

NORTH DAKOTA DEPARTMENT OF ENVIRONMENTAL QUALITY

RADIOACTIVE MATERIAL LICENSE

Pursuant to Section 23.1-03-01 through Section 23.1-03-15 of Chapter 23.1-03 of the North Dakota Century Code, and Article 33.1-10 of the North Dakota Administrative Code, and in reliance on statements and representations heretofore made by the licensee designated below, a license is hereby issued authorizing such licensee to transfer, receive, possess, and use the radioactive materials for the purpose(s) and at the place(s) designated below. This license is subject to all applicable rules, regulations and orders now or hereafter in effect of the North Dakota Department of Environmental Quality and to any conditions specified below:

Licensee 1. Name Baranko Environmental, LLC 2. Address 3048 Highway 22 N Dickinson, ND 58601		3. License Number 33-54714-01 amended in its entirety. Amendment No. 6 4. Expiration Date September 14, 2025 5. Reference Number 517
6. Radioactive Materials (element and mass number)	7. Chemical and/or physical form	8. Maximum quantity which licensee may possess at any one time
A. Technologically Enhanced Naturally Occurring Radioactive Material (TENORM) atomic numbers 82-92 inclusive	A. Any form suitable for transport under U.S. DOT Regulations	A. Maximum quantity not to exceed limit specified in Section 33.1-10-03.1-01 [10 CFR 30.35] for establishing a decommissioning funding plan
B. Iridium-192	B. Tracer material used in fracking operations	B. Not applicable
C. Scandium-46	C. Tracer material used in fracking operations	C. Not applicable
D. Antimony-124	D. Tracer material used in fracking operations	D. Not applicable

9. Authorized Use:

A. For receipt, use, and/or possession incidental to any activity as follows:

- 1) Any activity related to site characterization including radiological surveys of soil and other environmental sample collection, decontamination and decommissioning, and remediation of facilities, grounds, equipment, and containers;

- 2) Waste characterization, packaging and repackaging of customer radioactive waste for transport;
- 3) Solidification, processing, and treatment of Naturally Occurring Radioactive Material (NORM) and TENORM waste; and
- 4) Transport in containers approved for use under the provisions of Chapter 33.1-10-13.1 and 49 CFR Parts 100-185 for transfer to licensees authorized to receive the materials, in accordance with the terms and conditions of licenses issued by the U.S. Nuclear Regulatory Commission or an Agreement State.

B.-D. For receipt, use, and/or possession incidental to any activity as follows:

- 1) Any activity related to site characterization including radiological surveys of soil and other environmental sample collection, decontamination and decommissioning, and remediation of facilities, grounds, equipment, and containers;
- 2) Waste characterization, packaging and repackaging of customer radioactive waste for transport; and
- 3) Transport in containers approved for use under the provisions of Chapter 33.1-10-13.1 and 49 CFR Parts 100-185 for transfer to licensees authorized to receive the materials, in accordance with the terms and conditions of licenses issued by the U.S. Nuclear Regulatory Commission or an Agreement State.

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### CONDITIONS

10. A. Licensed material in Subitem A of Items 6-8 shall be used and stored only at:

- 1) 3048 Highway 22, Dickinson, ND 58601, except for processing activities.
- 2) Temporary job sites of the licensee anywhere in the State of North Dakota except in areas of exclusive federal jurisdiction. You must obtain reciprocity to work in areas of exclusive federal jurisdiction or outside North Dakota.
- 3) Activities related to the processing of Naturally Occurring Radioactive Material (NORM) and TENORM waste shall be limited to temporary job sites of the licensee anywhere in the State North Dakota except in areas of federal jurisdiction.

B. License material in Subitems B-D of Items 6-8 shall only be used at customer's facilities.

If the jurisdiction status of a federal facility within an Agreement State is unknown, the licensee should contact the federal agency controlling the job site in question to determine whether the proposed job site is an area of

exclusive federal jurisdiction. Authorization for use of radioactive materials at job sites in Agreement States under exclusive federal jurisdiction shall be obtained from the U.S. Nuclear Regulatory Commission.

11. A. The licensee shall comply with the following chapters of the North Dakota Radiological Health Rules:
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| Chapter 33.1-10-01   | General Provisions  |
| Chapter 33.1-10-03.1 | Licensing of Radioactive Material   |
| Chapter 33.1-10-04.2 | Standards for Protection Against Radiation  |
| Chapter 33.1-10-10.1 | Notices, Instructions and Reports to Workers - Inspections                                  |
| Chapter 33.1-10-11   | Fees for Issuance of License and Registration Certificates and Inspections                  |
| Chapter 33.1-10-13.1 | Packaging and Transportation of Radioactive Material  |
| Chapter 33.1-10-23   | Regulation and Licensing of Technologically Enhanced Natural Occurring Radioactive Material |
- B. The licensee shall comply with all State and Federal environmental regulations. Issuance of this license does not supersede, replace or negate any local ordinances, codes, rules, or regulations. In addition, the licensee shall comply with all local fire, zoning and other applicable ordinances, codes, rules, and regulations as they affect the safe use and storage of radioactive material.
12. A. Licensed material shall be used by, or under the supervision of, individuals who meet all of the following requirements:
- 1) Have been trained as specified in the application dated May 26, 2015 and amendment letter dated March 4, 2025, and
  - 2) Have been designated, in writing, by the Radiation Safety Officer.
- The licensee shall maintain records of individuals trained and designated as users.
- B. The Radiation Safety Officer for this license is Dalten Kuhn.
13. The licensee shall provide a personnel dosimeter that is processed and evaluated by an accredited National Voluntary Laboratory Accreditation Program (NVLAP) processor to each individual working with or in the vicinity of TENORM-impacted materials or equipment. Each personnel dosimeter must be assigned to and worn by only one individual. Film badges must be replaced at periods not to exceed one month and other personnel dosimeters must be replaced at periods not to exceed three months. After replacement, each personnel dosimeter must be processed as soon as possible. The licensee may request relief of this condition by submitting a minimum of twelve months of dosimetry reports to the Department for review.
14. Except for calibration sources, reference standards, and radioactively contaminated equipment owned by the licensee, receipt, storage, and use incidental to any activity of licensed material at each temporary job site shall be limited to material originating from each site. This material must either be transferred to an authorized recipient or remain at the site after licensee activities are completed.
15. This license does not authorize the import or export of byproduct material wastes.

16. In addition to the possession limits in Item 8, the licensee shall further restrict the receipt, storage, and use incidental to any activity of licensed material to quantities below the limits specified in Chapter 33.1-10-03.1-01 [10 CFR 30.72] which require consideration of the need for an emergency plan for responding to a release of licensed material.
17. A. The licensee shall notify the North Dakota Department of Environmental Quality, Radiation Control Program, 4201 Normandy Street, Bismarck, North Dakota 58503-1324, in writing, at least 14 days before initiating activities under this license at a temporary job site, excluding routine packaging or repackaging for purposes of transporting and not requiring a job or site-specific work package, and characterization and/or final surveys where radioactive materials and/or radiation are not likely to be detected. This notification shall include:
  - 1) The estimated type, quantity, and physical/chemical forms of licensed material to be used;
  - 2) The specific site location;
  - 3) A description of planned activities including waste management and disposition;
  - 4) The estimated start date and completion date for the job; and
  - 5) The name and title of a point of contact for the job, including information on how to contact the individual.
- B. Within 30 days of completing decontamination and/or decommissioning activities at the job site location, the licensee shall notify the North Dakota Department of Environmental Quality, Radiation Control Program, 4201 Normandy Street, Bismarck, North Dakota 58503-1324 in writing, of the disposition of any licensed material used.
18. This license does not authorize the use of licensed material at temporary job sites for uses already specifically authorized by a customer's license. If a customer also holds a license issued by this department, the licensee shall establish a written agreement between the licensee and the customer specifying which licensee activities shall be performed under the customer's license and supervision, and which licensee activities shall be performed under the licensee's supervision pursuant to this license. The agreement shall include a commitment by the licensee and the customer to ensure safety, and any commitments by the licensee to help the customer clean up the temporary job site if there is an accident. A copy of this agreement shall be included in the notification required by License Condition 17, above.
19. The licensee shall maintain records of information important to decommissioning for each temporary job site pursuant to Chapter 33.1-10-03.1-01 [10 CFR 30.35(g), 40.36(f), and 70.25(g)]. The records shall be made available to the customer upon request. At the completion of activities at a temporary job site, the licensee shall transfer these records to the customer for retention.
20. If approved by the Radiation Safety Officer specifically identified in this license, the licensee may take reasonable action in an emergency that departs from conditions in this license when the action is immediately needed to protect public health and safety and no action consistent with all license conditions that can provide adequate or equivalent protection is immediately apparent. The licensee shall notify the North Dakota Department of Environmental Quality Radiation Control Program at 701-328-5166 before, if practicable, and in any case immediately after taking such emergency action using the reporting procedure specified in Chapter

33.1-10-03.1-01 [10 CFR 30.50(c)].

21. The licensee is authorized to transport licensed material only in accordance with the provisions of Chapter 33.1-10-13.1, "Packaging and Transportation of Radioactive Material."
22. The licensee shall maintain records showing the transport of TENORM waste and retain each record for 3 years from the date of transport. Records of TENORM waste transport shall include the pick-up location, physical form of material, drop-off location and date of transport. Quarterly TENORM waste transport reports shall be filed within 30 calendar days of the end of each quarter with the North Dakota Department of Environmental Quality. The "Quarterly TENORM Transport Report" is available at <https://deq.nd.gov/WM/Radiation/TENORM.aspx> and shall be submitted electronically in excel format to [ram@nd.gov](mailto:ram@nd.gov).
23. The licensee shall acquire a sample of each container/load of licensed material to determine the concentrations of Radium-226 plus Radium-228 in picocuries per gram (pCi/g) prior to transfer for disposal in North Dakota. The sampling shall be performed prior to adding any other materials (i.e., drying agents, drill cuttings). If smaller containers of licensed material are consolidated prior to transfer for disposal, a representative sample from each container shall be acquired and blended together to create a composite sample for analysis. The composite sample results will be the results of record for disposal. Records of sample results shall be maintained for a period of 3 years.
24. Notwithstanding the requirements of License Condition 25, the licensee is authorized to make program changes and changes to procedures specifically identified in the application dated May 26, 2015, which were previously approved by the Department and incorporated into the license without prior Department approval as long as:
  - A. The proposed revision is documented, reviewed, and approved by the licensee's Radiation Safety Officer in accordance with established procedures prior to implementation;
  - B. The revised program is in accordance with regulatory requirements, will not change the license conditions, and will not decrease the effectiveness of the Radiation Safety Program;
  - C. The licensee's staff is trained in the revised procedures prior to implementation; and
  - D. The licensee's audit program evaluates the effectiveness of the change and its implementation.
25. Except as specifically provided otherwise in this license, the licensee shall possess and use radioactive material described in Items 6, 7, and 8 of this license in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The North Dakota Radiological Health Rules shall govern unless the statements, representations, and procedures in the licensee's application and correspondence or the conditions contained in this license are more restrictive than the North Dakota Radiological Health Rules.
  - A. Application dated May 26, 2015.
  - B. Amendment letter dated October 18, 2018.
  - C. Amendment letter dated September 6, 2019.

- D. Amendment letter dated February 28, 2020.
- E. Amendment letter dated March 4, 2025.

FOR THE NORTH DAKOTA DEPARTMENT OF  
ENVIRONMENTAL QUALITY

Date: \_\_\_\_\_

By: \_\_\_\_\_  
Charles R. Hyatt, Director  
Division of Waste Management

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