

# WISCONSIN ARMY NATIONAL GUARD

## 2014 Green Tier Report



January 29, 2015



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## Executive Summary

The Wisconsin Army National Guard (WIARNG) is a dynamic organization made up of approximately 7,700 soldiers, including a command staff in Madison and four major commands located throughout 67 Wisconsin communities that continues to evolve to meet the changing needs in providing state and national security.

Our efforts toward environmental stewardship are integral to our role in respective Wisconsin communities. We endeavor to lead the way in protecting and enhancing natural and cultural resources in Wisconsin while at the same time 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.

The WIARNG manages multiple facilities and respective equipment throughout Wisconsin but manages operations and activities as one collective agency. Surface maintenance facilities 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, the WIARNG operates from and manages sixty-nine (69) Armories statewide, a new Tactical Unmanned Aerial System facility (TUAS), a United States Property and Fiscal Office (USPFO), a Joint Forces Headquarters (JFHQ) building, an Armed Forces Reserve Center (AFRC) building, the Wisconsin Military Academy (WMA), administration buildings and warehouses, as well as training sites and local training areas (LTAs).

## Environmental Management System (eMS)

The Department of the Army chose to adopt the International Organization for Standardization (ISO) 14001 Standard and have a mission focused Environmental Management System (eMS) in place by December 2005 with full conformance to the standard by 2009. In response, the WIARNG has implemented a mission focused eMS with full conformance declared by the Adjutant General (TAG) in December 2009. 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.



WIARNG maintains procedures to evaluate its compliance with applicable Federal and State requirements and has established Standard Operating Procedures (SOPs) for activities that generate hazardous waste, solid waste, and wastewater to include WIARNG 200-1, a Hazardous Chemical Management and Disposal Plan (HC-MDP) and an 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. In 2014, the WIARNG simplified our spill plans for shops and armories and developed a Facility Spill Coordinator Handbook (FSC) and Unit Spill Coordinator Handbook (USC) accordingly. The FSC 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 FSC 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 Spill Coordinator (FSC) or assistant FSC (Unit Spill Coordinators at armories) or to serve on a facility Spill Response Team (SRT).

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.

**WIARNG 2014 External eMS Audit Summary**

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|---|
| <b>4.2 Environmental Policy</b>                               |
| <b>4.3.1 Environmental Aspects</b>                            |
| <b>4.3.2 Legal and Other Requirements</b>                     |
| <b>4.3.3 Objectives, Targets and Programs</b>                 |
| <b>4.4.1 Resources, Roles, Responsibility, and Authority</b>  |
| <b>4.4.2 Competence, Training, and Awareness</b>              |
| <b>4.4.3 Communication</b>                                    |
| <b>4.4.4 Documentation</b>                                    |
| <b>4.4.5 Control of Documents</b>                             |
| <b>4.4.6 Operational Control</b>                              |
| <b>4.4.7 Emergency Preparedness and Response</b>              |
| <b>4.5.1 Monitoring and Measurement</b>                       |
| <b>4.5.2 Evaluation of Compliance</b>                         |
| <b>4.5.3 Nonconformity, Corrective, and Preventive Action</b> |
| <b>4.5.4 Control of Records</b>                               |
| <b>4.5.5 Internal Audit</b>                                   |
| <b>4.6 Management Review</b>                                  |

|   |
|---|
| <b>ISO 14001 Conformance</b>              |
| <b>Green</b> - 100% in conformance        |
| <b>Yellow</b> - 50% or better conformance |
| <b>Red</b> - less than 50% conformance    |

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. On an annual basis, WIARNG conducts internal audits of 25% of its facilities for environmental compliance activities. In addition, WIARNG utilizes our USPFO Auditors for conducting our eMS audit of all WIARNG activities and facilities, also performed on an annual basis, except when an external audit is performed.

Every three years, the National Guard Bureau externally audits WIARNG to include the eMS and environmental compliance programs by an independent auditing organization. The results of the audits are managed within the EPAS program and all eMS non-conformances must be corrected before re-conformance can be declared by the Adjutant General. The final results of the 2014 WIARNG external eMS audit, initially conducted from April 21 through 25, 2014 are depicted in the figure titled "WIARNG 2014 External eMS Audit Summary" on Page 2. The single yellow nonconformance area noted in Section 4.4.2 is for the NGB's interpretation of the necessity to better inform outside contractors of our eMS.

## Environmental Aspects

To identify aspects, WIARNG initially conducted an analysis based on the functional areas of its operations. These "functional" areas include (but are not limited to) aviation flight and maintenance activities, maintenance of ground based military vehicles and equipment, armories, warehousing and transportation. WIARNG personnel focused on identifying environmental aspects for which it has direct control or influence. The WIARNG relied on current environmental compliance programs and associated activities to identify some of the environmental aspects of solid and hazardous waste management, air emissions, and wastewater management to determine the potential impacts of WIARNG operations. Additional information related to the specific operational activities of WIARNG facilities was obtained during workshop sessions to expand the list of environmental aspects and impacts.

On September 30, 2014, WIARNG conducted an Aspects/Impacts Update Workshop whereby representatives from shops, armories, aviation and administration were gathered at the USPFO in Camp Williams and were first trained on eMS, aspects and impacts; then reviewed the entire process. All WIARNG aspects, impacts and significant impacts were rescored as a result.

The procedures for identifying and prioritizing environmental aspects and impacts established in the eMS Implementation Plan are based on Army and EPA environmental management system implementation guidance documents. The procedures include criteria for ranking the significance of environmental aspects and impacts. The WIARNG conducts annual review and maintenance to ensure that the information on the WIARNG's environmental aspects and impacts and their significance is reviewed and updated. This process includes a review of the aspects and impacts by the environmental office and consideration of significant changes to project facilities, activities, products and services relevant to WIARNG's mission and operations. Changes in environmental aspect and impact prioritization are reviewed and

approved by the Environmental Quality Control Committee (EQCC); a group representing senior level management from various operating departments within the WIARNG.

The National Guard Bureau (NGB) considers a National Environmental Policy Act (NEPA) analysis sufficient to comply with ISO 14001 section 4.3.1 Environmental aspects analysis for "taking into account planned or new developments, or new or modified activities, products and services". This analysis:

- Ensures that appropriate consideration is given to environmental issues prior to project approval and funding;
- Ensures that new environmental aspects generated by projects are identified and their significance evaluated;
- Provides a mechanism for the amendment of relevant eMS elements and programs where relevant, to ensure that the eMS applies to such projects;
- Identifies new procedures that may be required; and
- Assists in identifying additional or new training needs.

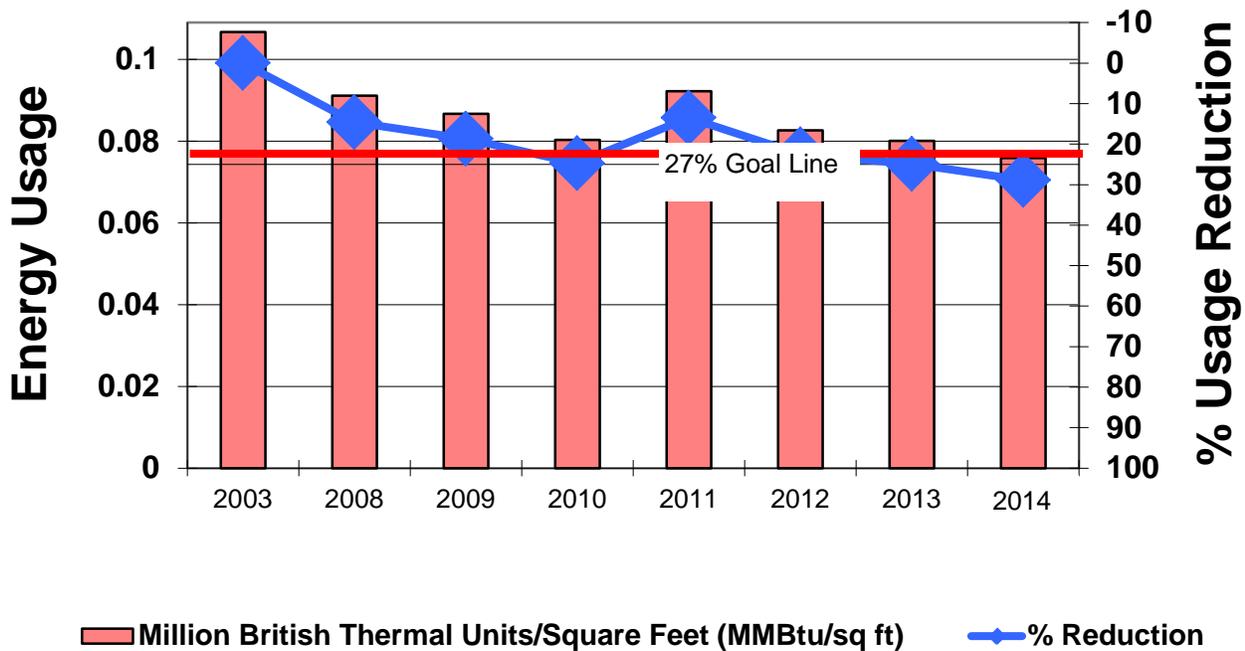
## **Objectives and Targets**

Well-developed objectives and targets provide a framework of clearly defined and action-oriented goals that result in minimizing the potential liability associated with significant environmental impacts of WIARNG's activities, processes and services. Targets are assigned to each objective and establish measurable performance criteria used to evaluate whether or not the organization is achieving its objectives. WIARNG identified formal objectives and targets that are reviewed by the EQCC. For FY2014, WIARNG eMS objectives and targets were re-evaluated. These formal objectives and targets are:

### **Objective: Reducing energy consumption**

- ★ Overall Strategy: Executive Order (EO) 13423 requires Federal agencies to reduce energy intensity by applying conservation measures into the design for new building construction.
- ★ Target: Reduce energy intensity by 3% each year leading to 30% by the end of FY15 compared to an FY03 baseline.
  - Currently in green status as we are meeting our goal.

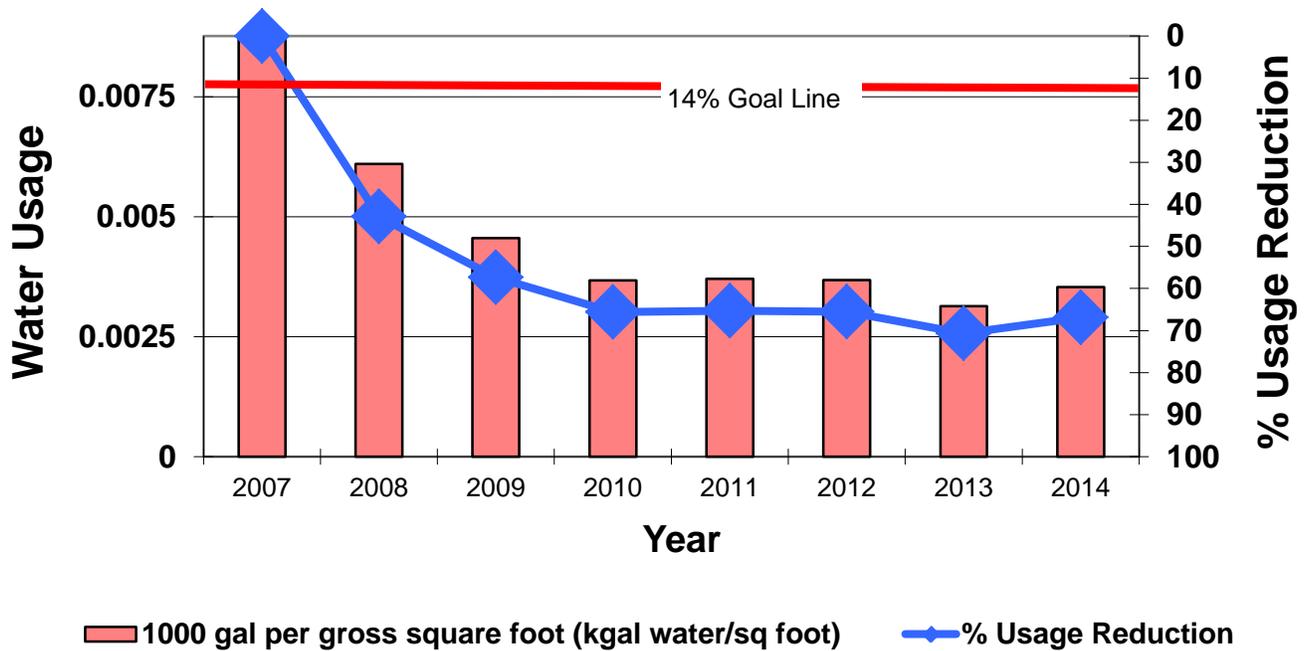
## WIARNG Facility Energy Usage



### Objective: Reducing water consumption

- ★ Overall Strategy: EO 13423 requires Federal agencies to reduce water intensity by applying water conservation measures at all facilities.
- ★ Target: Reduce water intensity (gallons per square foot) by 2% each year through FY15 for a total of 16% based on water consumption in FY07.
  - Although there was a slight increase in water usage in 2014, WIARNG is still well on-track in meeting target by installing low flow urinals at all facilities and by replacing steam traps as needed. Also converting from steam to hot water boilers.

## WIARNG Facility Water Usage



### Objective: Provide environmental training

- ★ Provide one combined (16 hr) Hazardous Chemical and Waste Management and one (8 hr) spill response training (AGR Readiness & Supply NCO's, Facility MGR's or their designee) annually.
- ★ Reinforce online refresher training requirements.
- ★ Target: 90% in 3 years for facilities to have sent a representative to spill and hazardous waste training (2011 - 2014).
  - This target has been met.

### Objective: Assess fueling systems

- ★ Review and assess all WIARNG facilities with fueling systems. Assess above ground and underground storage tanks (current status, age, etc.) and facility proximity to other fueling locations for need.
- ★ Target: Prepare Tank Management Plan assessment and present to G-4 and senior staff in FY2013.
  - An assessment report has been prepared, and the report has been reviewed by management.

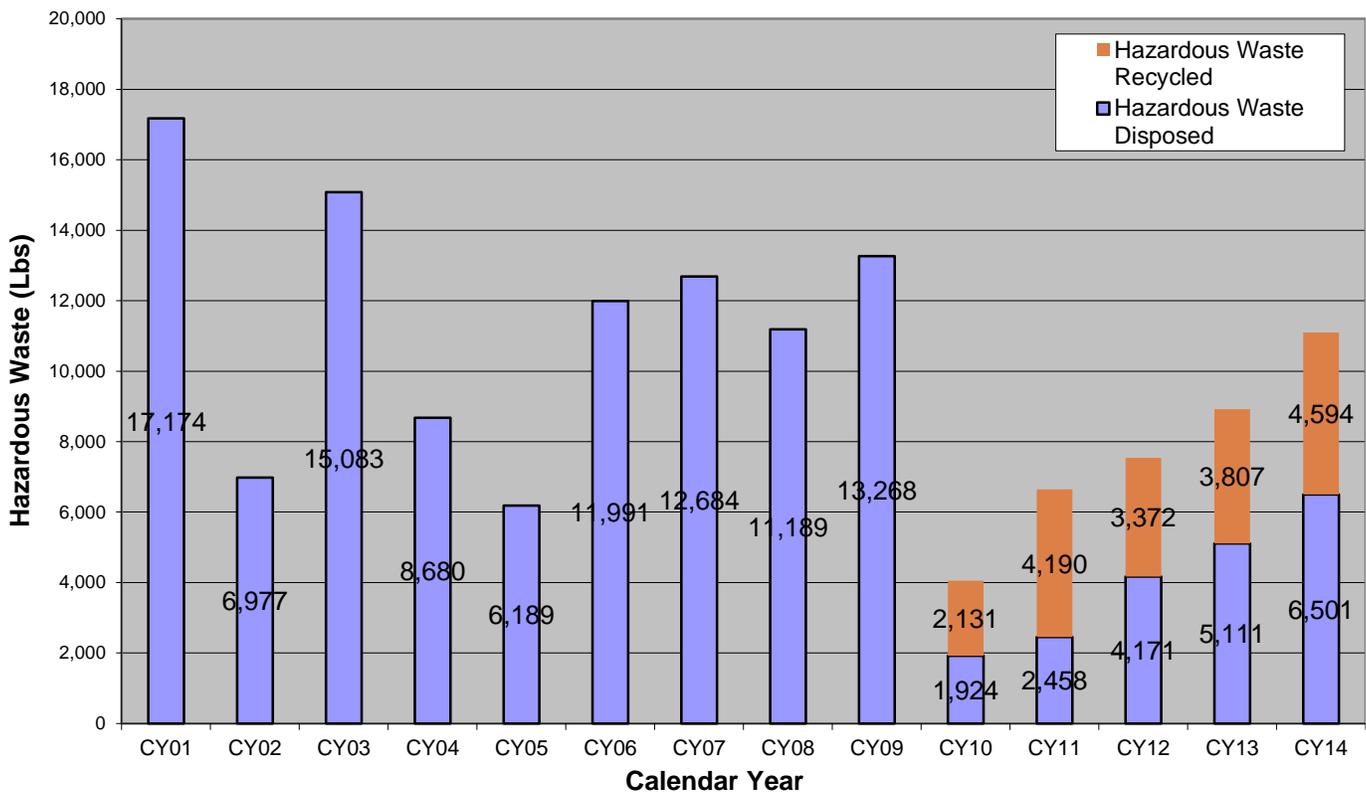
- Funding is currently being allocated so that recommendations can start being acted upon starting in FY2014.
  - ★ Three fueling systems were removed in the fall of 2014 at Richland Center, Oconomowoc and Marshfield.
  - ★ Four fueling systems are slated for removal in 2015; subject to funding.

## Environmental Performance

### A. Past Performance

In the past twenty years, WIARNG has made significant progress recognizing many successes towards improved environmental performance, particularly through its Pollution Prevention (P2), waste minimization, and training programs. The graph below depicts WIARNG hazardous waste totals that have shown an overall decrease since 2001 in the amount of material disposed, and an overall increase in the amount of material recycled.

**Hazardous Waste Totals**



B. 2014 Achievements

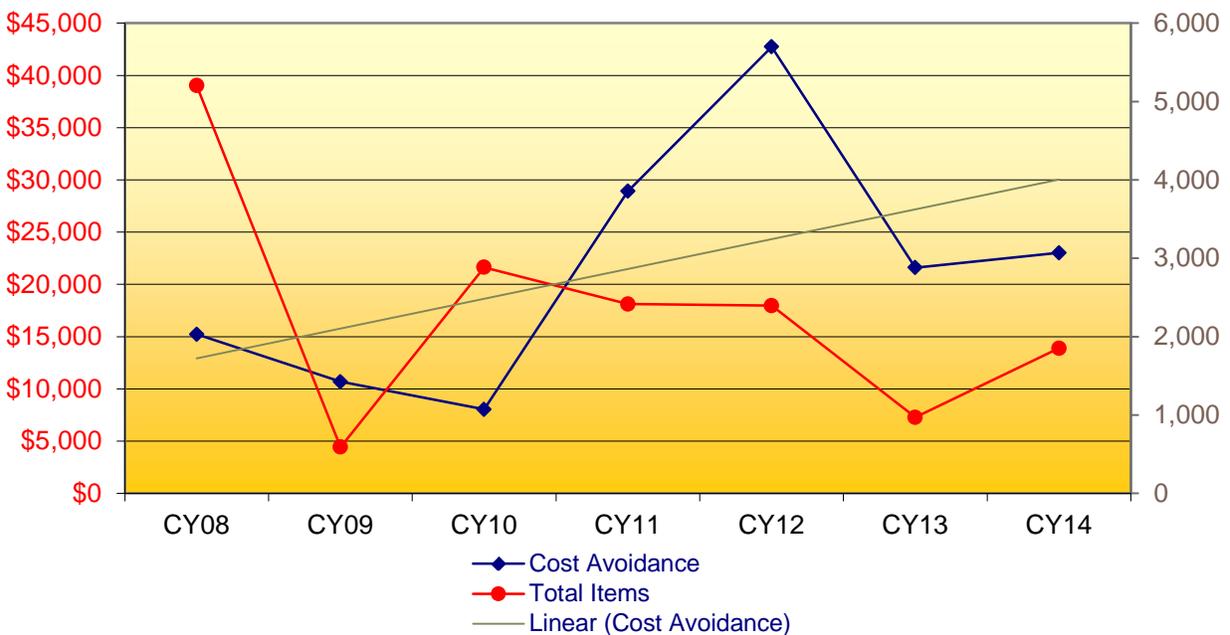
**Redistribution of Material**

WIARNG reutilizes hazardous chemical products that are in not needed at one facility and that can be utilized at other facilities throughout the State. Products reutilized are in good condition and are not expired. By reutilizing these products, WIARNG saves considerable money in purchasing new items and in the potential disposal of these products once deemed a waste. The chart below depicts the savings cost associated with this program. The green line represents the average linear regression over time with respect to cost avoidance.

**WIARNG Redistribution of Materials CY08-14**

|               | <u>Cost Avoidance</u> | <u>Total Items</u> |
|---------------|-----------------------|--------------------|
| CY08          | \$15,230.01           | 5,205              |
| CY09          | \$10,688.55           | 591                |
| CY10          | \$8,040.30            | 2,885              |
| CY11          | \$28,910.77           | 2,416              |
| CY12          | \$42,738.02           | 2,396              |
| CY13          | \$21,605.90           | 971                |
| <u>CY14</u>   | <u>\$23,012.96</u>    | <u>1852</u>        |
| <b>Totals</b> | <b>\$150,226.51</b>   | <b>16,316</b>      |

**Redistribution of Materials**



## Racine County Line Range

One of the bigger Green Tier success stories for WIARNG in 2014 was the completion of erosion repair work at the Racine County Line Range, property owned jointly by Federal and State entities. Thanks to the streamlined coordination afforded by the WDNR Green Tier staff, all necessary stakeholders were brought to the table in order to work out what permits were necessary such that the work could be moved forward in an expedited manner.

Field work began in August 2014 and was completed in September. Final paperwork for the site is currently being closed out, and the project is considered a success by all involved.

### C. Future Performance

In addition to WIARNG's targets and objectives discussed above; WIARNG strives for continual improvement in management of its environmental programs and has also identified areas of future activities.

- 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 performed by periodically reviewing our activities to find better ways to accomplish our assigned missions.
- The WIARNG is performing further work at the Waupun Armory fuel oil soil and groundwater contamination remediation project to bring residual levels to acceptable closure standards. The goal being that the level will alleviate the requirement for deed restrictions for the neighboring property owner.
- Continued refinement of the redistribution program and working with USPFO Supply & Services.
- Continued improvements and refinements of WIARNG training programs. Exploring new means to provide WIARNG training materials in an interesting and accessible manner.
- In an effort to not only ultimately save resources but to increase participation and effectiveness, the WIARNG has developed an interactive spill training "game" with the U.S. Army Gaming Center out of Redstone Arsenal, nationally recognized for their excellence in this type of programming activity. The Training material has been placed on the WIARNG website, where it will be accessible by all State and Federal personnel that require one-hour spill refresher training on an annual basis, and it will continue to be refined based on feedback.
- Working with WDNR and U.S. EPA in the eventual delisting of the Tomah Armory Superfund site from the National Priorities Listing (NPL).
- SPCC plans for FY15 will all be done in-house under certified P.E signature.
- WIARNG completes up to three Phase I Environmental Site Assessments (ESA's) under ASTM Standard E 1527-13 as expanded in accordance with Army National Guard (ARNG) Environmental Condition of Property SOP Guidelines (Version 3-14-2007).

## Conclusions

The Wisconsin Army National Guard continues to make great strides in meeting its targets and objectives as well as establishing new goals through its eMS program to protect the environment and conserve natural resources. Since joining the Green Tier program, WIARNG has been meeting or exceeding its initially established energy goals, and has met all of its environmental objectives such as incorporating LEED standards into building design, reducing hazardous materials/waste, and developing new training programs.

The WIARNG will continue to establish new energy and environmental goals as part of its eMS programs, assuring that environmental considerations are part of strategic decision making, so that lands and water damaged by WIARNG activities can continue to be restored, Army material recycling programs are supported, environmental quality issues with neighboring communities are actively addressed, so that a review process for environmental objectives can continue to be maintained.

The WIARNG eMS and participation in the Wisconsin Department of Natural Resources Green Tier program gives Soldiers a better means to be aware of environmental impacts and demonstrates to the citizens of Wisconsin that WIARNG is committed to its environmental stewardship and responsibilities. To further our participation, WIARNG is currently exploring transitioning from Tier I to Tier II. A Letter of Intent (LOI) was submitted on 8 January to initiate the process.

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