

(TEMPLATE : PW Division-Environmental)		
Procedure: DPW Energy Conservation Standard Operating Procedures		
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Energy Program Manager	Director/Commander	Original Date: 24 May 2012

Standard Operating Procedures for Energy Conservation in buildings occupied by (??Public Works, JBLM)

1. PURPOSE

This Standard Operating Procedure (SOP) establishes requirements and responsibilities for energy conservation in facilities occupied by Directorate of Public Works (DPW). The purpose of this SOP is to ensure DPW has established mechanisms to: 1) reduce energy consumption through elimination of energy waste; 2) increase energy efficiency and create awareness among the facility users.

2. APPLICABILITY

This SOP applies to all DPW facilities which are occupied more than ten hours per week, DPW civilian staff, military, contract employees, interns, and concessionaire personnel assigned to DPW.

3. RESPONSIBILITIES

a. The Director of Public Works ensures that the energy conservation program is effective and evaluates the performance of subordinate divisions. The Director also appoints one Energy Conservation Officer (ECO) for the organization and Building Energy Monitors (BEM) for DPW occupied buildings which are occupied more than 10 hours per week.

b. Energy Conservation Officer (ECO) develops and monitors organization energy conservation program. ECO provides training to BEMs on policies and requirements applicable to energy conservation. ECO serves as technical point of contact for DPW and conducts annual inspections on all DPW occupied buildings.

c. BEMs are assigned for Public Works (PW) occupied buildings to ensure heat, water and electricity are not being wasted. BEMs conduct a daily inspection at the end of each day and maintains records of the Daily Checklist (see Appendix-A). Copies of Daily Checklist with be stored for two years. BEMs serve as POC for their respective buildings and report building maintenance problems to the PW service desk.

d. Building occupants will take steps to reduce energy, heat and water waste by turning off lights and electrical equipment when not in use, ensure water faucets are turned off in restrooms and close doors and windows at the end of each day.

4. GENERAL

This SOP establishes procedures and responsibilities for energy conservation within the Directorate of Public Works. This SOP applies to all assigned and attached personnel.

5. ENERGY USE GUIDELINES

a. Heating will be operated to provide reasonable comfort levels inside occupied buildings. Maximum allowable temperature for certain areas is mentioned below:

- (1) Offices: occupied - 68°F (Not to Exceed 70°F); unoccupied - 55°F
- (2) Warehouse / Maintenance Bays: occupied - 60°F; unoccupied - 45°F
- (3) Unoccupied facilities: 50°F (where freezing and condensation are issues)
- (4) Unoccupied facilities: Unheated (where freezing and condensation are NOT issues)

b. Electrical space heaters are not authorized unless written approval is granted by the Director of Public Works.

c. Air Conditioning for comfort cooling is not authorized unless written approval is granted by the Joint Base Garrison Commander.

d. The operation of portable heating and cooling devices is prohibited where the intent is to circumvent the heating and cooling standards outlined above.

e. Windows and doors will be closed during the heating seasons. If the building has authorized mechanical cooling systems, windows will be closed during the time of cooling.

6. LIGHTING GUIDELINES

a. Make use of high efficiency fluorescent lights or LED lamps where appropriate.

b. Lights will be turned-off when rooms are not in use.

c. Keep lamps and fixtures clean when accessible from floor.

d. Turn off outside lights during daylight hours (if automatic shut-off is not working notify DPW service order desk at 253-967-3131).

e. Use task lighting (table lamp) whenever possible.

7. ELECTRICAL EQUIPMENT

a. DPW will purchase only Energy Star rated products and appliances. Information about products can be found at DOE web site.

b. DPW will maximize use of consolidated network printers. Personal non-network printers are not authorized unless written approval is granted by the Director of Public Works. Copiers and printers will be configured and enabled to enter low energy usage mode when not in use for more than 30 minutes.

c. Refrigerators are authorized in work and office areas for area use with sizing based on number of personnel supported. Use one cubic foot per person as an average to determine size and quantity of refrigerators that are appropriate. Refrigerators in work areas and offices intended for only one person's use are prohibited per AR 420-1, section III.

d. General purpose office equipment, fans, all-in-one devices and similar equipment will be turned off at the end of every business day. Computer monitors and peripheral devices such as speakers, scanners, and external drives, shall be turned off when not in use. Consideration should be given to using a power strip for all external devices to ease and consolidate turning off the devices and the associated transformers that are required for these devices.

e. Ensure electrical equipment (for example monitors, fans, and coffee pots) are turned off during unoccupied hours.

8. INSPECTIONS

a. BEMs are the eyes and ears of their respective buildings. To ensure heat, electricity and water are not being wasted, BEMs conduct daily inspections on buildings and update Daily Checklist (Appendix-A).

b. ECO conducts an annual inspection on all DPW occupied buildings.

c. DPW Division Chief will report that their BEMs are conducting daily checks of respective buildings to ECO bi-annually (on 31 July and 31 December).

9. TRAINING

a. ECO is required to attend annual energy training to learn about JBLM Energy Program and overall Army policy regarding energy conservation. This training is modeled after 'train-the-trainer' concept.

b. ECO will develop and provide energy training to all BEMs about the DPW Energy Conservation policy outlined in this SOP.

c. BEMs will provide training to building occupants. The purpose of the training is to instruct building occupants how to minimize energy waste outlined in this SOP.

Reference Documents

EPACT of 2005, Energy Policy Act, 8 Aug 2005
EISA of 2007, Energy Independence and Security Act, 19 Dec 2007
EO 13423, Executive Order, 26 Jan 2007
EO 13693, Executive Order, 19 Mar 2015
AR 420-1, Army Facilities Management, RAR 24 Aug 2012
JBLM 420-1, JBLM Energy Management Program, 2 Nov 2017

Appendices

Appendix A-Daily BEM Checklist Form
Appendix B-Graphic Diagram of Daily BEM Checklist

Document Review History

Original Document Issue Date: 24 May 2012		
Review Number	Date of Review	Review Summary
1	05/16/2013	3. a & b - Changed title from EO (Energy Officer) to ECO (Energy Conservation Officer). 8. b – Changed EO to ECO 9 a. & b. – Changed EO to ECO 5. a. (1) – Changed heating set points from 70°F to 68°F (occupied); and 55°F to 53°F (unoccupied) 6. a. – Deleted: compact fluorescent lamps. All footers changed to reflect current date.
2	07/24/2014	5. a. (1) – Changed unoccupied heating set points from 53°F to 55°F 3c. Daily Checklist stored for 2 years 8c. Reporting of Daily Checks to ECO by Division Chiefs 2 times a year Change Garrison to Joint Base Add Reference IEE 2013 Budget Guidance Minor administrative clarifications
3	07/16/2015	Edit Reference - JBLM 11-1 to JBLM 420-1 Add Reference - EO 13693, Executive Order, 19 Mar 2015 Minor administrative clarifications
4	02/11/2018	Edit Reference - JBLM 420-1 revision 2 Nov 2017 Edit Reference - AR 420-1 revision RAR 24 Aug 2012 Minor administrative clarifications

APPENDIX - A

EXAMPLE BUILDING ENERGY MONITOR CHECKLIST

<u>ENERGY CONSERVATION BEM CHECKLIST (DAILY)</u>																																
BEM: _____		MONTH: _____					BLDG#: _____					BRIGADE/BATTALION/COMPANY: _____																				
BLDG	DAYS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
ADMIN/OFFICE SPACE:																																
1. Doors/windows closed at the end of day																																
2. Thermostats work and set at proper temperature (if applicable)																																
3. Water faucets and showers are turned off, check for water leakage																																
LIGHTS:																																
1. Lights turned off in unoccupied areas and during weekends																																
2. Restroom lights and fans turned off after daily use																																
MOTOR POOL/MAINTENANCE AREA:																																
1. Compressors turned off																																
2. Generators turned off																																
3. All lights turned off after daily use and in weekends																																
4. Ventilation fans and hoods off when not in use																																

APPENDIX - B

Energy Conservation In Office Space

