

# WISCONSIN ARMY NATIONAL GUARD

## 2015 Green Tier Report



February 1, 2016



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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: the 32nd “Red Arrow” Infantry Brigade Combat Team headquartered at Camp Douglas; 64th Troop Command, Madison; 157th Maneuver Enhancement Brigade, Milwaukee; and the 426th Regiment (RTI) Regional Training Institute, Fort McCoy. WIARNG continues to evolve to meet the changing needs in providing state and national security.

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).

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.

## 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



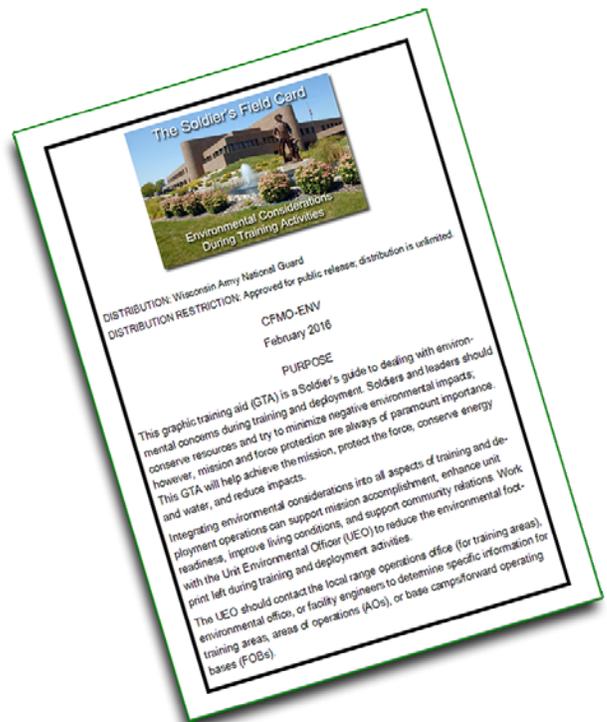
provides oversight and management control of the environmental compliance program through quarterly Environmental Quality Control Committee (EQCC) meetings.

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 2015, the WIARNG further refined our spill plans for shops and armories by updating our Facility Spill Coordinator Handbook (FSC) and Unit Spill Coordinator Handbook (USC) to update mercury spill protocols. The revisions also provided improved direction on in-house spill kit resources. 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 also establishes procedures to perform inspections and preventative maintenance on the military fleet for potential leaks. In addition, 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.

The WIARNG in-house training program conducts annual sessions on Emergency Responder Operations Level training 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). WIARNG is also currently revising its custom on-line refresher training program to update it to current standards (HTML5) and ensure that the training is cross-platform compatible for all users.

WIARNG is also in the process of finalizing a "Soldier's Field Card" for all of our soldiers. The handy pocket-sized fold-up guide contains quick reference material for the eMS, spill prevention and response, solid and hazardous waste management, cultural and archeological resources, and energy/water conservation. The guide also contains quick contact information so that soldiers know who to turn to with their environmental questions.



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 2015 Internal eMS Audit Summary**

<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. During intervening years, the program is audited by an independent internal review team based out of the USPFO office. 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. The final results of the 2015 WIARNG internal eMS audit, conducted in September of 2015 and finalized on 30 September 2015 are depicted in the figure titled “WIARNG 2015 Internal eMS Audit Summary” above. There were no findings noted in the 2015 audit.

**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

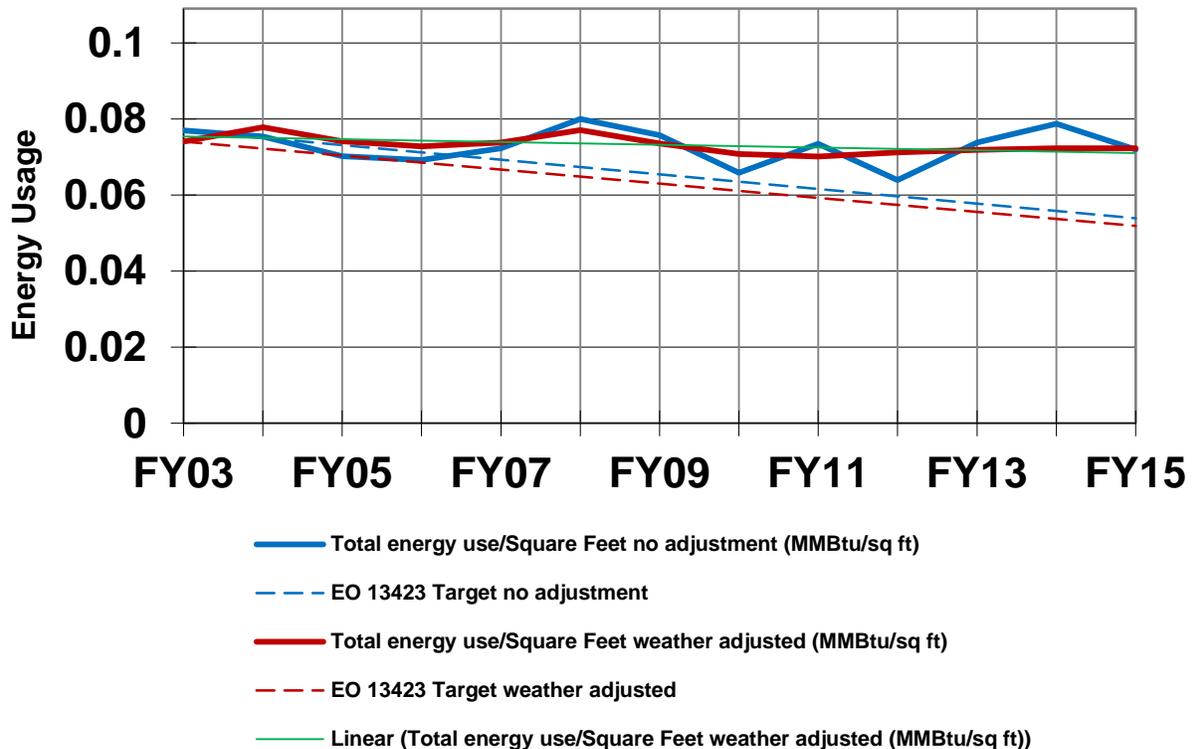
Well-developed objectives and targets provide a framework of clearly defined and action-oriented goals that result in minimizing the potential liability associated with significant environmental impacts of WIARNG's activities, processes and services. Targets are assigned to

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 FY2015, 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.
  - This target has not been met based on a revision of the calculations. Previous data was found to be overstated. Going forward, the target will be revised to meet a new federal mandate of 2.5% each year.
  - It is important to note also that in FY15 energy audits were conducted at the WIARNG facilities that use the most energy such as JFHQ and WMA.

**WIARNG Facility Energy Usage**



### **Objective: Improve WIARNG recycling program**

- ★ Overall Strategy: Improve the WIARNG recycling program and reduce waste.
- ★ Target: Increase the WIARNG landfill diversion rate from a baseline of 48% to 50% in FY15.
  - This target was not met.
  - Although the actual diversion number is likely much closer to the goal, current tracking systems are not capturing all diverted waste and will need to be improved for future reporting in this area.

### **Objective: Provide spill training for mobile fueling personnel**

- ★ Overall Strategy: A review of spill risk throughout WIARNG identified the mobile fueler position as one that inherently involves a greater risk for spill occurrences than practically any other position within the organization. With this in mind, it was determined that spill training, customized for the mobile fueling personnel, was necessary
- ★ Target: Provide customized training for 75% of the mobile fueling staff in FY15.
  - This target is still in progress and has not been met for FY15. The target will be retained for FY16.
  - Although a lot of progress was made on this target, the effort to transfer the training data to the DTMS system (Defense Training Management System) to distribute and track the necessary training, took longer than originally anticipated. At this point the system is ready and the training just needs to be disseminated via the affected units.

### **Objective: Assess fueling systems**

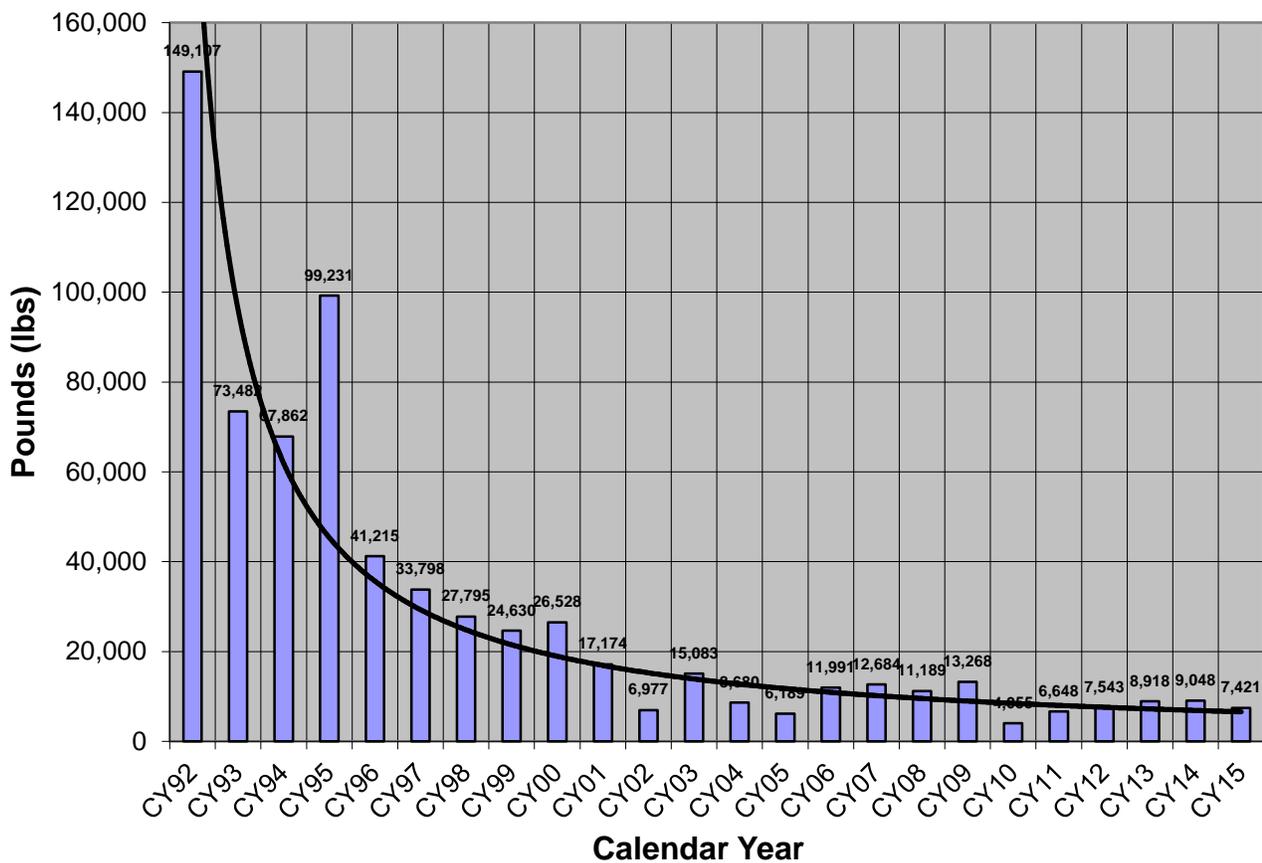
- ★ Review and assess all WIARNG facilities with fueling systems. Assess above ground and underground storage tanks (current status, age, etc.) and facility proximity to other fueling locations for need. Eliminate those systems determined to be unnecessary to reduce costs and environmental liability.
- ★ Target: Remove remaining targeted systems in FY15.
  - This target has been met.
  - Underground storage tank systems were removed at Chippewa Falls, Green Bay, Fond du Lac, Oconomowoc, Richland Center and Waupaca.
  - An above ground fueling system was removed at Marshfield.
  - It is also important to note that in addition to removing these systems from our inventory, WIARNG has also initiated the process of upgrading the remaining tank systems to current technology. In FY15 the fueling system at the Beloit Armory was upgraded such that the environmental staff can now remotely monitor the system, thus increasing responsible oversight of the system and reducing the reporting burden.

## 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 CY1992 in the amount of hazardous material disposed.

### Hazardous Waste Totals



### B. 2015 Achievements

#### Redistribution of Material

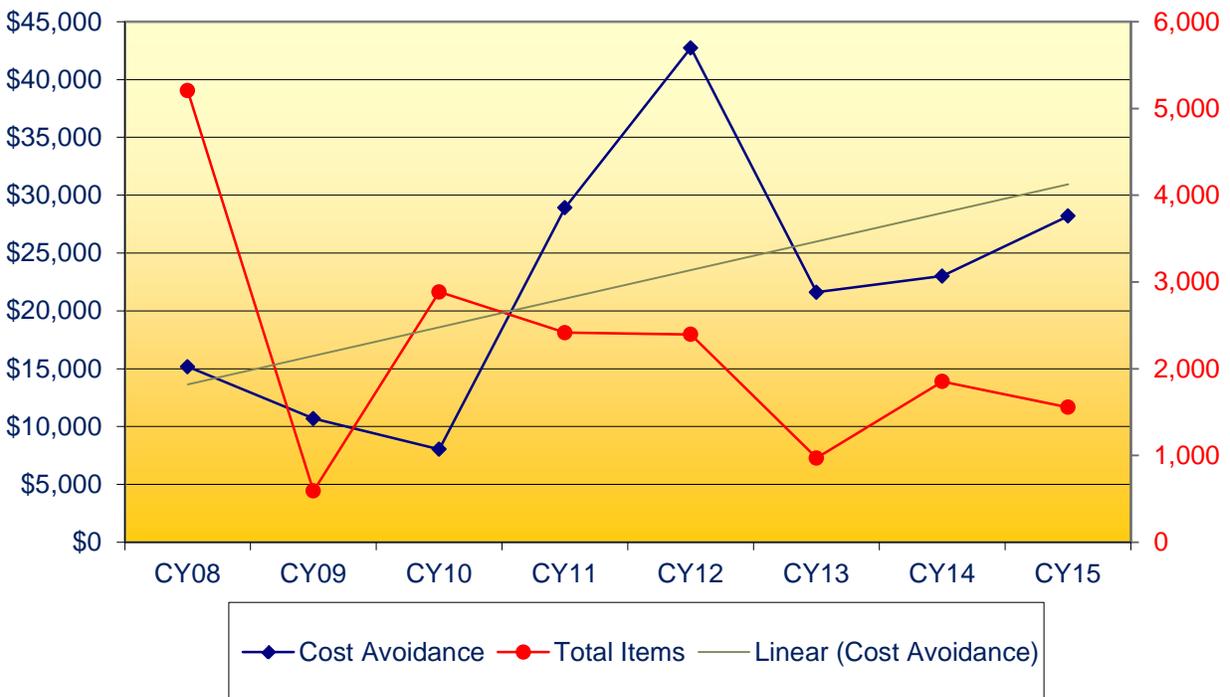
WIARNG reutilizes hazardous chemical products that are not needed at one facility and that can be utilized at other facilities throughout the State. Products reutilized are in good condition and are not expired. By reutilizing these products, WIARNG saves considerable money in purchasing new items and 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
CY14	\$23,012.96	1,852
<u>CY15</u>	<u>\$28,204.08</u>	<u>1,556</u>
<b>Totals</b>	<b>\$175,548.43</b>	<b>17,871</b>

**Redistribution of Materials**



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, starting with those due for renewal in FY15 are being completed 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 it's eMS program to protect the environment and conserve natural resources. Since joining the Green Tier program, WIARNG has been meeting or exceeding 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.

**Wisconsin Army National Guard  
2015 Green Tier Report**

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 to initiate the process.

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