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February 5, 2021

Bryan A. Parker
Senior Health Physicist
USNRC Region III

ADDITIONAL INFORMANTION FOR CN624431

Re: The NLS Asphalt and Paving Inc. – License Number 34-26487-02
Renewal of License

Dear Mr. Parker

1). Licensed material is stored when not in use. Item # 3

In regards, to Item 3 of the Form 313 application that the licensed material will be used periodically at temporary job sites. When not in use or transport, the licensed material will be stored at portable hot-mix asphalt plants locations. When licensed material is not in use at the temporary job sites or at the portable hot-mix asphalt plants the licensed material is stored at a central location. NLS Asphalt Inc. location for the licensed material is a Level III Asphalt Mix Design Lab, located at 604 South First Street, Martins Ferry, Ohio 43935. Yes, NLS Asphalt Inc. does posses an Ohio License that authorizes this storage location, and any temporary job site in the sate of Ohio. The Ohio Department of Health License Number is 31210070004, expiration date is June 1, 2023.

2). Delegation of Authority. Item # 7

Edward L. Hoffman (RSO) Delegation of Authority is to ensure that all terms and conditions of NLS Asphalt Inc. license are being complied with and that the information in the license is to date and accurate.

a). Edward L. Hoffman (RSO) will stop any unsafe licensed activities.

b). The nuclear gauges will be leak tested at the required intervals and the leak test is done according to the gauge manufacturer specifications. The nuclear gauges are used only by persons authorized by Edward I. Hoffman, and that all persons will wear personnel monitoring equipment when using the gauges. Personnel monitoring equipment will consist of film badges.

c). Edward L. Hoffman (RSO) has successfully completed the Troxler Electronic Laboratories, Inc. training course for the use of the Nuclear testing equipment. The most recent hazmat training was completed on January 2020, (Portable Nuclear Gauge Safety & U.S. D.O.T. Hazmat Training (NUREG 1556, 49 CFR 172 Subpart H) thru The Contractors Association of West Virginia, Ripley, West Virginia. Edward L. Hoffman (RSO) will attend a Hazmat refresher course this February 2021 thru The Contractors Association of West Virginia.

d). Edward L. Hoffman (RSO) will investigate and serve as a point of contact and render assistance in the case of emergency, such as gauges being damaged on any project sites, and or theft. The RSO will notify the proper authorities in the case of an emergency.

e). Edward L. Hoffman (RSO) will ensure that the nuclear gauges are properly secured, against unauthorized removal at all, times. All nuclear gauges will be place in the proper storage when not in use.

f). Edward L. Hoffman (RSO) will ensure the disposal of the Nuclear gauges will be by transfer to another facility licensed for the material or returned to the gauge manufacturer. Records of transfer will be maintained on file by NLS Asphalt Inc.

g). Transportation of Nuclear Gauges. The gauges will be transported only by NLS employees having Hazmat Training, tested and certified. Recurrent training will be required at least once every three years per USDOT hazardous materials rules. All possible means will be provided to ensure that the gauges are secured in the transporting vehicle and equipment is away from passenger compartments. When transporting in an enclosed vehicle (car or van), the vehicle will be securely locked. When transporting in an open bed vehicle, the gauge will be locked and securely fasten to the truck bed. At all times while the gauge is being transported the operator will carry the required shipping papers and a copy of the emergency plan.

h). Edward L. Hoffman (RSO) will maintain all records as required by license and regulations. These records will include personnel exposure, leak test records and training certificates for all users.

i). Annual internal audits are done by Edward L. Hoffman (RSO) and records are on file.

3). Training Programs. Item # 8

1a. All NLS Asphalt employees working under the supervision of and in the physical presence of Edward L. Hoffman (RSO) using the nuclear gauges will complete a training program, these employees will hold a certificate of training, this training certifies that each employee has successfully completed the training program requirements for Portable Nuclear Gauge Safety & US. D.O.Y Hazmat Training. This training will take place every 3 years, by **Manufacturer's Training, The Contractors Association of West Virginia, Cline's Technical Services, Inc.**, and or by any other authorized nuclear training organization.

2a. Edward L. Hoffman (RSO) will not provide nuclear training for certification. Edward L. Hoffman does hold a in house class to discuss Asphalt Quality Control for each state agency, renewal of all training programs and certifications, ethics, and to make sure all employees read and understand all safety, quality control programs, and any NLS policies that need to be discussed when employees return-back to work at the beginning of each year.

4). **Radiation Safety Program Item # 10**

See Radiation Safety Program attached

Item 11

See Waste Program attached

Sincerely,

A handwritten signature in cursive script that reads "Edward L. Hoffman".

Edward L. Hoffman

NLS Asphalt Inc.

QC/QA Manager

Radiation Safety Office (ROS)



67925 Bayberry Drive, Suite B
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Radiation Safety Program

Radiation Safety Officer

- Edward Hoffman has been designated as the company's radiation safety officer and will assume the responsibilities and duties that include the following:
- Programs comply with NRC and U.S. Department of Transportation regulations that all terms and conditions of the license are being complied with and that the information contained in the license is to date and accurate.
- Edward L. Hoffman, (RSO) will ensure that all gauge users have read and understand the radiation safety operating and emergency procedures before the use of these gauges.
- The RSO will arrange appropriate training for all new users as required.
- The RSO will post all signs and notices for all gauge users and new NLS employees as required.
- NLS Operators will at all times observe the principle of **A.L.A.R.A.** by following the **A.L.A.R.A. Principle**, operators will receive a radiation dose that is, **as low as reasonably achievable**.

10.1 Audit

- NLS will maintain the records as required by license and regulations. These records will include personnel exposure, leak test records and training certificates for all users. With, regard to audit records, 10 CFR 20.2012 requires that NLS will maintain records of "audit and other reviews of the program content and implementation" for three years after the record is made. Information to be acceptable: date of audit, name of person(s), who conducted the audit, persons contacted by the audit(s), areas audited, audit findings, corrective actions, and follow up.

10.2 Radiation Monitoring Instruments

- NLS will ensure that the gauges are used only by persons authorized by the radiation safety officer and that all persons will wear personnel monitoring equipment when using the gauges. Personnel monitoring equipment will consist of film badge. When the operator is not using the gauge, the monitoring device will be kept in a radiation free area, as designated by the radiation safety office.

- NLS personnel monitoring is required, for all personnel dosimeters that require processing to determine the radiation dose. NLS employees will use dosimeters supplied by an NVLAP-approved processor. The exchange frequency for dosimeter is quarterly.

10.3 Material Receipt and Accountability.

- NLS will maintain records of receipt, transfer and disposal of gauges. Disposal of the gauges will be by transfer to another facility specifically licensed for the material or returned to the gauge manufacturer. Records of transfer will be maintained on file, which includes manufacturer's name, model name, and serial number of each gauge containing byproduct material, also radionuclide and the activity of byproduct material in each sealed source.

Region III

NRC Safety Hotline 1-800-695-7403

Office of the Inspector General Hotline 1-800-233-3497

- NLS will conduct physical inventories every 6 months to account for all sealed sources. Also, NLS gauge uses will record daily use of the gauges in a logbook as part of our accountability program. The logbook contains manufacturer's name, model name, and serial number of each gauge, date name and signature of the individual for use.

Table 8-1. Record Maintenance

Type of Record How Long Record Must Be Maintained

Receipt: For as long as the material is possessed and for 3 years following the transfer or disposal of the material.

Inventory: For 5 years from the date of the inventory in accordance with license conditions.

Transfer: For 3 years after each transfer unless a specific requirement dictates otherwise.

Disposal: Until the NRC terminates the license
Important to Decommissioning* Until the site is released for unrestricted use.

10.4 Occupational Dose.

- adults who are likely to receive an annual dose in excess of any of the following
 - 5 mSv [0.5 rem] deep-dose equivalent
 - 15 mSv [1.5 rems] lens (of the eye) dose equivalent
 - 50 mSv [5 rems] shallow-dose equivalent to the skin
 - 50 mSv [5 rems] shallow-dose equivalent to any extremity
- minors who are likely to receive an annual dose in excess of any of the following (each evaluated separately)
 - 1.0 mSv [0.1 rem] deep-dose equivalent
 - 1.5 mSv [0.15 rem] lens (of the eye) dose equivalent
 - 5 mSv [0.5 rem] shallow-dose equivalent to the skin
 - 5 mSv [0.5 rem] shallow-dose equivalent to any extremity

- declared pregnant women who are likely to receive a dose from radiation sources external to the body during the entire pregnancy in excess of 1.0 mSv [0.1 rem] deep-dose equivalent
- individuals entering a high or very high radiation area.

10.5 Public Dose & Storage

- NLS, (RSO) and employees will ensure that the portable gauges will be used, transported, and stored in such a way that members of the public will not receive more than, 1 mSv (100 mrem) in a year, and the dose in any unrestricted area will not exceed 0.02 mSv (2 mrem) in any one hour, from licensed operation.
- All gauges will be stored away from occupied areas and will be secured against unauthorized removal, at all times.
- NLS density technicians will follow proceeds when gauges are not being used for density measurement, the gauge will have its source mechanism locked and will be locked in the transportation case. The gauge will also be returned to the transporting vehicle. When testing is completed the gauge will be returned to its permanent storage place as soon as possible.
- RSO and NLS employees will check the shipping case, periodically to ensure all the required labels are present and in good condition.

10.6 Operating, Emergency, and Security Procedures

- **Operating, Emergency, and Security Procedures** Operating, emergency, and security procedures will be developed, implemented, and maintained and will meet the criteria in section 8.10.6, “Radiation Safety Program—Operating, Emergency, and Security Procedures,” NUREG–1556, Volume 1, Revision 2, “Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Portable Gauge Licenses.” Copies of these procedures will be provided to all gauge users and will be available when on job sites.
- NLS will take all possible means to ensure that the gauges are secured in the transporting vehicle and equipment is away from passenger compartments. When transporting in an enclosed vehicle (car or van), the vehicle will be securely locked. When transporting in an open bed vehicle, the gauge will be securely and fasten to the truck bed.
- At all times while the gauge is being transported the operator will carry the required shipping papers within arms, reach with a copy of the emergency plan.
- The gauges are to be used for intended purposes only and NLS operators will exercise suitable control, over the gauge at all times.
- Under no circumstance will any gauges be left unattended or under the supervision of an unauthorized person.

- **In the event of physical damage to the gauge, following procedure will be performed:**
- NLS density technicians will immediately cordon off an area around the gauge to prevent exposure to personnel. An area of fifteen feet is sufficient.
- If a vehicle is involved, it must be stopped until the extent of contamination, if any, can be established.
- A visual inspection of the gauge is to be made to determine if the source housing and or shielding has been damaged, from outside of the cordoned area maintain surveillance until emergency response personnel arrive.
- At the earliest opportunity, when the situation is under control, the operator must contact the RSO (Edward Hoffman) at the NLS Asphalt & Paving, office number (740) 6535-4335, NLS Asphalt & Paving lab office number (740) 738-0646, cell number (740) 310-1938, or email at ehoffman@nlspaving.com.
- The use of a radiation survey meter after an incident, whether the shielding and source are intact. NLS will contact a consultant, or a local emergency response organization (Ohio Department of Health), and or NRC Region III.
- Describe the current situation and follow the instructions of the radiation safety officer. The radiation safety officer will contact the appropriate NRC office as listed below:

Region I	24 hr. number 1-800-434-1156
Region II	24 hr. number 1-800-577-8510
Region III	24 hr. number 1-800-522-3025
Region IV	24 hr. number 1-800-952-9677

Troxler Electronics will be contacted for the advice at the following number: 1-919-549-8661.
- **In the event the gauge is lost or stolen, immediately notify the radiation safety office as listed above in item.**

10.7 Leak Tests

- RSO and NLS technicians will ensure that the nuclear gauges have been leak tested at the required intervals and that the leak test is done according to the gauge manufacturer specifications, (every 6 months).
- The leak test will be performed using the Troxler Model3880 leak test kit. This test will be performed according to the manufactures' instructions. Again, the personnel monitoring device will be employed. Gauges will be leak tested at intervals not to exceed six months.

10.8 Maintenance

- NLS technicians will have adequate training and experience.
- NLS will implement and maintain procedures for routine maintenance of our gauges according to each manufacturer's written recommendations and instructions. During any cleaning, lubricating or maintenance the operator will wear their personnel monitoring device.
- No maintenance will be performed in which the radioactive source is removed from the gauge. For this type of maintenance, the gauge will be returned to the manufacture.

10.9 Transportation

- NLS Technicians will inspect the labeling of the transport container, it will be maintained in a legible condition, per the requirements in 49 CFR 172.403(g) and 49 CFR 172.407(a).
- NLS Technicians will properly block and brace the transportation case to ensure that the gauge does not shift during transport, per the requirement in 49 CFR 177.842(d).
- NLS Technicians will have emergency response information, including current emergency response telephone numbers that meet the requirements of Subpart "Emergency Response Information," of 49 CFR Part 172; "Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, Training Requirements, and Security Plans."
- The gauges will be transported only by employee's having Hazmat training, tested and certified. All NLS Asphalt employees working under the supervision of and in the physical presence of Edward L. Hoffman (RSO) using the nuclear gauges will complete a training program, these employees will hold a certificate of training, this training certifies that each employee has successfully completed the training program requirements for Portable Nuclear Gauge Safety & US. D.O.T Hazmat Training. This training will take place every 3 years, by **Manufacturer's Training, The Contractors Association of West Virginia, Cline's Technical Services, Inc.,** and or by any other authorized nuclear training organization. Recurrent training will be required at least once every three years per USDOT hazardous material rules.
- NLS Asphalt Inc. will maintain transportation shipping records, in accordance with the requirements of Subpart C, "Shipping Papers," of 49 CFR Part 172, including the proper shipping name, hazard class (7), United Nations identification number, the name of the shipper, and the name and activity of each radionuclide.

11. Waste Management

- See Waste Management Program.

Edward L. Hoffman

NLS Asphalt Inc.

QC/QA Manager

Company RSO

Equal Opportunity Employer



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Waste Management Program

11.0 Waste

- NLS Asphalt Inc. may only transfer byproduct material under the following conditions.
- Disposal of the gauges will be by transfer to another facility specifically licensed for the material or returned to the gauge manufacturer.
- When transferring material NLS Asphalt Inc. shall verify that the transferee's license authorizes the receipt of the type, form, and quantity of byproduct material to be transferred.
- NLS Asphalt Inc. may obtain and read a current copy of the transferee's specific license or registration certificate.
- NLS Asphalt Inc. may have a written certification by the transferee that they are authorized by license or registration certificate to receive the type, form, and quantity of byproduct material to be transferred, specifying the license or registration certificate number, issuing agency and expiration date.
- For emergency shipments NLS Asphalt Inc. may accept oral certification by the transferee that they are authorized by license or registration certificate to receive the type, form, and quantity of byproduct material to be transferred, specifying the license or registration certificate number, issuing agency and expiration date. Provided that the oral certification is confirmed in writing within 10 days.
- NLS Asphalt Inc. may obtain other sources of information compiled by a reporting service from official records of the Commission or the licensing agency of an Agreement State as to the identity of the licensees and the scope and expiration dates of licenses and registration.

Edward L. Hoffman

NLS Asphalt Inc.
QC/QA Manager
Company RSO