May 22, 2013

MEMORANDUM TO: Kevin Hsueh, Chief

> **Environmental Review Branch Environmental Protection**

and Performance Assessment Directorate

Division of Waste Management and Environmental Protection Office of Federal and State Materials

and Environmental Management Programs

FROM: Asimios Malliakos, Project Manager /RA/

> **Environmental Review Branch Environmental Protection**

and Performance Assessment Directorate

Division of Waste Management and Environmental Protection Office of Federal and State Materials

and Environmental Management Programs

MEETINGS HELD ON APRIL 16-18, 2013, REGARDING THE SUBJECT:

> PROPOSED FACILITY EXPANSION OF THE URENCO USA GAS CENTRIFUGE URANIUM ENRICHMENT FACILITY IN LEA COUNTY,

NEW MEXICO

During April 16-18, 2013, the U.S. Nuclear Regulatory Commission (NRC) staff and its contractors conducted several meetings regarding the environmental review of the proposed facility expansion of the URENCO USA (UUSA) gas centrifuge uranium enrichment facility located in Lea County, New Mexico. The NRC staff met with representatives of UUSA and toured the existing facility and the site where the proposed facility expansion will take place and discussed information needs for the environmental review. The NRC staff also met with local government officials to gather information on environmental issues. The enclosed document summarizes these meetings and does not contain any proprietary or classified information.

Docket No.: 70-3103

Enclosure: Summary

CONTACT: Asimios Malliakos, FSME/DWMEP

(301) 415-6458

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DATE	5/21/13	5/21/13	5/22/13	5/22/13

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Summary of Site Visit and Meetings with Local Government Officials Regarding Proposed Facility Expansion of URENCO USA Uranium Enrichment Facility April 16-18, 2013

URENCO USA (UUSA) Site Visit

Date: Tuesday, April 16, 2013

Participants:

Asimios Malliakos, U.S. Nuclear Regulatory Commission (NRC)
Bruce Biwer, Kurt Picel, and Robert Van Lonkhuyzen, Argonne National Laboratory (Argonne)
Melinda Conley, Licensing, and Harrison Orr, Environmental Compliance, UUSA
Rick Kohrt, Plant Engineer, and Pat McCasland, Licensing, UUSA

Summary:

The NRC staff and contractors visited the site of the proposed expansion of the UUSA uranium enrichment facility. Site features observed included existing buildings (including parts of the Technical Services Building, Cylinder Receipt and Dispatch Building, and Separations Building Module (SBM) 1001), the site perimeter road, the Uranium Byproduct Cylinder (UBC) storage pad, and the UBC pad retention basin. The following information was observed and/or discussed with UUSA staff during the tour. The existing UUSA facility currently uses three air monitors onsite and three offsite for radiological monitoring. The UBC pad retention basin and shoreline is currently used by several avian species including mourning doves and waterfowl. The vegetated area directly west of the basin appears disturbed and lacks an intact native plant community. Vegetated areas west of the service road, in the area of the new basins, appear less disturbed, with much of the area supporting a community of grasses and shrubs, including mesquite. Areas near the meteorology tower, in the area of new UBC storage pads, also appear less disturbed, with portions of the area appearing to support a native plant community similar to undisturbed areas outside the facility fence. External to the UUSA site, large mounds of stockpiled exposed soil (no cover) were observed to the east on the Waste Control Specialists property and to the north on the Wallach concrete property near the property line with UUSA.

Date: Wednesday, April 17, 2013

Participants:

Asimios Malliakos, NRC
Bruce Biwer, Kurt Picel, and Robert Van Lonkhuyzen, Argonne
Tim Knowles, Licensing, and Rhonda Daniel, Finance, UUSA
Melinda Conley, Licensing, and Harrison Orr, Environmental Compliance, UUSA
Rick Kohrt, Plant Engineer, and Pat McCasland, Licensing, UUSA

Wyatt Blodgett, ISA/Criticality Safety, and J.A. Picman, Logistics, UUSA

Summary:

The NRC staff and contractors discussed information needed in the environmental review for the proposed UUSA facility expansion. During these discussions, the UUSA staff indicated the following:

General Information:

- Although the increase in the proposed operational capacity is more than three-fold, the
 increase in feed, product, and waste materials is not by the same factor because the
 assay of the feed and tails for the 10 million separative work units (SWU) facility are
 different than for the three million SWU facility. UUSA may re-feed the tails into the
 cascades if it becomes economically beneficial.
- The current switchyard is adequate for the proposed completion of SBM-1005. UUSA will later need to add a transformer for SBM-1007 to SBM-1009, for a combined total of 62 megavolt amperes (MVA) to power the expanded facility.

Historic and Cultural Resources:

UUSA has not conducted any additional consultations with the State Historic Preservation Officer regarding the proposed facility expansion since the original construction of the facility. This is because data recovery had been performed during the original construction at all of the archaeological sites and none of these sites are in the area of the proposed expansion.

Climatology, Meteorology, and Air Quality:

UUSA indicated that the emissions from the UUSA facility are classified as Minor under Title V of the Clean Air Act and there are no pollutants above the thresholds specified under the National Emission Standards for Hazardous Air Pollutants compliance program; there are no sources subject to the New Source Performance Standards under Title I of the Clean Air Act; and the facility is not a major source for any hazardous air pollutants. Therefore, there is no air permit or reporting requirement, and no criteria air pollutant or hazardous air pollutant data collected. Also, UUSA is exempt from mandatory greenhouse gas inventory or reporting because the sources are mostly mobile (e.g., construction equipment) and any remaining sources such as some diesel generators have emissions below U.S. Environmental Protection Agency reporting requirements; therefore, no emissions data are collected. Weather data from Midland Airport is used for the CAP88 modeling analysis and the onsite air quality modeling analysis using AERMOD; real-time meteorology wind data is used for the RASCAL Emergency Response analysis.

Geology, Minerals, and Soil:

No surface soil sampling was conducted for the facility expansion and the site was not sampled for soil contamination. This is because the initial site characterization survey is still valid and no anomalies have been found.

Water Resources:

No monitoring wells are planned for the proposed facility expansion. Groundwater monitoring reports for the existing monitoring wells were sent to the State of New Mexico. UUSA does not have or need a Storm Water Pollution Prevention (SWPP) Plan, Construction SWPP Plan, or National Pollutant Discharge Elimination System Construction General Permit because there is no wetland or surface water body nearby (no waters of the U.S. exemption).

Ecological Resources:

UUSA does not have information on the amount of overlap of areas designated as undeveloped areas with the new UBC storage pad storm water retention basins and the new UBC storage pads. UUSA consultation with the U.S. Fish and Wildlife Service determined the need for netting only over the process water basin, which was never constructed. The runoff basins for the new pads will be similar to the current pad runoff basin and there will be no need for netting or other such mitigation.

Socioeconomics:

The high estimated tax revenue in Table 4.10-2 and high estimated tax revenue alocations in Table 4.10-3 in the Supplemental Environmental Report assume that all of the facility's SWU capacity is contracted out and at the higher potential price per SWU. They represent the maximum estimates. The low estimates of tax revenue and tax revenue alocations in these Tables assume not all of the SWU capacity is contracted out and UUSA receives the potentially lower price per SWU.

Cumulative Impacts:

There are no known additional contributions to cumulative impacts locally. However, elsewhere in the county there is the development of a new potash mine. UUSA does not have any agreements with neighboring facilities.

Meeting with the Lea County Manager

Date: Tuesday, April 16, 2013

Participants:

Asimios Malliakos, NRC Bruce Biwer, Kurt Picel, and Robert Van Lonkhuyzen, Argonne Michael Gallagher, Lea County Manager

Summary:

The NRC staff provided an overview of NRC's roles and responsibilities and the environmental review process with respect to the proposed UUSA facility expansion. The County Manager discussed the concerns and interests of the county. Lea County is interested in diversifying the

economic base in the county beyond oil and gas and welcomes the expansion of UUSA. The county would support an addition to UUSA's Industrial Revenue Bond, which provides capital for UUSA and payments to the county. The Lea County Emergency Operations Center and the Lea County Communications Authority (LCCA) are located in Hobbs and periodically coordinate training with UUSA. This coordination should continue during and after the UUSA expansion. The location of the UUSA facility is remote and the access roads would be able to handle any increase in traffic due to the facility's expansion. The expansion is not likely to compete for employment as the number of UUSA operations workers is already close to that planned for the 10 million SWU annual throughput and UUSA technicians are generally trained locally at the New Mexico Junior College. There are opportunities for new housing in the county, but any significant increase in workers could contribute to the increase in costs of hotel rooms or recreational vehicles spaces primarily because of the current oil and gas boom in the area. Any new employees due to the UUSA expansion are welcome to the county.

Meeting with the City of Hobbs Fire Department (FD)

Date: Tuesday, April 16, 2013

Participants:

Asimios Malliakos, NRC Bruce Biwer, Kurt Picel, and Robert Van Lonkhuyzen, Argonne Kris Allen, Hobbs Fire Chief, and Tim Kent, Fire Department Battalion Chief

Summary:

The NRC staff provided an overview of NRC's roles and responsibilities and the environmental review process with respect to the proposed UUSA facility expansion. The Battalion chief discussed the FD's emergency response roles, responsibilities and capabilities. With regard to the UUSA facility, the Hobbs FD would respond only for hazardous materials incidents, or if Eunice requests support for fire or Emergency Medical Services (EMS) response. The Hobbs FD is well prepared for an expansion at UUSA. The Hobbs FD has paid staff available 24/7 and trained with UUSA personnel for hazmat preparedness, radiological training (fully equipped), and hydrogen fluoride (HF) events. They can call Carlsbad for hazmat backup if needed. The Hobbs FD is hoping to hire 10 more staff in the near future. They feel that UUSA has a good program in place for hazardous response and the expansion should not be a concern.

Meeting with Officials from the City of Eunice

Date: Wednesday, April 17, 2013

Participants:

Asimios Malliakos, NRC Bruce Biwer, Kurt Picel, and Robert Van Lonkhuyzen, Argonne Matt White, Mayor Martin Moore, City Manager Tyerone Hardy, Public Works Director Richard Cummins, Fire Chief Casey Arcidez, Police Department (PD) Representative

The NRC staff and contractors and City of Eunice staff discussed the concerns and interests of the city. UUSA is considered an economic benefit to Eunice, with good communications and positive involvement. Eunice is the first responder to UUSA for fire, EMS, and police. Payments from UUSA's Industrial Revenue Bond are used for some staffing, equipment, and new facilities.

With regard to utilities, UUSA gets its water from Eunice. The 12-inch water line to the facility is now owned by the city. UUSA was using 10 million gallons per month during initial heavy construction, but uses about 2.3 million gallons per month normally. UUSA uses very little water for its cooling system. The Eunice water supply (2/3 of lines are new) and sewer system (new treatment plant is at 50 percent capacity) are adequate for UUSA's expansion. The systems are overbuilt due to the oil boom in the area. The groundwater below Eunice is salty, more than 1500 feet down, so the city potable water supply comes from seven wells near Hobbs. Also, two non-potable wells are located at Nadine. Power in the area comes from Xcel, with three gas-fired power plants in Hobbs, and four to five new solar plants in the area.

Even at the construction peak, there was not much of a requirement for additional police. Police, FD, and EMS have adequate resources for the expansion including any new employees that would move to Eunice. The Eunice FD conducts training with UUSA to maintain capabilities and also has a mutual aid agreement with the Hobbs FD. The PD has good equipment: vehicles, computers, etc. The 911 calls come from the LCCA regional center in Hobbs, but Eunice PD has its own dispatch system, which is thought to be quicker because of responder familiarity with the local area.

UUSA is promoting science in the schools, offering scholarships, and supporting the junior college nuclear technology program to increase the local employment base. Eunice is planning to build a new junior high and high school in the next few years. The housing market is tight, but new construction is underway; some room is also available at local RV parks. The high cost of apartments and RV space may be partly due to UUSA staff and construction workers, but the oil and gas boom is a major contributor. Most construction workers live in RV parks. Unemployment is low, about 3.5 percent currently, and was at a maximum of about 5 percent at the height of the recession.

Meeting with Officials from Lea County and the City of Hobbs

Date: Thursday, April 18, 2013

Participants:

Asimios Malliakos, NRC
Bruce Biwer, Kurt Picel, and Robert Van Lonkhuyzen, Argonne
Ron Black, Lea County Commissioner, and Corey Needham, Lea County Public Works Director
Sam Cobb, Mayor of Hobbs, and Garry Buie, Hobbs City Commissioner
Todd Randall, Hobbs City Engineer, and Toby Spears, Hobbs Finance Director

Summary:

The NRC staff and contractors, Lea County staff, and City of Hobbs staff discussed the concerns and interests of the city and county. UUSA is highly regarded and is very cooperative and open in communications and has a good safety culture. Hobbs supports the expansion.

UUSA has contributed to an inflow of revenue to the city and county, expected to stay steady; Hobbs has 30 percent reserves (only 8 percent is required). Hobbs has recently spent \$47 million on new school construction and is planning more. The city budget has greatly increased in the past decade and debt is very low; trust funds for city services are well funded. Property taxes are low, the sales tax rate is low; and the county is in good financial condition. The city has good wages, partly due to UUSA.

UUSA has brought in many highly educated professionals, but also has hired many locals. New housing is available in Hobbs and the city is willing to add as needed and has \$2 million for housing development incentives. Many Hobbs residents work at UUSA. The UUSA expansion has encouraged continued investment in hotel construction, new apartment buildings, and new home construction.

With regard to transportation, the Lea County Regional Airport in Hobbs now has daily commercial airline flights to Houston with many passengers associated with UUSA. The oil boom has affected rail use and has increased from a few tank cars per week to long (possibly up to 100 cars) trains daily. State highways 18 and 176 are at half of capacity. Route 176 has about 3,100 vehicles per day. Route 18 has about 10,000 vehicles per day of which 52 percent are heavy commercial vehicles. The traffic is mostly related to oil and gas; the UUSA expansion would be a negligible addition. The New Mexico Department of Transportation is allocating \$5 million for resurfacing Route 176 in 2015.

With regard to utilities, the new Hobbs wastewater treatment plant has a 30-year growth capacity; capacity is good, even with the UUSA expansion. Electric power is from Xcel which recently built a third new gas-fired plant; possible new gas-fired power production is coming. The county landfill recently opened cell 3 of the planned 10-12 cells. In addition, the landfill is expected to receive a height increase variance. The landfill has plenty of available capacity.

The ongoing expansion of oil and gas development in Lea County is expected to continue. The DCP Midstream Company has built a new natural gas processing plant in the county; there is also a new Oxy-CO₂ plant. A new Joule plant uses CO₂ from power plants and produced water from oil wells to produce ethanol and other hydrocarbons.

Meeting with the City of Eunice Fire Department

Date: Thursday, April 18, 2013

Participants:

Asimios Malliakos, NRC
Bruce Biwer, Kurt Picel, and Robert Van Lonkhuyzen, Argonne
Richard Cummings, Fire Chief, and Jesse Davis, EMS Division Chief,
Eddy Fabela, Fire Division Chief, and Jacob Haynes, EMS Lieutenant,
Derek Cox, EMT/Firefighter, and Martin Moore, City Manager

Summary:

The NRC staff and contractors and City of Eunice FD staff discussed the concerns of the department. The FD has 5 regular staff and 30 volunteers, one paramedic, and more staff in training. EMS has four crews on 48-hour call. A direct phone line from UUSA goes to Eunice FD dispatch; 911 calls go to LCCA in Hobbs. Eunice does not have a hazmat technician and relies on the Hobbs FD for hazmat response. The UUSA emergency response team informs the Eunice FD of the situation and if there is a hazmat concern. EMS averages about three calls per month to UUSA for medical issues (e.g., cardiac). Getting through UUSA security is the biggest concern, taking about 5-10 minutes. The UUSA fire protection department is considered excellent, with about 10 staff. A fire break around the facility prevents wildfires from spreading.