DEPARTMENT OF ARMY GUIDANCE FOR FY 2012 ANNUAL ENERGY MANAGEMENT REPORT

Ohio Army Narrative Report Guidance

- **1.0 Narrative Report.** Provide information on the Command's facility energy program describing progress toward energy and water goals. Provide insight into issues that limit energy performance improvement and the plans to resolve them. The narrative input for the report must address each of the elements listed in the following sections and the organization and sequencing of the input must be consistent with the sections below. The narrative report must address changes to trends in data from previous year's submissions. Discussions of percentages must indicate the numbers used to produce the percentage in order to facilitate compilation at the Army level. Commands must submit a single narrative report, consolidated from information from their installations, and indicate that they have validated the accuracy and completeness of their installations' FY12 Army Energy and Water Reporting System (AEWRS) data that will be used in the Army report.
- **1.1 Executive Summary.** Commands must provide a summary of their progress in meeting goals for energy intensity, renewable energy, water conservation, metering and petroleum fuel use. This summary must also highlight key aspects of the energy management programs for FY12, include representative projects, and summarize key energy program issues and plans for FY13.
- 1.2 Progress Towards Energy Efficiency. Highlight progress towards the following performance metrics and provide narrative information that supports the data and highlights particular initiatives and projects that contribute to meeting energy performance goals. 25 locations will be renovated or upgraded in the category of HVAC, Electrical and Plumbing. Design was done in FY12 and construction will be performed and completed in FY13 for a total of \$2.867 million dollars.

- 1.2.1 Energy Efficiency Performance. Summarize the total energy intensity for all goal subject buildings in units of BTU per gross square foot for FY12 and the percent change compared to the FY03 base year. Discuss any extenuating factors that may influence this performance measure. Describe factors that contribute to the success or shortfalls in meeting energy performance goals and include examples (e.g., building renovations or demolitions, use of temporary modular facilities, mission changes, etc.). Also, describe energy efficiency efforts planned for FY13-FY16 to help meet energy efficiency performance goals, including expected investment levels. These descriptions should include quantitative data and analysis to the maximum extent practicable. In FY12, Ohio has added several building to the property books that are larger and had to maintain and use the like old buildings at the same time. I believe this is why the 7.51% MBTU spike affects Ohio. We feel confident the usage comparison will be lower during FY13 for those old buildings are now closed. FY13 –FY16 designs done in FY12 in the category of HVAC Renovation and Electrical/Lighting \$648,501.
- 1.2.2 Energy Intensity by Installation. Commands are to list their top five and bottom five energy efficiency performers (installations), and explain what specific circumstances led to this performance (e.g., investments, leadership, weather, operational tempo, etc.). Using the 2003 baseline for each installation, the Army will include in the Annual Energy Management Report to Office of the Secretary of Defense a list the installations that are meeting their overall intensity goals and the installations that reduced their intensity by three percent or more in FY12 compared to FY11. Top Five: Springfield Armory, Newark USPFOW 1, Springfield VMB (FMS 13)(New facilities built to replace them and managed a security effort until property is disposed.), Toledo Readiness Center(Solar continue to perform at expected level), Youngstown VMB (FMS 5)(controls management-DDC occupied/unoccupied schedules .)Bottom Five: Newark Maint Facility (CSMS 01)(new building built and partial operation), Green Armory and Green VMB (FMS 6)(lighting project from a year ago), McConnelsville Hawk Drive (lighting project from year ago), Cols-Beightler Ship/Receiving (solar production from installation in FY10. Credits to utility account for last 8 months.
- **1.3 Progress Toward Water Conservation.** Provide narrative information in support of water consumption and intensity data reported by your installations into AEWRS, and highlight particular initiatives contributing to meeting water demands more efficiently. The narrative should include discussion of progress made towards meeting the Energy Independence and Security Act potable water intensity reduction goal and the Executive Order 13514 irrigation, landscaping, and agricultural water consumption reduction goals. **As reported in AEWRS, new buildings were added.**
- **1.3.1 Potable Water Intensity.** Report data required for determining potable water efficiency performance into AEWRS. The report narrative should summarize the total water intensity for all goal subject buildings in units of millions of gallons per gross square foot for FY12 and the percent change compared to the FY07 base year. Discuss any extenuating factors that may influence this performance measure. Describe factors that contribute to the success or shortfalls in meeting potable water performance goals. Also, describe potable water efficiency efforts planned for FY13-FY16 to help meet

potable water efficiency performance goals, including expected investment levels. These descriptions should include quantitative data and analysis to the maximum extent practicable. FY13 –FY16 projects are designs done in FY12 in the category of Plumbing Renovation \$653,980

1.3.2 Industrial, Landscaping, and Agricultural (ILA) Water Consumption. This category includes all water consumed on the installation that was not previously captured as potable water and not reported in the FY07 potable water baseline. Report ILA water in AEWRS in data entry fields created for this purpose in standard quarterly water consumption records. **N/A**

1.4 Non-Tactical (Fleet) Vehicles Petroleum Fuel Use.

Report any FY12 non-tactical (fleet) fuel consumption and cost that is NOT accounted for in the Federal Automotive Statistical Tool (FAST) system, into AEWRS as described in the Army Data Report Guidance section below. For any data reported into this section of AEWRS, provide a description of the usage in the Narrative Report. N/A

- **1.5 Operational Energy Fuel Use.** Report any FY12 mobile operational energy fuel use that was NOT purchased through DLA-Energy, into AEWRS as described in the Army Data Report Guidance section below. For any data reported into this section of AEWRS, provide a description of the usage in the Narrative Report. **N/A**
- 2.0 Renewable Energy Performance. Provide an overview of progress toward increasing the use of renewable energy and contributing to meeting renewable energy performance goals. Highlight progress toward renewable energy goals with noteworthy renewable energy systems put into service in FY12 and direct purchases of renewable energy including the disposition of renewable energy certificates (REC) potentially accompanying the energy. In FY12, Ohio has put into service a 538KW system at the Camp Perry, Port Clinton site. The array is producing 50% of total capacity load with cost savings of \$101,119 dollars through September 2012 and 1.5mil kwh in consumption. Total Renewable Solar Capacity for Ohio is 720kW with 644 to be complete in FY13. REC's are owned by OHARNG.
- **2.1 Renewable Energy Data.** Report all renewable energy production, purchases, and consumption into AEWRS as described in the Army Data Report Guidance section below. Do not count energy from renewable sources that are part of your utility supplier's normal mix as renewable energy. For example, if an electric supplier obtains 10 percent of its electric energy from hydropower, do not report 10 percent of the energy purchased from them as renewable. Only direct purchases of renewable energy qualify. **Reported in AEWRS**
- **3.0** Energy Security. Department of Defense energy security reporting requirements for the Annual Energy Management Report (AEMR) only pertain to utility outages on military installations. **Reported in AEMR Workbook.**

- **3.1 Utility Outages on Military Installations.** Report utility outages in the DoD AEMR Supplemental Workbook included with this guidance. Only report utility outages that occur on the installation as a result of an external, commercial utility interruption of gas, water, or electricity. Only include those utility outages that impact the installation's utility supply for greater than 8 hours from the time the commercial/external utility outage began. For the estimated financial impact, provide the costs associated with restoring and providing power during the period of the outage, but exclude any costs for lost of productivity. For steps taken to mitigate future outages, describe areas such as: who restored power (e.g., utility, installation, etc.); how was power restored (e.g., utility, backup initiated, etc.); any associated discussions with the local utility provider; and any backup generation added as a result of the outage. **Reported in AEMR Workbook**
- **4.0 Energy Projects Funding.** Provide narrative information on retrofit and capital improvement projects funded through appropriations and third party financing mechanisms. N/A
- **4.1 Energy Projects Funded by Appropriations & Third-Party Financing.** Describe noteworthy energy efficiency, renewable energy, or water conservation projects funded through appropriations or third-party financing. In the DoD AEMR Supplemental Workbook list all projects awarded in FY12 that were funded through third-party financing to include energy savings performance contracts (ESPC), enhanced use leases (EUL), utility energy service contracts (UESC), utility privatization (UP) agreements, and power purchase agreements (PPA) as well as projects funded by appropriations. Appropriated projects should include all projects funded through military construction (MILCON), the Energy Conservation and Investment Program (ECIP), operations and maintenance (O&M), sustainment, restoration and modernization (SRM), and working capital funds. N/A
- 4.2 Retrofit and Capital Improvement Projects. Describe any large capital energy investments (>25 percent of plant replacement value) in existing buildings during FY12 involving replacement of installed equipment (e.g., heating and cooling systems) and application of the most energy efficient designs, systems, equipment, and controls. Describe plans for future large capital energy investments. List retrofit and capital improvement projects awarded in FY12 in the DoD AEMR Supplemental Workbook. FY 2012 Total 2,867,627 for various Readiness Centers to concentrate on HVAC, Plumbing, Electrical Systems, Roofing, Masonry and Windows. Construction on going into FY13.
- 5.0 Federal Building Energy Efficiency Standards.
- **5.1 Progress Towards Meeting ASHRAE 90.1 Standards.** The Energy Policy Act of 2005 (EPAct05) requires that new Federal buildings be designed to achieve energy consumption levels that are at least 30 percent below the levels established by the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) Standard 90.1 or the International Energy Conservation Code (IECC), as appropriate. All new facilities should be designed to meet this requirement, unless a life cycle cost analysis demonstrates doing so would not be cost effective. The cumulative list of

projects designed since enactment of EPAct 2005 and reported annually in this report is included with this guidance. Headquarters, U.S. Army Corps of Engineers will provide an update of Active and Reserve Component MILCON projects for which design started in FY12 and the Office of the Chief, National Guard will provide details of National Guard MILCON projects for which design started in FY12 with their Narrative Report submittal. Reported in AEMR New building Designs

- **5.2 Progress in Meeting Green Buildings Standards.** Describe progress made in FY12 to meet the certification requirements for sustainable green-building standards (LEED certified, Silver, Gold and Platinum) in construction and major renovations. **Every new building in MILCON is required to meet LEED Silver. Noted in AEWRS**
- **5.3 2006 High Performance and Sustainable Buildings.** The narrative should include a description of programs or projects that have incorporated sustainable building and high-performance building designs as defined by E.O. 13423. It should also include a description of programs to ensure that building lease provisions meet the energy efficiency/sustainable design requirements. Ohio is moving forward to obtain the net zero concept by requiring some sort of renewable in the design of new construction.
- **5.4 Required Reduction in Fossil Fuel Use.** Describe progress made to comply with requirements to design buildings such that fossil fuel generated energy consumption of the buildings is reduced, as compared with energy consumption of similar buildings in FY03, regarding design standards, acquisition, budgeting, construction, or any major renovations of buildings. **Ohio has required to reduce in consumption by 3% IAW EO 13423, the Energy Action committee aligned with the Energy Management Program.**
- **6.0 FY12 Facilities Metering Progress.** Describe progress made toward requirements to meter energy and water use of appropriate buildings. Report the quantity of electricity, natural gas, steam, and water metered in AEWRS as described in the Army Data Report Guidance described below. Data and information on the quantity of actual energy being reported to the central meter data management system as well as the FY13, FY14, and FY15 planned metering for electricity, natural gas, steam, and water will be obtained from the Army Central Meter Program manager. **Noted in AEWRS. Also, Ohio falls into Region 3 of the contracted contract with the US Army Corps of engineers and Humber Garick.** Waiting on construction schedule to install meters.
- **7.0 Energy Performance Master Plan.** The Army Annual Energy Management Report is to include a section on the Energy Performance Master Plan that aligns the energy performance goals with efforts and resources to achieve those goals. To support the development of the Plan, provide discussion on how the specific investments and planned projects will help achieve the energy efficiency, renewable energy, and petroleum consumption goals, describe the specific financial and economic methods used to select projects, the potential for an action to serve as an incentive for members of the armed forces and civilian personnel to reduce energy consumption or adopt an improved energy performance measure, and, opportunities for improving energy security from facility

energy projects. Ohio has created and updated the Energy Management Program that appoints responsibilities of how to achieve the continued success of fossil fuel reduction of 3% per year. Ohio attacks the low lying fruit and continues to add building maintenance controls to all facilities to have either remote or local control to maintain and operate occupied and unoccupied conditions.