

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

November 3, 2008

Mr. Peter Habighorst  
Chief, Fuel Manufacturing Branch  
Nuclear Regulatory Commission  
One White Flint North  
11555 Rockville Pike  
Rockville, Maryland 20852-2738

Re: UF6 Processing at Nuclear Fuel Services, Inc., SNM-124

Dear Mr. Habighorst:

This is a follow-up to our letter of September 17, 2008 in which we mentioned that we would address the UF6 processing in the new Commercial Development Line at NFS. We are concerned about some of what we believe are unsatisfactory NFS answers to the NRC questions in the RAI Concerning NFS' CD Line Facility, June 25, 2008 (ML081790147). Erwin CAN requests that the NRC provide written responses to our questions in italics.

Given NFS' record for accidents and releases, to include UF6, into the environment -- air, water, and soil -- and their dismal management and safety record, we are not optimistic. We believe that a UF6 accident involving a release of hydrofluoric acid into the environment is *highly likely* if the NRC approves the NFS request for this license amendment to process UF6. NFS believes so too as indicated on Page 13 of the referenced document, "NFS' Integrated Safety Analysis (ISA) assumes that the cylinders will not withstand the bounding fire conditions for CDL, and rupture of the UF6 cylinder will occur."

In the 1996 Final DOE/EIS-0240, on page 4-59, it states "If a UF6 cylinder release were to occur, there would be an estimated 1 and 1.4 latent cancer fatalities in the general population within 80 km (50 miles) of B&W and NFS respectively. For the MEI (Maximum Exposed Individual), there would be increased likelihood of latent cancer fatality of  $1.9 \times 10^{-2}$  and  $3.0 \times 10^{-3}$  at these two sites respectively.

The DOE/EIS-0240-SA1, dated Oct. 11, 2007, (Table 4.2-2, page 11) shows a 36% increase in Radiological Doses and Risks, with a "1 chance in 71 latent cancer fatality for NFS." The largest calculated MEOI dose from down-blending activities would be  $2.8 \times 10^{-3}$  and would occur at NFS primarily due to the much closer proximity of the MEOI."

**QUESTION 1:** NFS stated "Specifically, the proposed operation would result in potential emissions from the source of less than five tons per year of each air contaminant and each regulated air pollutant that is not a hazardous air pollutant, less than 1,000 pounds per year of each hazardous air pollutant...." *What are the air contaminants, and what is quantity of*

*each? What are the regulated air pollutants, both hazardous and non-hazardous, and what are the quantities of each? (Note: It is curious that these potential emissions are per year. In the NFS License Performance Review on Oct. 2, NFS officials stated publicly that the quantity and duration of the UF6 processing would be "only" 700 kg for three (3) months. This is not believable.)*

**QUESTION 2:** *We would like to have a copy of the revision to the Emergency Plan that addresses possible UF6 accidents. NRC may send it to Erwin CAN's P. O. Box.*

**QUESTION 3,** Earthquakes: NFS stated, "These postulated accidents were then analyzed for applicable Chemical (occupational and environmental), or Radiological (occupational and environmental) consequence." *What were the postulated accidents and what were the results of the analysis?*

(NOTE: NFS is situated on top of five (5) fractures with two (2) fault lines, and is located within three earthquake zones, the Appalachian Tectonic Belt and the New Madrid Seismic Zone, the most seismically active area east of the Rocky Mountains. In 1993, an additional seismic zone was identified in East Tennessee running roughly parallel to Interstate 75 between Chattanooga and Jellico. **The risk associated with this seismic area has not been rigorously quantified.** Unicoi County is at moderate risk of being affected by a large New Madrid earthquake. The strongest earthquake recorded in East Tennessee was a 4.6 event in Blount County in 1973 and was widely felt. The most recent earthquake above MMI IV (magnitude 3.9) occurred Oct. 26, 1995 a distance of about 50 miles from the site (NFS). Each year more than 200 earthquakes occur, but most are unfelt by the populace. There is a concern that a large magnitude event grows more probably with each passing year. Such an event could directly affect more than 75% of the county's population, primarily through a disruption of pipelines, as well as damage to older masonry structures. (Page 3-11, Figure 3.3, 1999 NRC EA; Unicoi County Emergency Plan, 4/7/06, p. xiii.)

In the 1996 Final DOE/EIS-0240, Environmental Consequences, Page 4-59, "The accident scenarios that were considered included a tornado, straight winds, aircraft crash, truck crash, nuclear criticality, process-related accidents, and an evaluation basis earthquake. With the exception of the fluidized bed release and the filter fire (with continuous exhaust flow), all of the accidents scenarios that are considered potentially bounding can be initiated by the evaluation basis earthquake. Therefore, it is concluded that the **evaluation basis earthquake would result in the highest atmospheric release of radioactivity and hazardous chemicals.** The evaluation basis earthquake is assumed to initiate the nuclear criticality, UF6 and other release scenarios." (emphasis added)

In the October 11, 2007 DOE/EIS-0240-SA1, the earthquake risk had increased from 38 to 709 -- 18.7 times higher, a *significant* change to any reasonable person. Why then, did the NRC not pursue further RAIs with respect to a severe earthquake in Erwin causing, what the 1996 EIS called "the highest atmospheric release of radioactivity and hazardous chemicals?" With the new estimate of earthquake risk being almost 2000% higher than

the 1996 estimate, wouldn't you think the public would be at least that much more concerned about having NFS' shoddy operation dealing with "extremely hazardous" UF6? *Is the NRC's interest in continuing to cover-up the Supplement Analysis so great that you're doing your best to ignore the new data in it?*

**QUESTION 4.** NFS states that "A general description of the accident sequences has been provided in the ISA Summary as required by 10 CFR 70.65(b)(3)."

(Note: According to the Request for Supplemental Response to CAL 02-06-003, 6/30/06, "since the ISA that was submitted in response to the October 2004 due date, NFS has discovered occasional unanalyzed, credible accident sequences in both BPF and (redacted)." (ML081440078). **Credible accident sequences have gone unanalyzed before. What is being done by the NRC to keep it from reverting to close-enough-for-government-work-type acceptance of incomplete, sloppy ISAs from NFS again?**)

**QUESTION 5.** Regarding IROFS CDS3-16. *What is the revision in the ISA for this IROFS?*

(Note: "As part of the safety program, licensee (NFS) committed to establish management measures to maintain the reliability of IROFS." Inspection Report Aug. 2, 2004 paragraph 2b, (ML081290542). However, as of June 30, 2006, "NFS has not yet implemented fully management measures to assure that IROFS will be available and reliable." Source: Request for Supplemental Response to CAL 02-06-003, (ML081440078). *Does the NRC intend to risk Erwin residents' lives for 2 years again while it gives NFS all the time it wants to comply with NRC safety regulations even though NFS will now be handling extremely hazardous UF6 in downtown Erwin?*)

**QUESTION 6.** NRC states "Once an IROFS has failed it cannot be considered available and reliable to perform its safety function." Regarding Administrative IROFS CDG-17, NFS states that it "provides protection against open and unattended favorable geometry containers, while CDG-1 helps prevent the handling of open unfavorable geometry containers within the facility. Since containers handled under CDG-17 are favorable geometry, there is no concern with the second failure **unless** an additional failure involving spacing occurs."

(Note: The following are a few examples of past NFS failures regarding **unfavorable geometry and safety equipment failures:**

1. NFS License Performance Review, March 12, 2004 (for Jan. 20, 2003 - Jan. 24, 2004) (ML081440081) - Lack of supervisory oversight for a waste transfer operation in the (redacted) caused solution to be transferred from a favorable to an **unfavorable geometry vessel that was over the allowed procedural concentration limit. Did not meet NCS limits for uranium concentration.**

2. NFS Event Report 40750, May 14, 2004 and Inspection Report, June 28, 2004 (ML081440457) and Exercise of Enforcement Discretion, Oct. 6, 2004 (6 months later) (ML081500427). Loss of Criticality Safety Controls -- the inability of an engineered control to meet specified performance criteria. The condition had existed since system operation commenced in 1999.

3. NFS Event Report 41097, Oct. 6, 2004 - Safety Related Needle Valves in incorrect position. **Potential vulnerability to workers and public** of high consequence event involving failure of safety controls designed to prevent a hydrogen explosion in BLEU Preparation Facility U-Aluminum Dissolution glove boxes/dissolvers.

4. NFS Event Report 41149, Oct. 26, 2004 - Failure of safety system causing **unfavorable geometry**.

5. NFS License Performance Review, Mar. 22, 2005 (for Jan 25, 2004 to Jan 22, 2005, (ML081370278))

- The licensee compromised an IROFS when they failed to control (redacted) **unfavorable geometry** bags that were open and unattended (redacted).

- The licensee compromised an IROFS when they failed to remove an **unfavorable geometry** bag from the Oxide Conversion Building process area after use.

- The licensee compromised an IROFS when they failed to remove an **unfavorable geometry** bag from (redacted).

6. NFS Inspection Report, Dec. 16, 2005 (ML081480307):

- Failure to close and lock the block and bleed valves and subsequently released approximately (redacted) of liquid waste effluent from (redacted) to **unfavorable geometry** tanks without confirmation of U235 concentration.

- Two examples of failure to provide adequate assurance that IROFS will be reliable and available to perform their function when needed.

7. NFS Event Report 42411, Mar. 13, 2006 - All safety items unavailable

8. NFS Event Report 43090, Jan. 11, 2007 - Failure of Gamma Spectrometer Waste Monitor (only one safety item available)

9. SCUBA Report, Feb. 16, 2008 (page 57) - Safety Related Equipment (SRE) and Items Relied on for Safety (IROFS) are run to failure.

10. NFS Inspection Report, May 5, 2008 (ML081270020) - Failure to adequately maintain BPF downblending In-Line Monitor, an IROFS

11. NFS Event Reports 44344 and 44345 - Items Relied on for Safety (IROFS) Discovered Inoperable

With safety control outages, IROFS failures, unfavorable geometry situations, degraded equipment, and other unsafe conditions being allowed by the NRC to persist at NFS, in some cases, for 5 years, ***what is the Erwin public to do but work to protect itself from NFS?*** The NRC has proven -- by the 3-year cover-up for NFS and by repeated enforcement negligence with respect to serially-noncompliant NFS -- that it's surely not looking out for us!

**QUESTION 7.** NFS states "The initiating event (leak in connection) will be revised to reflect the actual event of concern, an improperly connected system. Revision to Table 6-1 will be reflected in the CD Line ISA Summary prior to facility start-up." **We would like to see Table 6-1. Please send it to our P. O. Box.**

**QUESTION 9.** NFS states "container limits will be enforced via postings on the enclosures, operating procedures and during training. Given that essentially all enclosures at NFS have

some type of container limit, it is unlikely this control would be violated since operators are accustomed to having a container limit and the specific limit is clearly posted on the enclosure." NFS also states that "In regards to defense-in-depth practices with a preference for engineered controls, there are *rack positions* inside the enclosures that are designated NCSE."

**Past practices at NFS show problems with engineered controls, container limits, and rack positions as follows:**

1. NFS License Performance Review, March 12, 2004 (for Jan. 20, 2003 - Jan. 24, 2004) (ML081440081):

- Mass (redacted) limits for (redacted) containers of (redacted) were exceeded when material was moved from one (redacted) to another by operators who did not know the NCS (Nuclear Criticality Safety) requirements for the (redacted) area.

- Containers of (redacted) exceeded the (redacted) H/X ratio of the material prior to placing the material (redacted) had been established.

- Storage of SNM containers in the (redacted) scanning facility without proper safety postings.

2. NFS Inspection Report, Jan. 26, 2004 (ML081440508) - Multiple SNM (redacted) containers in a location (redacted) which was neither designated for storage nor approved by a posted station limit card.

3. NFS Event Report 41274, Dec. 12, 2004 - Materials were transferred to a storage area without being transferred thru a particular device as required by the Standard Operating Procedure (SOP).

4. NFS Event Report 41523, Mar. 24, 2005 - Equipment Piece for Storage Rack not in place for safe storage of SNM (Loss or degraded safety items).

5. NFS Inspection Report, June 27, 2005 (ML081440517) - Licensee identified a container stored in an unauthorized location (redacted) designed with several different types of shelves, and as noted on the NCS posting, different containers were allowed to be stored on each type of shelf. The similarity between shelves led to confusion on the part of the operators and supervisors and an incorrect decision resulted in a containers being stored in an unauthorized location.

6. NFS Inspection Report, Mar. 6, 2006 (ML081490104) - Licensee identified a container stored in an area which exceeded the posted mass limit.

7. NFS License Performance Review, Mar, 28, 2006 (ML072490009):

- Failure to store SNM in its authorized location due to confusion over identical storage racks.

- Failure to close an open container when it was left unattended

- Failure to comply with criticality safety instructions.

8. NFS Inspection Report, May 31, 2006 (ML081500430) - Numerous S/X equipment labeled "0" instead of "O".

***How can NRC assure the public that extremely hazardous UF6 won't be handled as cavalierly as NRC continues to allow NFS to handle other SNM?***

**QUESTION 13.** NFS' ISA "assumes that the cylinders will not withstand the bounding fire conditions for the CD Line, and rupture of the UF6 cylinder will occur." ***If this happens,***

***what will the result be to workers and the offsite public within a mile of NFS?***

Additionally, the referenced literature is 18 and 40 years old. Surely there is more current literature indicating the threshold failure of a UF6 cylinder.

**QUESTION 14.** NFS states "the CD Line does not process or use flammable, combustible, and explosive gases and liquids."

**However, the following government documents seem to dispute NFS's assertion. *What is the truth? Shouldn't the NRC determine the facts before it even considers the CD Line license amendment?***

1. Page 8 of the EA/FONSI regarding the CD Line issued by the NRC on Aug. 15, 2008, states "Fire accidents - Ignition of **combustible** material in and around the processing line."

2. The 1996 Final DOE/EIS-0240 states, "In the evaluation basis earthquake accident scenario, it is assumed that the building collapses, resulting in ruptured containers, piping, and tanks releasing uranium solutions, water, **toxic gases, flammable gases**, and toxic and reactive liquids. Thirty percent of a cylinder containing LEU is assumed to be released into the atmosphere. The result is a release of 1,900 kg (4,100 lbs) of 1.5-percent assay LEU.... "

3. The Record of Decision for the Disposition of Surplus Highly Enriched Uranium Final Environmental Impact Statement, Federal Register/Vol. 61, No. 151, Aug. 5, 1996, states "In the area of potential facility accidents, in particular, UF6 blending would result in higher accident consequences because of a UF6 cylinder breach accident that could release **gaseous** UF6 (both radiologically and chemically toxic) into the environment.

(Note: Gaseous defined: Vaporous, effervescent in the form of gas -- vapor, **volatile substance**, fumes, acriform fluid). (emphasis added)

**QUESTIONS 15-18. Fires and fire safety has been a continuing problem at NFS. According to the 1996 DOE/EIS-0240, in the case of the UF6, in a filter fire accident, it is assumed that a fire occurs that releases all the uranium in the bag filters, traps, and HEPA filters to the atmosphere in a matter of minutes.**

Repeated fire and fire related safety issues at NFS continue to be a plague upon Erwin, with a few examples from the 3-year cover-up period to follow. ***When is the NRC going to force NFS to stop gassing us from fire smoke?*** NFS's big incinerator fire on April 2, 1996 only resulted in renewal of NFS's license!

1. NFS Inspection Report, May 17, 2004 (ML081440458):
  - Failures led to a penetration of a firewall that went undetected for several days, having inadequate compensatory measures in place to ensure the integrity of the firewall.
  - Licensee failed to incorporate new projects in operation for approximately 12 months in the Pre-Fire Plan
  - A fire watch failed to maintain visual observation of the hot work activity at all times.
  - Failure to comply with written procedures impacting fire safety.
  - May 15, 2004 a firewall penetration was not sealed.

2. NFS Inspection Report, Aug. 2, 2004 (ML081290542) - During a review of the fire protection IROFS for the (redacted) system, it was noted the functional test of the

(redacted) detection interlocks did not verify the (redacted) detector was in calibration prior to performance of the test.

3. NFS Event Report 40901, July 27, 2004 - Fire/Explosion in Off-Gas System.  
Ignition of off-gas process line during disassembly of processing equipment.

4. NFS Inspection Report, Dec. 13, 2004 (ML081440453):

- A fire resulted (redacted) due to the temporary manifold mixing the flammable gasses into the inert gas line

- One fire safety IROFS inoperable.

5. NFS License Performance Review Mar. 22, 2005 (ML081370278):

- Failure to verify the availability of a fire safety IROFS for the (redacted) system.

- Failure to follow fire safety procedures that involved new/areas/modifications

- Improper implementation of LOA (redacted) for the (redacted) was not properly implemented and led to a fire.

6. NFS Inspection Report, April 4, 2005 (ML081440195):

- Improper maintenance creating a fire hazard

- Several fire dampers did not have protective screens.

7. NFS Inspection Report, June 27, 2005 (ML081440517) - A fire occurred in an area which had undergone extensive repairs. Equipment deficiency was identified as cause of the fire.

8. NFS Event Report 41839, July 19, 2005 - Fire/Explosion in Waste (Calcliner) Furnace. Air contacted the hot gases leaking from the calciner and the gases were ignited. A prefilter in the vent duct caught fire, the HEPA filter was damaged and part of the vent duct melted.

9. NFS Inspection Report, Sep. 19, 2005 (ML081480306) - Two fires occurred at NFS. A longstanding deficiency in equipment condition contributed to one event. Some equipment damage occurred, including significant deformation of the PVC ventilation piping from the process. The fire alarm was not sounded due to confusion between the scene of the fire and the alarm station operator who received a verbal report from the scene. Due to the confusion, the Fire Brigade did not respond to the scene. The event demonstrated this aspect of system operations also increased the probability of a fire in the enclosure.

10. NFS Inspection Report, May 4, 2006 (ML073060347) - Work request involving modification of carbon dioxide fire suppression system wiring never implemented, safety controls affecting two carbon dioxide system interlocks not tested.

11. NFS Inspection Report, Dec. 21, 2006 (ML073050171) - All required fire protection features not completed prior to startup of LA.

12. NFS Inspection Report, Jan. 26, 2007 (ML073060497):

- Non functioning fire damper and associated ductwork **non operational for over a year** replaced.

- Electrical fire in a heat tract line

- Inoperable Halon system (both tanks fully discharged)

13. NFS License Performance Review, Aug. 31, 2007 (ML072430937) - Failure to follow, maintain and develop fire protection procedures which led to two halon discharges.

**QUESTIONS 19 a-e and QUESTIONS 20 a-c:** NFS states "In the event of an accident involving the release of material, no reduction in material released through the stack is assumed due to the off-gas trap. The sudden increase in pressure causes the release of

material in the enclosure, which is assumed to be contaminated with a 0.001 kg of uranium, to the ventilation system. **It also causes the filter to fail, discharging its material directly to the environment through the stack.**" (emphasis added)

**NFS has had many releases into the environment**, and all the while NFS was an NRC licensee. ***How is the NRC going to regulate NFS differently now and prevent releases into the air we breathe, into the water we drink and onto the land on which we raise livestock, crops and gardens and that we let our kids play on?*** Below are a few examples:

1. NFS Inspection Report June 28, 2004 (ML081440457) - Licensee staff documented unusually high contamination ranging from 100,000 disintegrations per minute (dpm) to 300,000 dpm inside a dry box enclosure located in the process area. NFS had posted a temporary clean area inside of a radiologically controlled area and the posting was confusing. These incorrect assumptions lead to an individual exceeding the derived air concentration (DAC) action levels in the area and unexpected contamination inside the dry glove box.

2. NFS Inspection Report, Sep. 20, 2004 (ML081440246) - Stack (redacted) had frequently exceeded licensee established actions points (9 months).

3. NFS Event Report 41197, Nov. 15, 2004 - Wet Offgas (WOG) line Calculation was not performed. IROFS (redacted) was not reliable and available on (redacted) and transfer to (redacted) which occurred on Oct. 18, Nov. 2, and Nov. 11, 2004.

4. NFS Event Report 41651, April 28, 2005 - Inadequate Controlled or Analyzed Pathway for Material Accumulation occurred in the U-Al Hydrogen dilution system area. Licensee observed a solution accumulated in a HEPA filter housing on the building (redacted) roof. Analysis of the solution determined the liquid to be a caustic by product of the process with approximately 3 grams of U-235 in the HEPA housing and filter. Further reviews of the system design identified potential pathways from the U-Al dissolution system that did not appear to be adequately controlled or analyzed. The NCS of the system relied on the physical design to prevent uranium (redacted) materials from entering the Hydrogen Dilution System and the filter housing. The system also relied on a drain in the dilution system ductwork to prevent material from entering the filter housing.

5. NFS Inspection Report, June 27, 2005 (ML081440517) - On April 7, 2005, licensee attempted to rework (redacted) waste solution (redacted). The operation required manipulation of several manual valves, and the lineup was performed in error such that the waste solution was pumped to the off-service (redacted) column. The operation eventually filled the column, which overflowed into the (redacted) filled the process off-gas piping, and overflowed into the (redacted) dilution ventilation system on the roof. When the full extent of the issue was realized on April 28, 2005, (20 days later) the (redacted) system was shutdown for review and revision of the safety basis, and also design and completion of physical modifications to the system (see Event Report below).

6. NFS Inspection Report, Mar. 28, 2006 (ML072490009):

- Failure to implement/establish a criticality safety control identified in the safety analysis for the uranium-aluminum (U-Al) hydrogen dilution ventilation system.

- Failure to rework U-Al process caustic waste solution according to procedure led to a transfer to the ventilation system.

- No signature verification the discard valve was shut and locked as required, and no verification the valve lineup was correct prior to initiating recirculation of the system.



- Failure to analyze required environmental effluent samples in the BLEU complex sewer.

- An investigation identified potential NCS control failures resulting in fissile solution accumulation in the BLEU U-Al dissolution process off-gas system.

7. NFS Inspection Report, Aug. 5, 2006, (ML081480303) - Elevated isotopic analysis on a stack sample above licensee's action limit. The reading was above the plant actions limits of 130 disintegrations per minute for alpha and 5,000 dpm for beta. **An investigation was unable to state how much material might have been vented out the stack.** Since the system normally operated continuously and no system isolation or lockout was utilized, the inspector questioned how the licensee maintained control over the system. Poor maintenance practices resulted in increased exposure.

8. NFS Event Report 42131, Nov. 8, 2005 - Exceeded Mass Limits Requirements (unanalyzed condition). Failure of IROFS for Environmental Safety Program.

9. NFS Event Report 43204, Mar. 1, 2007 - An operational upset resulted in an excessive amount of fissile material to accumulate in a portion of a glovebox location in area 800. Accumulation of fissile materials exceeding the controlled limit found in an enclosure. **NFS Past environmental releases of UF6** as outlined on page 51, CDC ATSDR Public Health Assessment-NFS, 05/29/07:

1962	Over 10 kilograms of UF6 (uranium hexafluoride) gas released to air
1964	Over 4 kilograms of UF6 released
1979	Over 3 kilograms of UF6 released
1981	Over 150 grams of UF6 released

**QUESTION 24.** Flooding/Floodplain: UF6 processing in the new CD Line will take place in Building 301. **Building 301 is located in the 100-500 year floodplain. Why is the NRC considering the processing of UF6 in an area that is highly likely to flood?**

"In the vicinity of Erwin the flood-plain elevation is between 1,600 and 1,700 feet (page 9). Downstream from the Riverview section near the mouth of Martin Creek are located the buildings of Nuclear Fuel Services, Inc. They are above the level of the Regional Flood, but are 3 to 6 feet below the Maximum Probable Flood (page 16)." Source: Floods on the Nolichucky River and North and South Indian Creeks in the Vicinity of Erwin, Tennessee, (TVA, Division of Water Control Planning).

Page 4-30, DOE 1996 Final EIS 0240 (regarding NFS) states, "The site has the potential for being flooded if the Nolichucky River experiences very high flows. Elevations of the buildings floors are between 1,640 and 1,670 ft. The UNH blending would be accommodated at facilities in the **300 area located outside** the 100-and 500-year floodplain elevations at the NFS site and determined to be **1,639 ft. and 1,640 ft.** above mean sea level, which would be above the 100-500 year floodplain elevations." (emphasis added)

Page 4-54 DOE 1996 Final EIS 0240 (regarding NFS) states "The site has the potential for being flooded if the Nolichucky River experiences very high flows. Elevations of the building floors are between 1,640 and 1,670 ft. The **UF6** conversion and blending facility would not be accommodated at facilities in the **300 area located inside** the 100-or 500-year floodplain (text deleted). Facilities in the 300 area have building floor elevations of

approximately 1,642 ft above mean sea level, which would be above the 100-and 500-year flood elevations." (emphasis added)

**(Note: The NFS buildings and floors in the 300 area cannot be *inside* the floodplain for one process and *outside* the floodplain for another).**

The Record of Decision for the Disposition of Surplus Highly Enriched Uranium Final Environmental Impact Statement, Federal Register, Vol. 61, No. 151, Aug. 5, 1996, states "Of the four candidate sites, two DOE (Y-12 and SRS) and two commercial (B&W and NFS), all facilities *except* NFS ..... would be *outside* the limits of the 100-year floodplain and are at least one foot above the 100 year floodplain elevation and, therefore would conform to both State and local floodplain requirements. As discussed in section III.D, the potential for flooding at NFS is another relative disadvantage of that facility." (emphasis added)

***Would NRC have asked this question unless they had a concern about flooding?***

**QUESTION 25.** Lightning strikes have been an ongoing problem at NFS as follows:

1. NRC Inspection Report Sep. 20, 2004, (ML081440246) - A lightning strike affected the site criticality alarm system. The alarm was audible but not loud enough in the (redacted) of the BPF.

2. NRC Inspection Report July 7, 2006, (ML073060562) - Failure of Criticality Alarm System due to lightning strike.

3. NRC Inspection Report, July 21, 2006 (ML081490352) - (CAAS) Criticality accident alarm system of WWTF (Waste Water Treatment Facility) only had one detector in service after electrical storm and could not be reset. Inoperable detector had been in an alarm state since May 31, 2006. The audible alarm system for BLEU complex CAAS was also disabled during the same storm. This CAAS failure was not noted for several days because the lightning strike had disabled both the alarm and the diagnostic panel that should have indicated alarm failure. CAAS for WWTF had only one operable detector in service from May 31, 2006 to July 15, 2006 (nearly 2 months). BLEU has lightning protection, but the protection failed to protect the CAAS equipment.

In summary, for the majority of the NRC questions, NFS states that the answers will be included in the Integrated Safety Analysis to be provided prior to start up. ***When will the NRC receive this ISA? We would like to see a copy of this ISA well before NRC considers risking our health and safety by letting NFS's slipshod operations handle extremely hazardous UF6.*** You may send it to Erwin CAN's P. O.Box.

Additionally, based on the past history of NFS for fires and fire safety issues, criticality alarm and IROFS failures, near miss-criticality events, mass limits exceeded, and material vented into the air through the stacks and into the City Sewer and River via the Waste Water Treatment Facility, we do not believe NFS can safely handle the UF6 and request that the NRC disapprove their request to process it.

The above reasons coupled with the fact that the Independent Safety Assessment Team's report stated that NFS was not meeting safety expectations in 9 of the 13 categories and was only minimally meeting the expectations in the other four areas, and the fact that their safety culture plan is just now being developed and will not be completed until 2011, is more than enough reasons for the NRC to disapprove their request. The NRC would be taking a great risk with the health and safety of the people in this community, if the NFS request for this license amendment is approved.

We believe the UF6 material should be sent back to DOE or sent elsewhere for processing, and that the NRC needs to get a backbone and tell DOE that its plan for processing UF6 at NFS is unsafe for the Erwin community.

We request this document be entered into ADAMS.

Sincerely,

Michelle Banner  
Chris Tipton

Francis W. Barnett  
John C. Kelly for  
Wanda Kelley  
Erwin Citizens Awareness Network

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