

# FOXFIRE CONSULTANTS, INC.

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January 29, 2015

*Certified Mail Return Receipt Number 7007 2680 0001 2267 4482*

**United States Nuclear Regulatory Commission**

ATTN: Document Control Desk

Washington, D.C. 20555

**Re: Reply to a Notice of Violation - NRC License 47-23771-01**

**To Document Control Desk:**

A safety inspection was conducted by Mr. Steven Courtemanche of the United States Nuclear Regulatory Commission ("NRC") at Foxfire Consultants, Inc.'s ("Foxfire") nuclear density gauge storage facility located at 9804 County Route 52, Gilbert West Virginia and the temporary jobsite at Glen Alum Operations, Wharnccliffe, West Virginia. As a result of this inspection, it has been determined that five (5) Security Level IV violations of NRC requirements occurred. The findings and Foxfire's corrective actions were discussed during the inspection exit meeting conducted on January 20, 2015.

Pursuant to the provisions of 10 CFR 2.201, Foxfire is hereby submitting the required written statement of explanation to the NRC for each of the violations documented during the December 2014/January 2015 inspection and exit meeting. Foxfire is committed to radiation safety and to compliance with NRC regulations and licensed conditions and therefore is providing the following:

- (1) *Severity Level IV violation* - 10 CFR 20.1101(c) requires that the licensee periodically (at least annually) review the radiation safety program content and implementation. Between December 31, 2012 and December 17, 2014, the licensee did not periodically (at least annually) review the radiation safety program content and implementation.

*Reason for the violation* – Foxfire is a small company with only two nuclear density gauges and four full-time field technicians. Because of Foxfire's small size, management personnel implements on-going review of compliance with field and laboratory safety techniques. However, these are generally not documented. The 2013 annual documentation of the review of the radiation safety program content and implementation was inadvertently overlooked.

*Corrective steps taken and results achieved* – This Severity Level IV violation was

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identified by the inspector during the course of his December 2014 inspection. As verbally stated during the exit meeting on January 20, 2015, a review of the radiation safety program content and implementation was completed immediately and the results of the review was documented on December 17, 2014.

*Corrective steps to avoid future violations* – As verbally stated during the exit meeting on January 20, 2015, an electronic calendaring system has been set up to remind the Radiation Safety Officer (“RSO”) of the next annual due date for review of the radiation safety program content and implementation. Additionally, notices with the next annual due date for review of the radiation safety program content and implementation are posted on the gauge vault door and in Foxfire’s office.

*The date of full compliance* –Foxfire conducted and documented a review of the radiation safety program content and implementation on December 17, 2014. As a result of the review and the actions taken to ensure future reviews will be conducted in a timely manner, Foxfire was in compliance with the requirement to conduct such a review as of the December 17, 2014.

- (2) *Severity Level IV violation* – 49 CFR 172.403 states that each package of radioactive material transported on public highways is required to have two (2) RADIOACTIVE labels affixed to opposite sides of the package. One of the two RADIOACTIVE labels had fallen off of one of Foxfire’s transport packages and had not been replaced as of December 17, 2014.

*Reason for the violation* – One of the required labels had fallen off of the transport container and this occurrence had gone unnoticed by personnel.

*Corrective steps taken and results achieved* – As verbally stated during the exit meeting on January 20, 2015, the required labels were applied before December 21, 2014 prior to transporting the nuclear density gauge on public highways.

*Corrective steps to avoid future violations* – A notice has been posted in the nuclear density gauge storage vault requesting that personnel review nuclear density gauges to ensure that all required labels are on the transport container and that such labels are legible prior to loading the nuclear density gauge in the vehicle. Additional labels are stored in the nuclear density gauge storage vault so that any damaged or missing labels can immediately be replaced. Management will conduct a meeting with field personnel to review the Department of Transportation labeling requirements along with the contents of the posted notice. Also, an item has been added to the six-month nuclear density gauge inventory checklist noting that the nuclear density gauges have all required labels at the time of inventory.

*The date of full compliance* – All labels for both transport cases were applied and legible prior to transporting on public highways. Foxfire was in full compliance with Department of Transportation labeling requirements prior to December 21, 2014.

- (3) *Severity Level IV violation* - 49 CFR 172 Subpart D, 49 CFR 178.3 , and 49 CFR 178.350 requires that packages used for the transportation of radioactive material have the required specified markings. The label with the required markings had come off of the transport container and had not been replaced as of December 17, 2014,

*Reason for the violation* – One of the labels contained the required specified markings had fallen off of the transport container and this occurrence had gone unnoticed by personnel.

*Corrective steps taken and results achieved* – As verbally stated during the exit meeting on January 20, 2015, the labels containing the required specified markings were applied before December 21, 2014 prior to transporting the nuclear density gauge on public highways.

*Corrective steps to avoid future violations* – A notice has been posted in the nuclear density gauge storage vault requesting that personnel review nuclear density gauges to ensure that all required labels are on the transport container and that such labels are legible prior to lading in the vehicle. Additional labels are stored in the nuclear density gauge storage vault so that any damaged or missing labels can immediately be replaced. Management will conduct a meeting with field personnel to review the Department of Transportation labeling requirements along with the contents of the posted notice. Also, an item has been added to the six-month nuclear density gauge inventory checklist noting whether or not the nuclear density gauges have all required labels at the time of the inventory.

*The date of full compliance* – All labels for both nuclear density nuclear density gauges were on the transport cases and legible prior to transporting on public highways. Foxfire was in full compliance with Department of Transportation marking and labeling requirements prior to December 21, 2014.

- (4) *Severity Level IV violation* - License Condition 15 of License No. 47-23771-01 requires, in part, that the licensee conduct a physical inventory every six months or at other intervals approved by the NRC to account for all sources and/or devices received and possessed under the license.

*Reason for the violation* – Foxfire is a small company which possesses only two nuclear density gauges. Normal nuclear density gauge usage at Foxfire consists of one nuclear density gauge being utilized in the field while the other nuclear density gauge remains stored in the gauge storage vault. Both nuclear density gauges are stored in the gauge storage vault when not required for field density testing. Historically, physical inventory has been conducted at the time that required annual leak tests were performed. When the required interval for leak testing requirements was revised from every six months to annually, it was overlooked that documentation of a physical inventory of the nuclear density gauges was needed in the interim between leak tests in order to comply with License Condition 15 of License No. 47-23771-01.

*Corrective steps taken and results achieved* – A physical inventory was performed and documented on December 16, 2014.

*Corrective steps to avoid future violations* – As verbally stated during the exit meeting on January 20, 2015, an electronic calendaring system was set up to remind the RSO of the six-month due date for physical nuclear densometer gauge inventory documentation. Additionally, notices with the next due date for documentation of the six month physical nuclear densometer gauge inventory are posted on the gauge vault door and in Foxfire's office.

*The date of full compliance* –Foxfire conducted a physical inventory of Foxfire's nuclear density gauges and was in full compliance with License Condition 15 of License No. 47-23771-01 on December 16, 2014.

- (5) *Severity Level IV violation* - License Condition 19 of License No. 47-23771-01 requires that the licensee conduct its program in accordance with the statements, representations, and procedures contained in the facsimile dated July 22, 2005. Item 10, "Radiation Safety Program – Occupational Dosimetry" of the facsimile dated July 22, 2005, requires, in part, that dosimetry is to be processed and evaluated by an NVLAP-approved processor that is exchanged at a frequency recommended by the processor. The licensee provides its occupationally-exposed radiation workers with optically stimulated luminescent dosimeters which the processor recommends be exchanged at a quarterly frequency. As of the December 17, 2014, the licensee had not exchanged dosimetry of occupationally-exposed radiation workers for the July – September 2014 period as of the date of the inspection, a period in excess of the recommended quarterly frequency.

*Reason for the violation* – The dosimetry used by Foxfire's workers for the quarter dated July-September 2014 was exchanged at the end of said quarter for dosimetry for the quarter dated October –December 2014. The package containing the July – September 2014 was not submitted to the processor for analysis at that time because said package was inadvertently overlooked and did not get delivered to the post office.

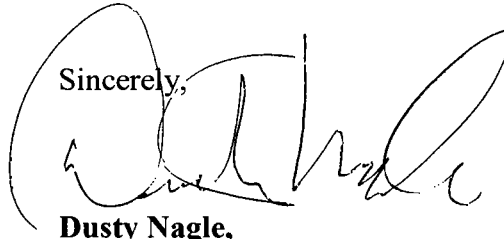
*Corrective steps taken and results achieved* – The dosimetry used by workers during the July-September 2014 quarter was sent via U. S. Postal Service to the processor on December 17, 2014.

*Corrective steps to avoid future violations* – As verbally stated during the exit meeting on January 20, 2015, an electronic calendaring system was set up to remind personnel to submit the dosimetry to the processor in a timely manner and to remind management to review the results of said dosimetry analysis. Additionally, notices have been posted at the desks of both the personnel responsible for submitting the dosimetry to the processor and management with the due dates for submission of dosimetry and for review of dosimetry reports.

*The date of full compliance* - Foxfire sent the dosimetry used July-September 2014 to

the processor and was in full compliance with License Condition 19 of License No. 47-23771-01 on December 17, 2014.

Please let me know if I can provide any additional information.

Sincerely,  
  
**Dusty Nagle,**  
*Radiation Safety Officer*

c: Mr. Daniel Dorman, Regional Administrator, Region I  
Mr. Steven Courtemanche, Health Physicist