Attachment 2

Environmental Performance Statement

CORRESPONDENCE/MEMORANDUM

STATE OF WISCONSIN

DEPARTMENT OF MILITARY AFFAIRS
OFFICE OF THE ADJUTANT GENERAL
DIRECTORATE OF FACILITIES
2400 WRIGHT STREET
MADISON WI 53704-2572

DATE: July 14, 2010

TO: Wisconsin Department of Natural Resources, Director of Bureau of Cooperative Environmental Assistance, P.O. Box 7921, Madison, WI, 53707-7921

FROM: Department of Military Affairs, WIJS-J4-ENV, 2400 Wright Street, Madison, WI 53704-2572

SUBJECT: Attachment #2 of WIARNG Green Tier Application

The Wisconsin Army National Guard is a dynamic organization that continues to evolve to meet the changing needs in providing state and national security. Integral to its role in respective Wisconsin communities are its efforts toward environmental stewardship. An important goal is to lead the way in protecting and enhancing natural and cultural resources in Wisconsin while maintaining the highest degree of military readiness. To this end, the WIARNG strives to comply with all Federal, state, and local regulations, as well as Army Regulations, in working to preserve, protect, and restore the quality of the environment. In addition, the WIARNG has implemented many waste minimization and recycling activities as best management practices and hazardous waste reduction initiatives.

1. WIARNG Facility Operations

The Wisconsin Army National Guard (WIARNG) manages multiple facilities and equipment throughout Wisconsin. It manages surface maintenance facilities to include the Maneuver Area Training Equipment Sites (MATES), Combined Support Maintenance Shop (CSMS), ten (10) Field Maintenance Shops (FMSs), and two (2) Army Aviation Support Facilities (AASFs). In addition, WIARNG operates from and manages sixty-nine (69) Armories statewide, a United States Property and Fiscal Office (USPFO), a Joint Forces Headquarters (JFHQ) building, administration buildings and warehouse, the Wisconsin Military Academy (WMA) as well as training sites and local training areas (LTAs). The WIARNG operates multiple facilities throughout Wisconsin but manages operations and activities as one collective agency. The WIARNG facilities and their respective operations are discussed below.

Maneuver Area Training Equipment Site (MATES) (1 Facility)
The MATES is located at Ft. McCoy and provides permanent storage, service, hot water parts washing, maintenance, and repair of primarily large military owned equipment which requires specialized maintenance technicians. The MATES facility currently recycles used oil, used

antifreeze, shop towels, soiled rags or absorbents containing Petroleum, Oil, and Lubricants (POL). Spray painting operations take place only in approved spray booths and utilize water based chemical agent resistant coating (CARC) paint. The MATES is currently classified as a Very Small Quantity Generator (VSQG) of hazardous waste.

Combined Support Maintenance Shop (CSMS) (1 Facility)
The CSMS is located at Camp Williams Regional Training Center (RTC) near Camp Douglas, Wisconsin and performs major repairs and replacement of larger components such as engines, transmissions, and body parts/repairs. Additionally, it also provides specialized service for low density equipment such as electronic and sophisticated test equipment. The shop services military wheeled, track equipment and civilian buses, light, medium, and heavy duty trucks, and passenger sedans and utilizes hot water and filtered solvent in parts washers. Spray painting operations take place only in approved spray booths and utilize water based CARC paint. Touch-up painting with a brush or aerosol canister takes place outside but only during periods of no precipitation. The CSMS facility currently recycles used oil, used antifreeze, shop towels, and soiled rags or absorbents containing Petroleum, Oil, and Lubricants (POL). The CSMS is currently classified as a Very Small Quantity Generator (VSQG) of hazardous waste.

Facility Maintenance Shops (FMS) (10 Facilities)
The FMSs are situated strategically around the State to provide basic maintenance service on military vehicles and miscellaneous equipment for a set number of assigned units. Limited changing of fluids, servicing equipment, and components replacement is conducted. Most of the shops use petroleum products, synthetic lubricants, and have inside storage for control of these materials. The facilities utilize hot water and filtered solvent degreasing metal parts washing machines with scheduled change-out intervals. Refueling operations involving JP-8, diesel or Jet-A fuel from underground/aboveground storage tanks take place outdoors on impervious fueling pads with trench drains and a storm water interceptor system. Outdoor vehicle washing occurs on paved structures that are designed and engineered to prevent discharge of fuel, oil, and grease to the storm water system via a flow switch activated three-way valve. All FMS facilities currently recycle used oil, used antifreeze, shop towels, and soiled rags or absorbents containing Petroleum, Oil, and Lubricants (POL). All FMS facilities within the WIARNG are currently classified as Very Small Quantity Generator's (VSQG). Refer to **Attachment 1** for the list of WIARNG FMS facilities.

Army Aviation Support Facility (AASF) (2 Facilities)
The AASF facilities are located at Madison and West Bend and are co-located at public airports. They provide storage and all levels of maintenance for Army aircraft, primarily helicopters. The Madison facility is covered by a pre-existing Storm Water Pollution Prevention Plan (SWPPP) completed for the Dane County Regional Airport that includes the military facility. The West Bend facility is covered by a pre-existing SWPPP completed for the West Bend Municipal Airport that includes the military facility. The AASF facilities currently recycles used oil, used antifreeze, and soiled rags containing Petroleum, Oil, Lubricants (POL). Both AASF facilities are currently classified as Very Small Quantity Generator (VSQG) of hazardous waste.

Armory (69 Facilities)
WIARNG Armory facilities statewide perform limited user level periodic vehicle maintenance. Military vehicles are typically stored outdoors on paved surfaces or hard packed gravel lots and paved employee parking is provided. If present, a bulk petroleum tanker truck containing fuel is

parked on a concrete pad to provide secondary containment. Outdoor vehicle washing occurs on paved structures that are designed and engineered to prevent discharge of fuel, oil, and grease to the storm water system via a flow switch activated three-way valve. All WIARNG armories statewide are currently classified as Very Small Quantity Generator's (VSQG) of hazardous waste. Refer to **Attachment 1** for the list of WIARNG facilities.

United States Property and Fiscal Office (USPFO) (1 Facility)
The USPFO is located at Camp Williams and handles the Federal property and funds for the WIARNG, both Army and Air Guard. The USPFO is the central location and turn-in point for all WIARNG activities. Surplus hazardous chemicals are examined and evaluated for redistribution or downgraded to waste status and disposed of with State approved vendors. The USPFO is currently classified as a Small Quantity Generator (SQG) of hazardous waste. The USPFO warehouse operates under a Hazardous Material Turn-in and Hazardous Waste Collection Facility Operations Plan. This plan was written and implemented in May 2006 and was modeled to follow the requirements of a permanent Household and Very Small Quantity Generator (VSQG) collection facility as described in Wisconsin Administration Code NR600, Subchapter HH (666.900 – 666.903). This program was established for WIARNG operations only and does not provide services to the general public.

2. Environmental Performance

A. Past Performance

In the past 20 years, WIARNG worked to make significant progress recognizing many successes towards improved environmental performance, particularly through its P2, waste minimization, and training programs. The WIARNG has saved over $33,000 in redistribution of hazardous chemicals over the last 3 years. Some of WIARNG pollution prevention activities are discussed below.

- **Filtered solvent-based parts washing.**
  A trial of traditional solvent-bath-in-a-basin washing equipment made by various vendors was conducted. Knowledge gained was the effectiveness of the different solvent filtering options that are offered by various venders. It was found that, through use of a series of filters, solvent life could be extended significantly, perhaps indefinitely. This was clearly beneficial compared to the existing Safety Kleen equipment. Drawbacks included the filter/solvent management task, and the prospect of continued solvent-based parts washing. ZEP machines with dual filtering capabilities were purchased for all maintenance shops.

- **Aqueous-based jet washing.**
  Based on research and the recommendations of other military organizations, the WIARNG purchased Better Engineering aqueous jet washers for all maintenance shops. This system was chosen based on the prospect of little or no hazardous waste generation and the ease and efficiency with which the parts cleaner could be used by FMS personnel. These washers subject metal parts to a shower of biodegradable detergent-treated hot water from a spray apparatus, similar to the operation of a dishwasher, only the water is reused. Two types of jet washers were purchased: the side-loading carousel tray and the top-loading stationary tray

Impulse. Worker acceptance was slow at first, but the aqueous jet washers soon became the desired means of parts washing.

Eventually each maintenance shop was outfitted with aqueous parts washing machines of various sizes and configurations. These new machines replaced Safety Kleen parts washers on a one for one basis (two Safety Kleen machines for one jet washer in some cases, such as with the larger type jet washers).

In CY93 the total weight of waste solvents reported to the WDNR was 50,407 lbs for maintenance operations statewide. Through employment of the jet washers and filtered solvent parts washers, this figure was reduced to 8,847 lbs by CY97.

- Antifreeze Recycling

The other type of recycling that has proven successful entails the recovery and reuse of used antifreeze. Used antifreeze is collected in tanks or other containers. When nearing capacity, the shop calls a vendor to come to the site to do the recycling. In some cases the vendor removes the used antifreeze off-site for recycling, in other cases the vendor brings all associated equipment, recycles the antifreeze on-site via an ultrafiltration process, restores it to MIL-A-46153, and leaves the recycled product onsite for use by the shop. Any filter wastes produced during the process are managed by the antifreeze recycling vendor.

- POL Related Recycling.

Used oil is collected using low-profile oil drain carts and stored in an evacuation system/aboveground storage tank. When the tank is full the used oil is picked up by a vendor who burns the oil for energy recovery. The WIARNG receives money from the vendor for purchase of the used oil which goes into the WIARNG Qualified Recycling Program (QRP) fund.

Used oil filters and fuel filters are drained at each maintenance facilities and compacted in a crushing device, collected in 55-gallon drums, and are picked up for recycling by a contracted vendor. The vendor shreds the crushed filters, burns the fluff material for energy recovery, and recycles the scrap metal.

Oil absorbent materials are used to catch and contain drops of oil, fuel, and/or cleaning solvents during day-to-day maintenance and repair operations, including weapons cleaning. Absorbents are also used to respond to spills of POLs. Presently POL contaminated absorbents are bagged and stored until picked up by a vendor that extracts the oil and recycles the absorbent materials. The recovered absorbents are ultimately reissued as new absorbents.

- Lead-acid battery recycling.

The WIARNG has a lead-acid battery service contract with Interstate Batteries for all maintenance shops. Fully charged lead acid vehicle batteries are delivered by the vendor to the vehicle maintenance shops, and are used in military vehicles. Used or otherwise unserviceable batteries are collected at the shop and swapped one-for-one for new batteries with Interstate Batteries.

- **Aerosol Container contents.**

  Spent aerosol cans traditionally had to be disposed of as hazardous waste. Each maintenance facility has been outfitted with a puncturing and crushing device which removes and collects any residual liquids into a closed container and renders the steel aerosol can suitable for recycling. Any ignitable liquid waste is collected and ultimately disposed with a hazardous waste vendor to be burned for energy recovery.

- **Shop Towel laundering service.**

  Each maintenance shop has established a shop towel laundering service. Clean towels are delivered by a service company. At the same time, dirty towels are picked up, laundered, and used multiple times again.

- **Fuel filtering carts.**

  This system consists of particulate filter and water separator (and associated pump) mounted on a two-wheeled dolly-type cart, for ease of movement. The carts can filter contaminated diesel or JP8 motor fuel that becomes contaminated with particulate matter or water during use, vehicle maintenance, and storage activities. Fuel processed through the cart can be restored to a usable condition. The used filters are recycled with other automotive oil filters and eventually shredded and burned for energy recovery.

- **Tire recycling.**

  Worn out tires from military vehicles are collected at a central point (USPFO Warehouse), and sent to the Defense Reutilization and Marketing Office (DRMO) at Ft. McCoy. The DRMO sells the used tires to companies for retreading or other forms of recycling. Some of the "new" tires in the federal supply system are retreads.

- **Ozone depleting compound (ODC) substitution.**

  The WIARNG has been replacing ODCs at every opportunity since 1993. CFCs that are used in building environment control systems have been systematically replaced with more environmentally-friendly HCFCs (usually R-22). CFC based spray cleaners that were used for electronics maintenance have been replaced by non-CFC spray cleaners. Halon 1211 and Halon 1301 fire extinguishers in buildings have been eliminated. Halons are still being used in aircraft maintenance operations on an attrition basis. Halon 1301, identified as a mission critical item, is also still used as in fire extinguishers in crew compartments of M-1 tanks.

  When equipment containing refrigerants (air conditioning units, refrigerators, water coolers, etc.) become unserviceable, CFCs, are removed and recycled by a state-certified refrigerant handler.

- **Various Waste Recycling Activities.**

  Accumulations of off-spec materials that are combustible or flammable liquids (including oil-based paints) are bulked for fuel blending (burned for energy recovery).

Unserviceable mercury batteries and nickel-cadmium batteries are shipped to a recycler as universal waste.

Fluorescent lamps and ballasts are accumulated from all WIARNG facilities and sent to a state-contracted recycling facility.

E-scrap and mercury containing devices are collected and recycled with a state contracted recycler.

- **UST Closures.**

Spanning the past 20 years, WIARNG has removed approximately 120 underground storage tanks (USTs) from facilities throughout the State. During the removal of these USTs, approximately 33 of the tanks leaked petroleum that required remedial cleanup of the soil. WIARNG has successfully remediated and closed 32 of these tank sites with WDNR approval and continues to remediate one additional site with residual soil and groundwater contamination. The WIARNG currently operates approximately 21 USTs at 16 facilities throughout the State.

- **Indoor Firing Ranges.**

WIARNG successfully closed all indoor firing ranges associated with facility buildings throughout the State. As part of the closure, WIARNG completed an Environmental/Safety Study in 2005 of all indoor firing ranges in the determination of potential lead impacts to the facility and adjacent outdoor soil conditions. From this Environmental/Safety Study, twelve facilities were identified as requiring various lead remedial activities before closure would be accepted by the WDNR. Beginning in 2008, these twelve facilities conducted soil excavation activities adjacent and near the indoor firing ranges where vents discharged air from indoor range ventilation units. Closure letters were received from the WDNR in 2009 which documented the remedial activities WIARNG conducted at each of the twelve facilities.

- **ENV compliant fuel systems at all FMSs.**

Over the years the WIARNG has committed considerable funding and effort to upgrade its fueling operations to be in compliance with WAC COMM 10 – Underground and Aboveground Storage Tanks regulations. The WIARNG has a total of 21 USTs at 16 locations statewide. The WIARNG also operates seven locations that store and dispense fuel to military vehicles from ASTs. All fuel systems whether UST or AST have been retrofitted or designed to have overfill protection and leak detection systems. The systems have also been designed to provide secondary containment for spills that may occur in the fueling area. Spill kits are also available on the fuel island to implement a basic spill response.

B. Current Environmental Management

The Department of the Army has chosen to adopt the International Organization for Standardization (ISO) 14001 Standard. In response, the WIARNG has implemented a mission focused Environmental Management System (eMS). The eMS program provides guidance for long-term maintenance and on-going improvements in environmental performance. Senior

leadership provides oversight and management control of the environmental compliance program through quarterly Environmental Quality Control Committee (EQCC) meetings.

The WIARNG has established Standard Operating Procedures (SOPs) for activities that generate hazardous waste, solid waste, and wastewater to include WIARNG PAM 200-1, Hazardous Chemical Management and Disposal Plan (HC-MDP) and Installation Spill and Contingency Plan (ISCP). The compliance based environmental SOPs are communicated via the WIARNG web-based Intranet, along with information on formal training classes, and annual spill response awareness briefings. Procedures are maintained to identify and respond to emergency spill situations, and to prevent/mitigate any associated environmental impacts. The WIARNG has developed a Facility Spill Contingency Plan (FSCP) for all maintenance shop and Armory facilities. The FSCP establishes duties and responsibilities for coordination, oversight, and execution of in-house spill cleanup operations and emergency response activities for spills beyond the capabilities of in-house operations. The FSCP establishes procedures to perform inspections and preventative maintenance on the military fleet for potential leaks. In addition, the Spill Prevention Control and Countermeasure (SPCC) Plans have been prepared and implemented for facilities that have aboveground petroleum storage capacities greater than 1,320 gallons. Additional training is conducted on Emergency Responder Operations Level for personnel who are appointed as a Facility On-Scene Coordinator (FOSC) or assistant FOSC or to serve on a facility Spill Response Team (SRT).

The WIARNG maintains procedures to evaluate its compliance with applicable Federal and State requirements. The documented procedure to monitor and measure compliance with environmental laws and regulations is the external and internal Environmental Performance Assessment System (EPAS) audit program. The EPAS program provides an ongoing mechanism by which the WIARNG can track corrective action progress on findings of non-compliance that have a potential impact on the environment.

C. Future Performance.

To guide our efforts and ensure continual improvement, WIARNG established a set of short and long-term environmental objectives and targets established to conform to requirements, pollution prevention (P2) activities, and continual improvement initiatives. Issues covered include:

- Protect water quality
- Increase environmental training levels
- Extend environmental training courses to new audiences within the organization
- Minimize hazardous waste generation
- Prevent Petroleum Oil and Lubricants (POL) spills
- Avoid Notices of Violation (NOVs) and/or Notice of Non-Compliance (NONs)
- Noise reduction

From this list; WIARNG identified formal objectives and targets that were reviewed by the Environmental Quality Control Committee (EQCC); a group representing senior level management from various operating departments within the WIARNG. These formal objectives and targets approved are:

- The WIARNG will continue to not only maintain compliance with applicable laws and regulations but also find ways to conduct our operations in a sustainable manner. This will be done by periodically reviewing our activities to find better ways to accomplish our assigned missions and through maintaining, upgrading and construction of new facilities which meet the LEED Silver standard.
- Review and rebid as needed the used oil, used antifreeze, and used absorbents/oil filters of the Resource, Recovery and Recycling program.
- Improve awareness and compliance with general solid waste recycling requirements at WIARNG facilities.
- Update/revise the Integrated Pest Management Plan (IPMP).
- The WIARNG proposes to incorporate additional Best Management Practices (BMPs) into the existing shop level FSCP document for storm water protection measures. The additional BMPs will include limiting facility outdoor material storage and ensure solid waste is collected in covered dumpsters and properly dispose of in a timely manner. These BMPs will be incorporated into the existing shop level FSCP so the document will provide equivalent protection of the environment in lieu of formal SWPPPs and storm water permitting requirements.
- Remediate Waupun Armory fuel oil soil contamination.
- Develop and implement environmental awareness and UST operator training programs designed to train various groups within the WIARNG on ways to minimize the impact of WIARNG operations on the environment and to maintain regulatory compliance.
- Continue environmental training efforts.

3. Baseline Date

The baseline date which the WIARNG will use to measure future progress will be 31 DEC 2009. This date was chosen since the WIARNG formerly declared eMS conformance based on Army policy, ISO 14001:2004, and our 2008 external eMS audit.