



DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
TENNESSEE DIVISION OF AIR POLLUTION CONTROL  
ANNUAL INSPECTION

Reference No.: 86-0002-G3  
State Class: CM  
Pollutant(s): NOx

Environmental Specialist: GKT  
Route To: ~~RBW~~  
~~VTD~~  
CMW  
File

Date Inspected: April 13, 2010

Company: Nuclear Fuel Services (NFS)  
Location address: 1205 Banner Hill Road  
City/State/Zip: Erwin, TN 37650

Company Contact/Title: Becky Webb, Environmental Scientist  
Phone: (423) 735-5415

Does Company impact an additional control area? YES/NO : No

Does Company have: NSPS (Part 60)? Yes (D) PSD? No  
NESHAPS (Part 61)? No MACT (Part 63)? No

Sources: Point 28, BLEU Complex

Date of the last annual inspection: July 16, 2009  
Time period covered by this inspection, from: July 1, 2009 to March 31, 2010  
Is inspection partial or comprehensive? Comprehensive

Total time required for this inspection (hours): 7  
Was company in compliance during entire inspection time period? Yes

If CM source: Date annual report received in EFO: Not Required  
Date annual report review complete/acknowledged by EFO:  
Did annual report have deviations from permit conditions (Y/N)?

**EXECUTIVE SUMMARY:**

On April 13, 2010, Air Pollution Control inspector Greg Tester met with Becky Webb, environmental scientist, for the purpose of conducting a comprehensive annual compliance inspection.

NFS currently has four (4) operating permits and three (3) construction permits. The 2007-2008 annual inspection was conducted on July 18, 2008 and found NFS to be in compliance. The 2008-2009 annual inspection was conducted on July 16, 2009 and found NFS to be in compliance. This inspection did include a site visit.

The following is a summary of my findings listed by permits and conditions. Conditions with no compliance specification have been omitted.

**Operating Permit 017604P: Point 06, B-234**

**Condition 1:** In compliance. This condition states the company is to operate within applicable visible emission limits as stated in the air pollution regulations. There were no visible emissions as the source was not in operation and is in the process of decommissioning.

**Construction Permit 955420P: Point 08, Enriched Uranium Processing**

The inspector did not have the proper security clearance to enter this area.

**Condition 1:** In compliance. B. Marie Moore is still the responsible party.

**Condition 15:** In compliance. This condition requires the company to maintain air pollution control equipment. Ms. Webb stated the air pollution control equipment is in good working condition and regularly maintained. Maintenance records were checked, dated, and initialed. See Condition 16.

**Condition 16:** In compliance. This condition requires maintenance logs be kept. Maintenance logs for July 2009 through April 2010 were reviewed, dated and initialed.

**Condition 18:** In compliance. This condition limits visible emissions to 20% opacity per EPA Method 9. No visible emissions were observed.

**Condition 21:** In compliance. This condition states the permittee must apply for an operating permit within 30 days of start-up. The start-up date was September 8, 2004 and the operating permit was applied for September 30, 2004.

**Condition 22:** In compliance. This condition specifies start-up date certification dates. The start-up notification shows September 8, 2004. Start-up certification was sent September 15, 2004.

**Construction Permit 954441P: Point 12, Wastewater Plant**

**Condition 1:** In compliance. B. Marie Moore is still the responsible party.

**Condition 2:** In compliance. This condition limits maximum wastewater/chemical input rate to 4,967 lbs/hr per forty-eight (48) hour period (batch time). Operational flexibility was granted on June 10, 2005 raising the limit to 14,914.94 lbs/hr by letter from David Carson. According to the wastewater input logs, the highest input rate was 3,907 lbs/hr for the 48 hour time period of 3/17/10-3/19/10.

**Condition 4:** In compliance. This condition limits visible emissions to 20% opacity per EPA Method 9. No visible emissions were observed.

**Condition 6:** In compliance. This condition requires logs that readily show compliance with Condition 2 of this permit. Logs for July 2009 through March 2010 were reviewed, initialed and dated.

**Condition 9:** In compliance. This condition specifies start-up certification deadlines. Start-up date was July 1, 2004. A timely start-up certification was applied for on July 12, 2004. An operating permit was applied for July 27, 2004.

**Operating Permit 051893P: Point 21, Research and Development Laboratory and Soil Treatment Pilot Plant with Wet Scrubber Control.**

**Condition 1:** In compliance. This condition lists Andrew Maxin as the responsible party. A letter dated January 31, 2000 changed the responsible party to B. Marie Moore. Ms. Moore is still the responsible party.

**Condition 2:** In compliance. This condition limits the maximum process material input rate to 540 pounds per hour in the soil treatment pilot plant. The soil treatment pilot plant has not operated in more than 10 years. The research and development laboratory is still in operation and Ms. Webb applied for an exemption on 5/28/2008.

**Condition 6:** In compliance. This condition limits visible emissions to 20% opacity per EPA Method 9. No visible emissions were observed.

**Condition 8:** In compliance. This condition states that permit renewal must be applied for no less than sixty (60) days prior to expiration. The permit expires November 1, 2008. According to an online delivery- tracking invoice, a timely permit renewal was sent on May 28, 2008 and signed for by T. Phipps on May 29, 2008.

**Operating Permit 050434F, Point 24, 250 HP and 150 HP Steam Boilers:**

**Condition 1:** In compliance. This condition lists Andrew Maxin as the responsible party. A letter dated January 31, 2000 changed the responsible party to B. Marie Moore. Ms. Moore is still the responsible party.

**Condition 4:** In compliance. This condition limits fuel to natural gas or #2 fuel oil. Only natural gas is used at this source.

**Condition 7:** In compliance. This condition states that both boilers may not operate simultaneously. At the time of this inspection, only the 250 HP boiler was operating.

**Condition 8:** In compliance. This condition requires a fuel sampling and analysis for #2 fuel oil. No fuel oil has been used since 1993.

**Condition 9:** In compliance. This condition limits visible emissions to 20% opacity per EPA Method 9. No visible emissions were observed.

**Condition 10:** In compliance. This condition states that permit renewal must be applied for sixty (60) days prior to expiration. Permit expires November 1, 2008. According to an online delivery- tracking invoice, a timely permit renewal was sent on July 11, 2008 and signed for by S. Bethea on June 14, 2008.

**Operating Permit 051889P: Point 27, Groundwater Treatment Process**

**Condition 1:** In compliance. This condition lists Andrew Maxin as the responsible party. A letter dated January 31, 2000 changed the responsible party to B. Marie Moore. Ms. Moore is still the responsible party.

**Condition 2:** In compliance. This condition limits volatile organic compounds (VOCs) emitted from this source to 0.6 pounds per hour. The highest reported VOC emission was in August 2009 at 0.000005 pounds per hour.

**Condition 3:** In compliance. This condition states that an activated carbon filter must be utilized any time vinyl chloride is detected by sampling of the incoming groundwater. Ms. Webb stated that the activated carbon filter is used at all times, even when no vinyl chloride is detected.

**Condition 4:** In compliance. This condition requires contaminated groundwater to be tested every month for toxics. This source began operation again after several years of being idle in January 2008. Monthly tests are conducted on-site for ammonia and nitrate. Other tests are sent to an independent laboratory. All results are placed in a log book. The results for July 2009 through February 2010 were initialed and dated.

**Condition 5:** In compliance. This condition states that based on certain test results, it is allowable to test every quarter, instead of monthly. Ms. Webb stated that this source will be tested monthly regardless of the test results.

**Condition 6:** In compliance. This condition limits visible emissions to 20% opacity per EPA Method 9. No visible emissions were observed.

**Condition 7:** In compliance. This condition states that permit renewal must be applied for sixty (60) days prior to expiration. According to an online delivery- tracking invoice, a timely permit renewal was sent on July 11, 2008 and signed for by S. Bethea on June 14, 2008.

### **Construction Permit 955540P: Point 28, Blended Low Enriched Uranium (BLEU) Complex**

**Condition 1:** In compliance. B. Marie Moore is still the responsible party.

**Condition 5:** In compliance. This condition states only natural gas may be used for this facility. Ms. Webb stated that only natural gas is used.

**Condition 6:** In compliance. This condition limits the maximum throughput of Uranium Oxide Dissolution process to 60 tons/year on a twelve month moving average basis. Compliance with this condition is shown by logs required in Condition 7. This source only operates on an as-needed basis and has not operated since May 2009. Based on the 12-month rolling average, 5.8 tons is the highest 12-month average and as of May 1, 2010, will drop to 0.

**Condition 7:** In compliance. This condition requires an annual log of uranium oxide used at this source. Monthly logs were reviewed, dated, and initialed.

**Condition 15:** In compliance. This condition requires maintenance logs be kept for the wet scrubber. Maintenance logs for July 2009 through March 2010 were reviewed, dated, and initialed.

**Condition 17:** In compliance. This condition states that no parts of this source shall operate without the associated pollution control equipment. Ms. Webb stated that this source will not operate without the control devices. If the scrubber shuts down, sensors shut down the entire system.

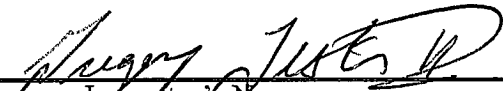
**Condition 21:** In compliance. This condition limits visible emissions to 20% opacity per EPA Method 9. No visible emissions were observed.

**Condition 23:** In compliance. This condition states that the operating permit must be applied for within ninety (90) days of start-up. Start-up date was September 12, 2004. Operating permit applied for December 9, 2004.

**Condition 24:** In compliance. This condition states the start-up notification must be submitted within thirty (30) days of start-up. Source started on September 12, 2004, and the notification was sent on September 30, 2004.

**Conclusion**

Based on the information reviewed and/or obtained during this inspection, I report NFS to be **IN COMPLIANCE** in that no compliance problems were found with any issue under the purview of this inspector.

  
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Inspector's Name

VEE Certification Number: 2287  
Certification Expiration Date: 9/22/10

I verify that the format and content of this report conforms to established TN Division of Air Pollution Control annual inspection standard operational procedures guidance and that the compliance determination made in this report is correct.

  
\_\_\_\_\_  
Supervisor/Manager

  
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Date