



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION III  
2443 WARRENVILLE RD. SUITE 210  
LISLE, IL 60532-4352

September 13, 2022

Bryan W. Davis  
Radiation Safety Officer  
Mikon Corporation  
4414 B South 40th St.  
St. Joseph, MO 64503

Dear Mr. Davis:

This letter is in reference to your application dated July 21, 2022, for the renewal of your U.S. Nuclear Regulatory Commission (NRC) Materials License No. 24-24954-01.

The U.S. NRC's guidance document for your proposed type of license is NUREG-1556, Volume 1, Rev. 2, dated June 2016, "Consolidated Guidance About Materials Licenses, Program – Specific Guidance About Portable Gauge Licenses." This guidance is available on the U.S. NRC website at: <https://www.nrc.gov/docs/ML1617/ML16175A375.pdf>

Upon review of your request, I identified the following areas requiring additional or clarifying information:

1. Section 8.3, "Address(es) where Licensed Material will be Used or Possessed," of the guidance, and Item 3 of the NRC Form 313 (Application for Materials License), require that you specify the address where licensed materials will be used or possessed. For portable gauge applicants, it is common for "temporary job sites" to be included in the request.

While your application states that your portable gauges will be used a power plants at numerous locations, your statement does not clearly indicate your intent to possess and use portable gauges at temporary jobsites established in the U.S. NRC's jurisdiction.

If applicable, please clearly state that you intend to use and possess licensed material at temporary job sites. According to the guidance, this may be conveyed by adding the following statement, "temporary jobsites anywhere in the U.S. where the NRC maintains jurisdiction."

2. Your application refers to the transfer/disposal of the following licensed devices:
  - Troxler Electronic Laboratories Model 1351 portable gauging devices, including Source S/Ns 50-9207, 35-370, R2-70, 72-229;
  - Troxler Electronic Laboratories Model 1352 portable gauging device, including Source S/N 40-5840; and
  - CPN International Division of Instrotek, Inc. (formerly Campbell Pacific Nuclear) Model 501 portable gauging device, including Device S/Ns D77117976 and D77117975.

Please include documentation of the transfer/disposal of the licensed devices. Also, please include current leak test reports for each source with an acceptable result.

3. Section 8.7.1, "Radiation Safety Officer," of the guidance identifies that the Radiation Safety Officer (RSO) is responsible for the oversight of licensed operations. The RSO must have sufficient organizational authority and management prerogative to enforce appropriate radiation protection rules, standards, and practices.

Submit an updated delegation of authority supporting your continuing appointment as RSO. A model Delegation of Authority is provided in Appendix D, "Typical Duties and Responsibilities of the Radiation Safety Officer," of the guidance. The completed Delegation of Authority should be signed by the appointed RSO and a management representative. Include the printed name, title and date for each individual signing.

4. Section 8.9, "Facilities and Equipment," of the guidance identifies that applicants must provide a facility diagram for each permanent portable gauge storage location.

Please resubmit the facility diagram and description, providing all information relevant to public dose and security as discussed in Sections 8.10.5, "Public Dose," and 8.10.6, "Operating, Emergency, and Security Procedures."

Depict the portable gauge storage area and its distance from occupied work areas, including areas occupied by adjacent tenants.

As depicted in Figure 8-4, "Storing Gauges," of Section 8.10.5 of the guidance, gauges should be stored away from occupied areas. Further, 10 CFR §30.34(i) requires that portable gauges must be secured against unauthorized removal using a minimum of two independent physical controls that form tangible barriers.

5. Section 8.10.6, "Operating, Emergency and Security Procedures," of the guidance, identifies that licensee's using portable gauging devices used for measurements with an unshielded source extended more than 3-feet beneath the surface to develop and implement procedures specifically addressing the following:
  - use of surface casing or alternative procedures to ensure that the source can move freely in the hole;
  - instructions to follow to retrieve a stuck source; and
  - reporting to the U.S. NRC when a stuck source cannot be retrieved in accordance with 10 CFR §30.50(b)(2).

Your application requests continuing authorization to possess and use the Troxler Electronic Laboratories Model 1351 and CPN International Division of Instrotek, Inc., Model 501 depth gauging devices. The guidance identifies that Operating, Emergency and Security Procedures will be developed, implemented and maintained that meet the Criteria in Section 8.10.6 of the guidance.

Please confirm that your Operating, Emergency and Security Procedures specifically address the above bulleted items from the Criteria specified in Section 8.10.6 of the guidance addressing the use of depth gauging devices.

6. Section 8.10.7, "Leak Tests," of the guidance indicates that the U.S. NRC requires testing to determine whether there is any radioactive leakage from the sources in portable gauging devices. The U.S. NRC may, in a license condition, specifically authorize portable gauge licensees to conduct the entire leak test sequence themselves, including leak test sample collection and analysis.

Your application included a request to perform leak testing and analysis in accordance with Appendix I, "Model Leak Test Program," of NUREG-1556, Volume 1, Revision 2, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Fixed Gauge Licenses." Though, your application did not include a description of available equipment and personnel qualifications for performing in-house leak test analysis.

To proceed with your request to perform in-house leak test analysis, please provide a list of available analytical equipment to be used to perform in-house leak test analysis and the personnel qualifications who will perform the analysis.

7. Section 8.10.9, "Transportation," specifies that licensees must follow U.S. DOT regulations for the offsite transport of radioactive material.

While your application for license renewal is not required to address Transportation Procedures, it appears that some of your gauging devices may be subject to transportation restrictions. For additional information, please refer to:

[U.S. DOT Special Permit Authorization, DOT-SP 14329](#); and

[U.S. DOT's Special Permit Authorization, DOT-SP 14287, Rev. 4](#)

An addition was made to the DOT-SP 14287, Rev. 4, on March 21, 2022, to account for Troxler Electronic Laboratories Model 1351 and 1352 depth density gauges, which no longer satisfy the Type A package documentation requirements specified in [Title 49 §173.415](#)

As this item is only advisory, no specific response is needed to address this item.

8. Section 8.13, "Item 13: Certification," specifies that a representative of the legal entity filing the application must sign and date the NRC Form 313, "Application for Materials License." The representative signing the application must be authorized to make binding commitments and to sign official documents on behalf of the applicant (i.e., a certifying official).

You signed the submitted application for license renewal. Though, your title is not recognized as that of a certifying official (i.e., President, Director or Branch Manager).

Therefore, please revise and submit the application bearing the signature of a certifying official. For additional information, you may refer to Chapter 3, "Management Responsibility," of the guidance.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the U.S. NRC website at <https://www.nrc.gov/reading-rm/adams.html>.

To continue review of your request, please submit your response to this letter within 30 calendar days from the date of this letter. In your response, please refer to the license, docket, and control number specified below. I will assume that you do not wish to further pursue this licensing action if I do not receive a reply within the specified timeframe noted above.

If you have questions, require additional time to respond, or require clarification on any of the information stated above, I encourage you to contact me at (630) 829-9737 or via e-mail at [Jason.Kelly@nrc.gov](mailto:Jason.Kelly@nrc.gov).

Sincerely,

Jason M. Kelly, MPH  
Health Physicist  
Materials Licensing Branch

Docket No.: 030-29962  
License No.: 24-24954-01  
Control No.: 631910