



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
245 PEACHTREE CENTER AVENUE NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

September 16, 2014

Erwin Citizens Awareness Network
P.O. Box 1151
Erwin, TN 37650

SUBJECT: RESPONSE TO QUESTIONS POSED DURING CHAIRMAN MCFARLANE
MEETING WITH THE ERWIN CITIZENS AWARENESS NETWORK
ON JUNE 23, 2014

Dear Erwin Citizens Awareness Network members:

This letter is in response to the questions that were asked during the U.S. Nuclear Regulatory Commission (NRC) meeting between the Chairman McFarlane and staff (Victor McCree, Mary Woollen, Phillip Niedzielski-Eichner, Jenny Weil, Michael Waters, Eliot Brenner, Charles Stancil, and Sarah Price), and members of the Erwin Citizens Awareness Network (ECAN) on June 23, 2014, at the Erwin City Town Hall. Our responses to your questions are documented in the Enclosure to this letter.

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 NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Should you have any additional questions or comments, please contact me via telephone at 404-997-4628, or james.hickey@nrc.gov.

Sincerely,

/RA/

James A. Hickey, Chief
Projects Branch 1
Division of Fuel Facility Inspection

Enclosure:
Response to ECAN Concerns

September 16, 2014

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PUBLICLY AVAILABLE NON-PUBLICLY AVAILABLE SENSITIVE NON-SENSITIVE
ADAMS: Yes ACCESSION NUMBER: ML14259A397 SUNSI REVIEW COMPLETE FORM 665 ATTACHED

OFFICE	RII:DFFI/BR1	RII:DFFI/BR1	RII:DFFI/SRI	RII:DFFI/BR1			
SIGNATURE	SLM	DJH2	CRS1 via e-mail	JAH5			
NAME	S. Mendez	D. Hartland	C. Stancil	J. Hickey			
DATE	8/ 28 /2014	8/ 28 /2014	8/ 28 /2014	9/ 16 /2014			
E-MAIL COPY	YES NO	YES NO	YES NO	YES NO			

OFFICIAL RECORD COPY

NRC Response to ECAN Concerns

During the U.S. Nuclear Regulatory Commission (NRC) meeting between Chairman and staff, and members of Erwin Citizens Awareness Network (ECAN) on June 23, 2014, a number of questions were asked. The NRC's responses to the questions are as follows:

1. Dr. Michael Ketterer, Ph.D., asked if there were any regulatory requirements for transport and monitoring of offsite environmental contamination.

The NRC regulatory requirements for radiological effluent releases from fuel facilities are those specified in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 20, as public dose limits and includes all radionuclide effluents. The regulatory requirement is to demonstrate compliance with those public dose limits. One way to demonstrate compliance is to take measurements which prove that the licensee's effluent concentrations are below the limits in Appendix B of 10 CFR Part 20. Compliance may be demonstrated in other ways. Licensees can use various models to show compliance with the public dose limit. The NRC must find the monitoring methods and the models to be acceptable, but we do not mandate a specific method or model.

The NRC uses Inspection Procedure (IP) 88045, "Effluent Control and Environmental Protection," to assess licensee compliance with the regulatory requirements. The NRC's regulatory jurisdiction is limited to the processing of effluents generated within the licensee's boundary and discharges from the site. Once the effluent is discharged to the environment, the State and U.S. Environmental Protection Agency (EPA) have the jurisdiction.

2. Is there man-made/enriched uranium in the NFS outfall to the Nolichucky River and downstream areas?

Yes, NFS is authorized to release small quantities of enriched uranium to the Nolichucky River. NFS discharges trace amounts of uranium (U) into the Nolichucky River, which includes high-enriched uranium (HEU). NRC regulations specify release limits for various radionuclides, including uranium isotopes U-235 and U-238, which are two major components in HEU.

Natural uranium, the type of material found in rocks and soil, is composed of approximately 99.3 percent U-238 and 0.7 percent U-235. HEU, the type of material processed at NFS, is enriched with the U-235 isotope to greater than 20 percent. Since NFS is licensed to handle and process HEU, trace amounts of HEU may be present in liquid wastes. Liquid waste is processed, sampled, and analyzed prior to being discharged offsite. The effluent monitoring program ensures that liquid discharges are in compliance with regulatory release limits.

The NRC regulatory limits for liquid effluent discharges from NFS are based on activity concentration, and the discharges must comply with these release limits, regardless of their enrichment. The allowable release limit, for both U-235 and U-238, is 3.0×10^{-7} micro curies per milliliter ($\mu\text{Ci/ml}$). This release limit was conservatively calculated with the assumption that a member of the public consumes water directly from the liquid discharge point at this concentration for an entire year. The recent NFS biannual effluent monitoring reports can be retrieved at this Web page - <http://www.nrc.gov/materials/fuel-cycle-fac/fuel-fab/nfs-effluent-reports.html>.

3. Ms. Trudy Wallack asked about what appears to be a “revolving door syndrome” with the NRC staff.

The NRC engages in employee development and promotions like any other organization. As a result, an individual may transfer or be promoted, out of or in to, the NFS oversight organization to support the NRC mission. The length of time an individual stays in one position is determined by a combination of the individual’s development, career objectives, and the mission needs of the agency.

Resident inspectors have specific rotation requirements. The tour-length of a resident inspector at a single site is limited to 7 years by Commission Policy, with the goal of ensuring they do not become too familiar with the activities and personnel they are inspecting. Resident inspectors provide first-hand independent and objective assessment of plant conditions and performance. Resident inspectors live in the area of the nuclear facility, and report to offices at the plant during regular business hours. In addition, resident inspectors spend a portion of their time at the plant during weekends and at night. Resident inspectors significantly enhance the agency's onsite monitoring of the plants, and reduce the time to respond to events.

4. Ms. Barbara O’Neil asked about the issuance of the most recent National Pollutant Discharge Elimination System (NPDES) Permit that was valid for only 3 years, and will expire in 2015. It was previously valid for 10 years in the past. Has the Hazardous Waste Permit been expired for 2 years, and is that why it was only issued for 3 years?

The EPA and the Tennessee Department of Environment and Conservation are the agencies responsible for these permits. The NRC has no role with the issuance of these permits. Questions regarding these permits should be directed to the responsible agencies to ensure they are adequately addressed.

5. Document Requests

With respect to the documents requested, we evaluated the request and determined that a significant amount of effort from the NRC would be required to support the release of these documents. As a result, any documents desired should be requested by initiating a Freedom of Information Act (FOIA) request. The request could be made at the following link, <http://www.nrc.gov/reading-rm/foia/foia-submittal-form.html>. Additional information on the FIOA process is accessible through the following link, <http://www.nrc.gov/reading-rm/foia/foia-privacy.html>, or by contacting the NRC's FOIA/PA Office at 301-415-7169 from 7:30 a.m. to 4:15 p.m. EST, Monday through Friday, excluding Government holidays.

Please note the National Academy of Science (NAS) may review some of the documents you request to support the ongoing cancer study. If so, those documents will become publically available. The NRC also offers a Public Document Room (PDR), which maintains a large collection of publicly available agency records, and provides equipment and services to assist people who seek access to NRC records. The PDR is located at NRC headquarters at 11555 Rockville Pike, Rockville, Maryland 20852. In addition, certain NRC publications (staff-prepared NUREG-series reports) are available for subscription purchase from the National Technical Information Service (5285 Port Royal Road, Springfield, Virginia 22161), the Government Printing Office (GPO), and the NRC Web site

(<http://www.nrc.gov/reading-rm/doc-collections/nuregs/>). You may contact the GPO Access User Support Team by telephone (toll-free) at 1-888-293-6498 from 7:00 a.m. to 6:00 p.m. EST, Monday through Friday, excluding Government holidays. You can also contact the GPO Access User Support Team by e-mail at ContactCenter@gpo.gov or by fax at 202-512-2104.

A request could be made to the agency to waive or reduce the fees of a FOIA request. However, fee waivers or reductions are limited to situations in which a requester can show that the disclosure of the requested information is in the public interest, because it is likely to contribute significantly to public understanding of the agency's operations and activities, and is not primarily in the commercial interest of the requester. If you ask the NRC to waive or reduce its fees for processing your FOIA request, you will need to submit a statement of justification, as follows:

- Describe the purpose for which you intend to use the requested information.
- Explain the extent to which you will extract and analyze the substantive content of the requested records.
- Describe the nature of the specific activity or research in which you will use the requested records and the specific qualifications you possess to utilize information for the intended purpose in such a way that it will contribute to public understanding.
- Describe the likely impact on the public's understanding of the subject, compared to the level of public understanding of the subject before disclosure of the requested information.
- Describe the size and nature of the public segment whose understanding will be increased by disclosing the requested information.
- Describe the means by which you intend to disseminate the requested information to the general public.
- Indicate whether you will provide public access to the requested information free of charge or in return for an access or publication fee.
- Describe any commercial or private interest that you or any other party may have in the requested records.

LIST OF ACRONYMS

ECAN	Erwin Citizens Awareness Network
EPA	U.S. Environmental Protection Agency
FOIA	Freedom of Information Act
HEU	High-enriched Uranium
IP	Inspection Procedure
NPDES	National Pollutant Discharge Elimination System
NAS	National Academy of Science
PDR	Public Document Room
U	Uranium