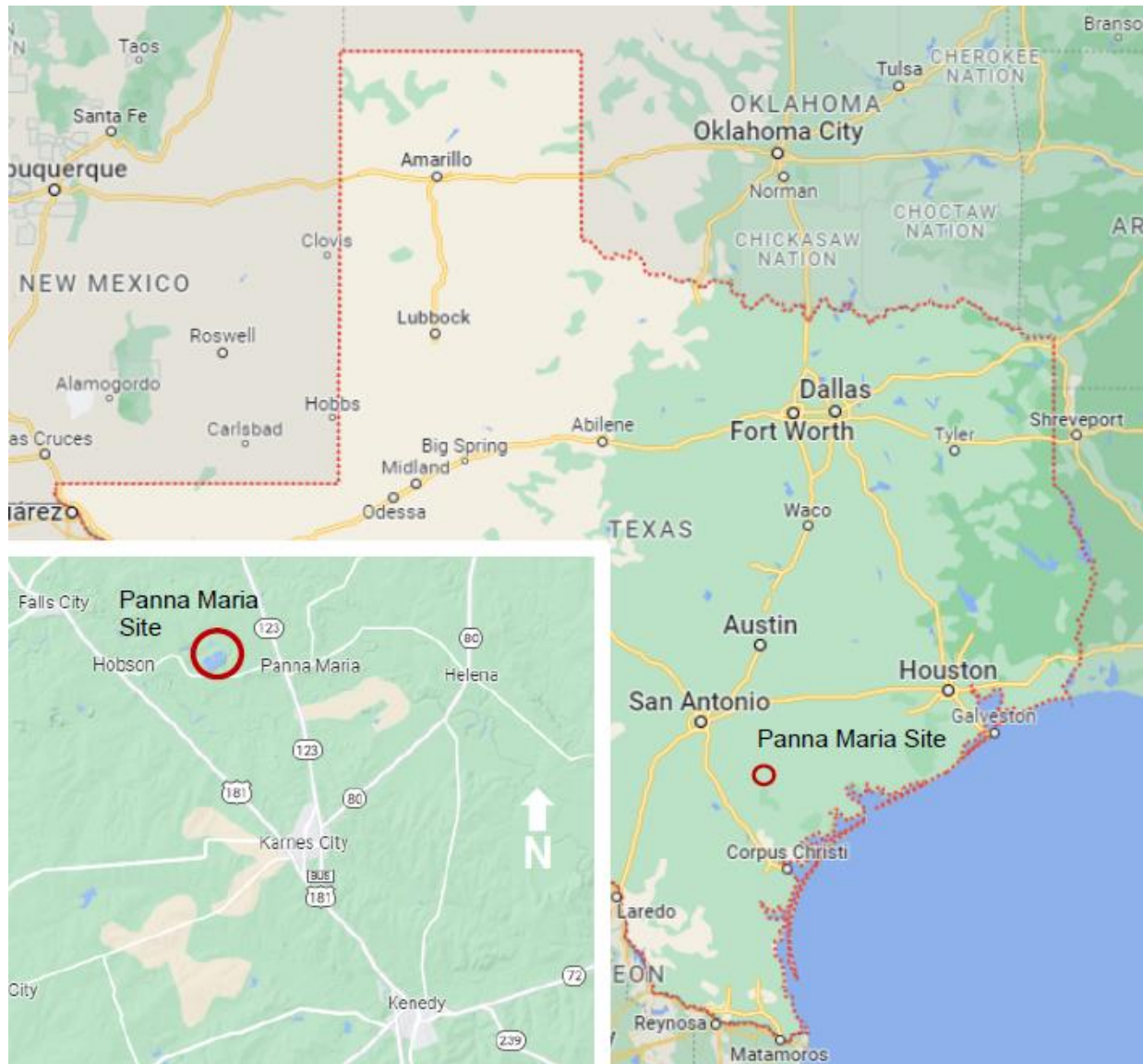
**4. Discussion of results of the State Regulatory Agency's Site Closure Inspections**

In response to RGR's request for license termination, on June 26, 2024, TCEQ Critical Infrastructure Division (CID) investigators conducted the final inspection of the site. Based on the investigation report (TCEQ – 2024), the TCEQ investigators visited the area which was authorized to operate as a processing facility for production and temporary storage of yellowcake, authorized under RML No. R06063, issued by TCEQ on November 6, 2012. The area was located approximately 250 feet west of the mine shop/warehouse. The area was undeveloped and being used to store bales of hay directly on the surface of the ground (see the Photo on page 6). The investigators also visited the areas of the proposed waste disposal wells (WDWs) WDW-426 and WDW-427 locations. The WDW-426 location was approximately 275 feet southwest of the mine shop/warehouse, and the WDW-427 location was approximately 1,000 feet west-southwest of the mine shop/warehouse. Wooden stakes were embedded in the ground at each proposed WDW location. The investigators observed no evidence that any license or permit-related development or construction had taken place.

Also, the investigators conducted spot-check radiation surveys in the areas of the proposed WDW and processing plant locations. Readings obtained were consistent with background radiation levels of 14  $\mu\text{R/hr.}$  and 2,900 cpm. Based on observations made by the investigators, it did not appear that any activity authorized by RML No. R06063, WDW-426, or WDW-427 had occurred.

### III. REFERENCES

TCEQ - 2012	Texas Commission on Environmental Quality Radioactive Material License (RML) Number: R06063 was issued on November 6, 2012.
RGR - 2022	R06063 Radioactive Material License, License Termination Request, September 27, 2022.
RGR - 2024	R06063 Radioactive Material License, Technical Notice of Deficiency (TNOD) Response (with the updated closure plan) for the License Termination, February 5, 2024.
TCEQ - 2024	Staff interoffice memorandum (4/12/2024) for Radioactive Material License R06063 - License Termination Request Technical Notice of Deficiency (TNOD) Response Dated October 17, 2022 IDA# 29545256 and 29731855
TCEQ - 2024	R06063 Radioactive Material License, final site inspection report, by TCEQ Critical Infrastructure Division (CID), dated September 5, 2024.



**Figure 1. Panna Maria Site Location, December 8, 2023**

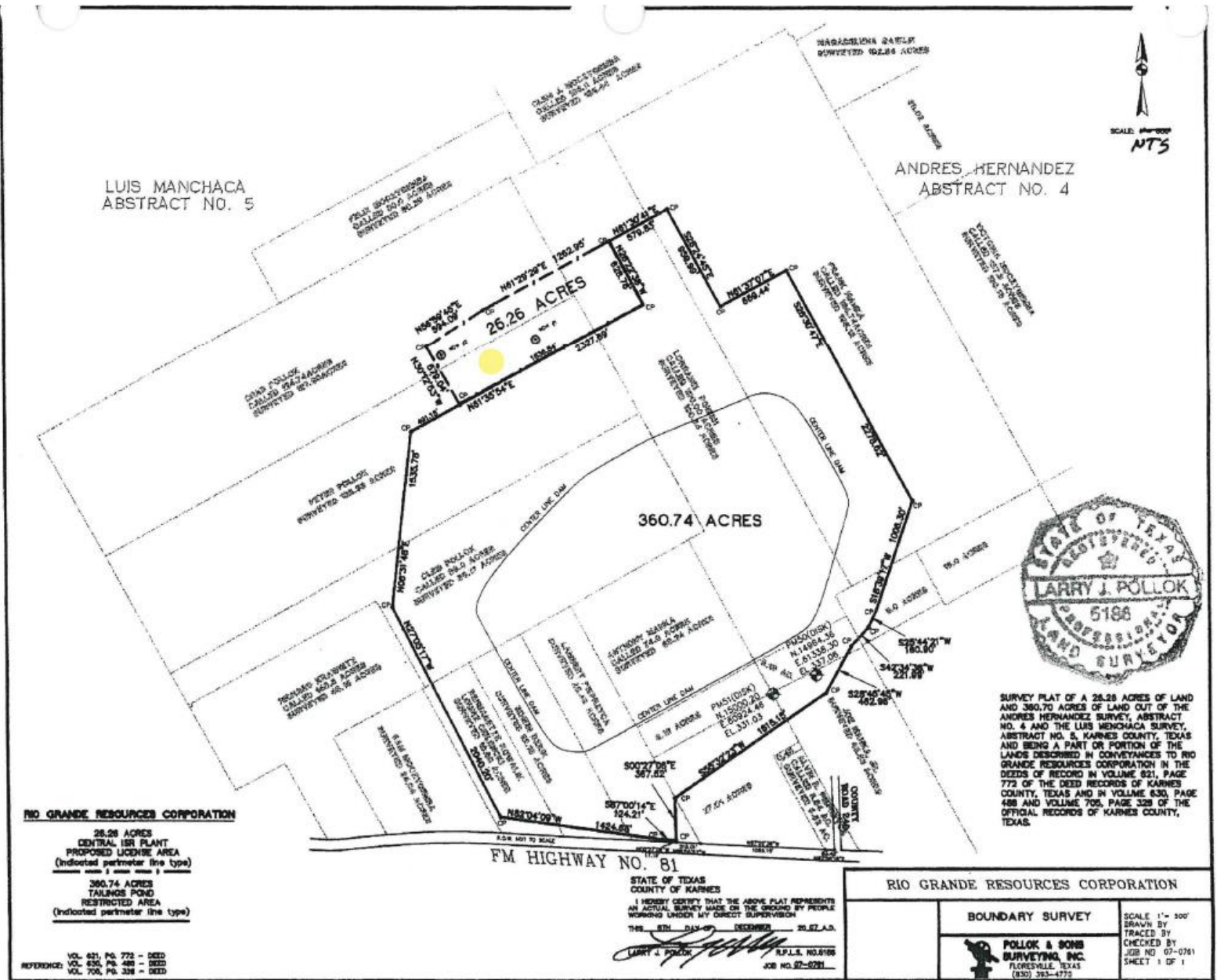


Figure 2. Proposed ISR Processing Facility (R06063) Location



**Photo Description:** Photograph documents the area of the proposed processing facility authorized under R06063. The investigators observed no activities taking place related to the authorization.

**Location:** Photograph taken facing southwest while standing outside the mine shop.