



FORT GORDON



US Army Garrison-Ft Gordon Environmental Quality Control Committee

2 March 2016
presented by

Directorate of Public Works
Environmental Division

IMCOM Mission – Our mission is to synchronize, integrate and deliver installation services and sustain facilities in support.



*2nd Quarter, FY 2016 Agenda
2 March 2016 (1300hrs - 1400hrs)
GC Conference Room, Darling Hall*

CALL TO ORDER BY CHAIRPERSON, EQCC/GESC..... *Col. Anderson*
WELCOME AND PRESENTATION OF AGENDA.....*Mr. Rob Drumm*
EQCC FY16 1st QTR ACTION REVIEW.....DPW, Environmental Division

ENVIRONMENTAL MANAGEMENT REVIEW.....DPW, Environmental Division
A. Review of Sustainability Objectives and Targets
B. Command Analysis Overview of Environmental Program Areas

SEMS OBJECTIVES AND TARGETS 2nd QTR FY16 BRIEFINGS

FUEL EFFICIENCY AND RENEWABLE FUELS.....Logistics Readiness Center (LRC)
Targets 5-1, 5-2, 5-3, 5-4

POLLUTION PREVENTION AND GREEN PROCUREMENT.....DFMWR
Targets 8-3

ENERGY MANAGEMENT REVIEW.....Mr Lowell Travis
A. Energy Conservation; Target 4-1
B. Water Conservation; Targets 6-1 and 6-2

LEED/SUSTAINABLE DESIGN AND LOW IMPACT DEVELOPMENT (LID).....DPW
Targets 7-1, 7-2, 7-3

SUSTAINABILITY/MONITORING & MEASURING.....DPW-ED
Targets 10-1 and 10-2

ENVIRONMENTAL TOPICS, UPDATES & SPECIAL REPORTS.....DPW, Environmental Division



PURPOSE



- Assist the Garrison Commander in the formulation of installation
 - environmental compliance,
 - pollution prevention,
 - energy and water conservation, and
 - natural and cultural resource management policies.
- Review progress towards meeting established goals.
- Monitor the effectiveness of the organizational environmental programs.
- Review the status of the Installation Corrective Action Plan (ICAP).

- This meeting serves a dual purpose as the Garrison Energy Steering Committee meeting as well as the EQCC.

- Garrison Energy Steering Committee goals
- The overall goal of energy conservation is to:
 - meet Federal and Regulatory requirements
 - increase efficiency to conserve valuable domestic resources for future generations of Americans.
- The methodology is to eliminate waste and increase efficiency.

EQCC Board Composition

- | | |
|--|---|
| V Garrison Commander (Chairman) | V Dir, of Human Resources |
| V Deputy to the Commanding General | V Dir, of Emergency Services |
| V Cdr DDEAMC | V Dir, of Logistics |
| V Cdr, 15 th Signal Brigade | V Dir, of Plans, Analysis, Integration Office |
| V Cdr, 35 th Signal Brigade | V Dir, of Public Safety |
| V Cdr, 706 th MI GP | V Dir, of Public Works |
| V Cdr, 480 th ISRG | V AAFES |
| V Cdr, 359 th Signal Brigade – USAR | V DeCA Southern Region |
| V Cdr, 513 th Military Intelligence Bde | V Dir, of Contracting |
| V Cdr, 116 th MI Brigade | V Dir, of DFMWR |
| V Cdr, NAVIOCOM | V Dir, of DPTMS |
| V Cdr, RTS-Medical | V Chief of Staff 3rd MEDCOM (Gillem Enclave) |
| V Cdr, U.S. Army Reserve Center | V CID Director (Gillem Enclave) |
| A Area Engineer, USACOE | V U. S. National Guard (Gillem Enclave) |
| A Office of the Staff Judge Advocate | V Balfour Beatty Fort Gordon Communities |
| A Chief, Environmental Division | V National Security Agency |
| A Chief, GRMO | A Georgia Power; Southern Company |
| A Chief, Public Affairs Office | A Augusta Utilities |
| A Deputy Garrison Commander | A Atlanta Gas and Electric |
| A Gillem Enclave Manager | |

A/Red = Advisors

V/Black= Voting Members

SEMS Implementation Flow Chart



FORT GORDON



Garrison Commander

SEMS Management Representative

SEMS Coordinator

Cross Functional Team

Unit Commanders

Installation Directors

Contractors

Tenant Organizations

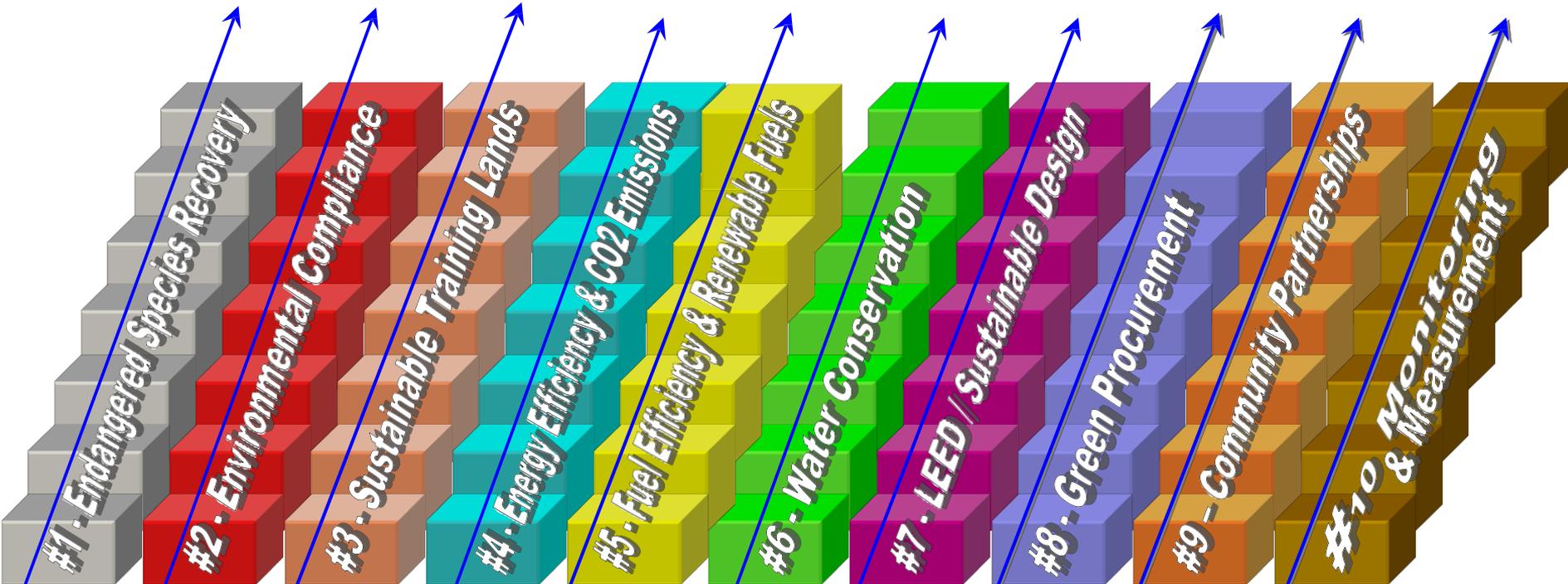
* Only approved members vote on topics presented by the CFT



Overview of Sustainability Objectives and Targets



Sustainable Fort Gordon





FORT GORDON

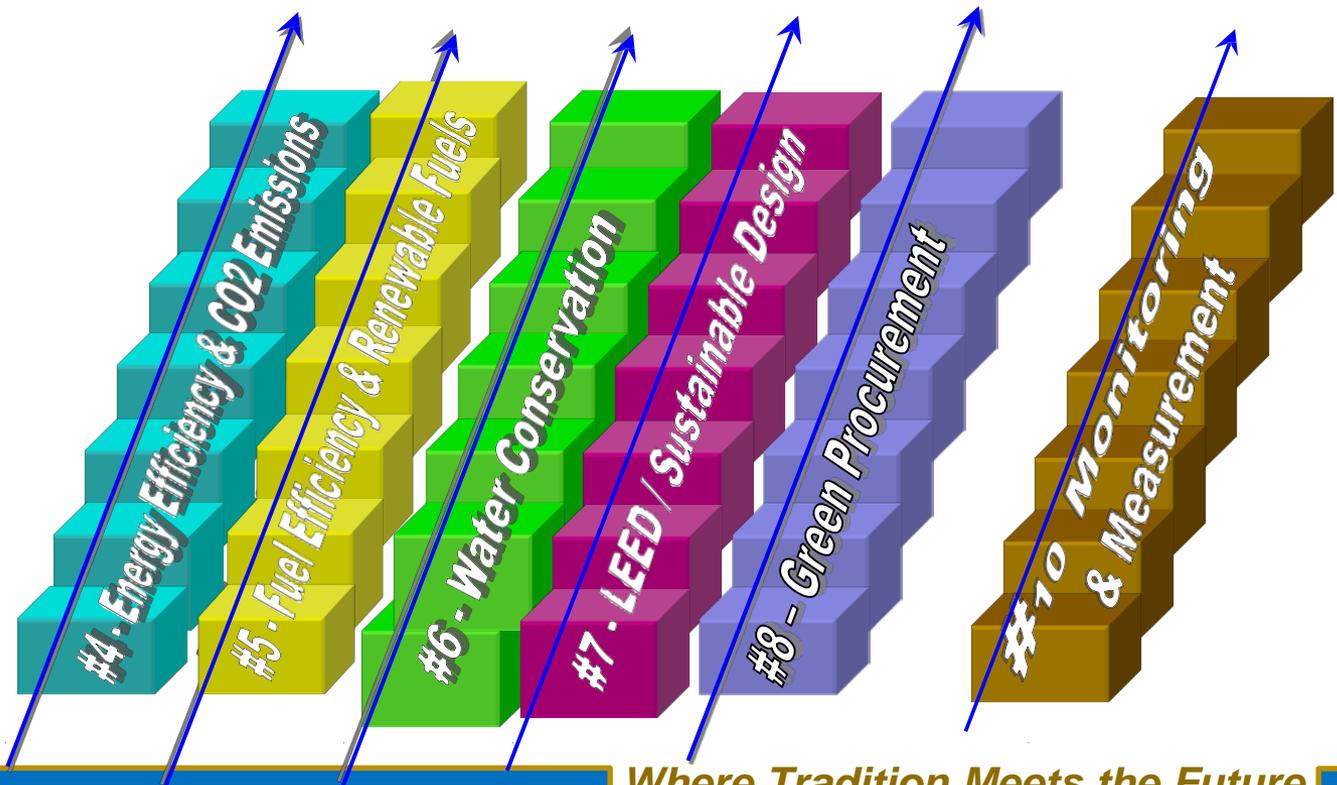
Sustainability Objectives and Targets Overview

Climbing the Steps to a Sustainable Future



U.S. ARMY

Sustainable Fort Gordon



Where Tradition Meets the Future



Review of Sustainability Objectives and Targets



All Current Metrics and Champion Organization

Installation Sustainability Objectives	Champion Organization
1. ENDANGERED SPECIES RECOVERY	DPW-ED, Natural Resources Branch
1-1 - Restore the biological integrity on 25,814 acres of longleaf wiregrass ecosystem by 2059.	DPW-ED, Natural Resources Branch
1-2 - Increase RCW habitat by 200 acres per year, maintain 5-10% population growth to 30 active clusters by 2020.	DPW-ED, Natural Resources Branch
2. ENVIRONMENTAL COMPLIANCE	DPW-ED, Compliance Branch
2-1 - Reduce volume of discharge by 25% within 10 years through development of LID projects	DPW-ED, Compliance Branch
2-2 - Annually reduce the amount of hazardous waste generated.	LRC; DPW-ED, Compliance Branch
2-3 - Achieve an annual 50% diversion rate for non-hazardous solid waste and C&D debris.	DPW-ED
3. SUSTAINABLE TRAINING LANDS	DPTMS- Range Control
3-1 - Minimize degradation of training lands and long-term damage to soils, vegetation	DPTMS- ITAM
3-2 - Increase the training acres through mitigation of impaired areas by 100 acres per year through 2020.	DPTMS- ITAM



Review of Sustainability Objectives and Targets



All Current Metrics and Champion Organization

Installation Sustainability Objectives	Champion Organization
4. ENERGY EFFICIENCY & CO2 EMISSIONS	DPW- Operations and Maintenance Division (OMD)
<p>4-1 - Improve energy efficiency and reduce greenhouse gas emissions by reducing building energy intensity by 2.5% annually through FY25 relative to the FY15 baseline.</p>	DPW-OMD
5. FUEL EFFICIENCY AND RENEWABLE FUELS	Logistics Readiness Center/ DPW-OMD
<p>5-1 - Increase renewable electric energy use and clean energy use 10% in FY16 and FY17.</p>	DPW-OMD/ LRC
<p>5-2 - Improve fuel efficiency and fleet management to achieve a 4% reduction in fleet-wide per mile GHG emissions by the end of FY17.</p>	LRC
<p>5-3 - Increases the total fuel consumption that is non-petroleum-based by 10% annually.</p>	LRC
<p>5-4 - Use plug-in hybrid (PIH) vehicles when PIH vehicles are commercially available.</p>	LRC

All Current Metrics and Champion Organization

Installation Sustainability Objectives	Champion Organization
6. WATER CONSERVATION	DPW-OMD
<p>6-1 - Reduce potable water consumption intensity 36% by FY25 through 2% annual reductions relative to the FY07 baseline.</p>	DPW-OMD
<p>6-2 - Reduce industrial, landscaping, and agricultural (ILA) water consumption intensity by 2% annually relative to the FY10 baseline.</p>	DPW-OMD
7. LEED/ SUSTAINABLE DESIGN AND LOW IMPACT DEVELOPMENT (LID)	DPW
<p>7-1 - Ensure that new construction and major renovations comply with the Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings set forth in the Federal Leadership in High Performance and Sustainable Buildings MOU.</p>	DPW
<p>7-2 - Ensure 15% of the existing capital asset building inventory as of the end of fiscal year 2025 incorporates the sustainable practices.</p>	DPW
<p>7-3 - Ensure by FY2020 all new buildings (>5,000 GSF) entering the planning process are designed to achieve energy net-zero, and, where feasible, water or waste net-zero by FY2030.</p>	DPW

All Current Metrics and Champion Organization

Installation Sustainability Objectives	Champion Organization
8. POLLUTION PREVENTION AND GREEN PROCUREMENT	DPW-ED/DFMWR; QRP/ MICC/ LRC
8-1 - Use paper of at least 30 % post-consumer fiber content.	MICC
8-2 - Reduce the quantity of toxic and hazardous chemicals and materials acquired, used, or disposed.	LRC/DPW-ED
8-3 - Maintain cost effective waste prevention and recycling programs throughout the installation (plastic, metals, paper, and cardboard).	DFMWR
9. COMMUNITY PARTNERSHIPS	DPW-ED
9-1 - Army Compatible Use Buffer (ACUB)	
9-2: Implement requirements of the Integrated Cultural Resources Management Plan 2011-2016	
10. SUSTAINABILITY/ MONITORING & MEASURING	DPW-ED/ PAIO
10-1 - Environmental Performance Assessment and Assistance System (EPAAS) Quarterly Update.	DPW-ED
10-2 – Sustainability Environmental Management System (SEMS) Conformance.	DPW-ED



Command Analysis Overview of Environmental Program Areas

DPW, Environmental Division

**Fort Gordon Command Analysis Environmental Program Overview
Prevention & Compliance Branch
2nd QTR FY 16**

Program Areas (Compliance Branch)	Program Components	Driver	Status
Compliance Overview	Air	PL	Generators have been tested. Awaiting test results.
	Asbestos/Lead	PL	Nothing at this time.
	Storm Water/ Wastewater	PL	Industrial storm water corrective actions underway to address deficiencies from GAEPD inspection. Corrective action for EAMC stormwater design at 95%.
	Hazardous Waste/Materials/ EPCRA	PL	Hazardous Waste Biennial report completed, due March 1, 2016.
	Drinking Water	PL	Lead to be retested at child care center(bldg 44401)this FY through PHC, date to TBD
	Solid Waste	PL	Two Landfill permit applications (Gibson Rd and Carter Rd. Inert Waste Landfills) addressing comments from GAEPD.
Program Management	SPCC/POL Storage Tanks	PL	FRP under review to update information and to be staffed for signature of GC
	Sustainability	EO, PC	EMS conformance issues being addressed after External EPAAS.
	Training & Outreach	PL, AR	Newsletter & Training Schedule linked to Fort Gordon Web Page.
	SEMS/EPAAS	EO, AR	Corrective action being prepared from external EPAAS
	Budget and Contracting	PL, AR	FY16 Contracts starting to be generated and submitted for approval.

PL – Public Law **PC** – Public Commitment **EO** – Executive Order **AR** – Army Regulation

Fort Gordon Command Analysis Environmental Program Overview

Natural Resources Branch

2nd QTR FY 16

Program Areas (NR Branch)	Program Components	Driver	Status
Natural Resources	Conservation Ecology	PL, AR	Treating midstory and improving training access on approximately 2,452 acres this FY.
	Endangered Species	PL, AR	RCW 24 active clusters, 14 Potential Breeding Groups Translocation of 4 pair and 2 single female birds complete Deer season completed with 202 deer harvested Turkey season 26 March – 15 May 2016
	NEPA	PL, AR, PC	Gate 6 EA project kick off meeting held. Document to be complete by 30 Sept 2016. Aerial Herbicide EA project underway scoping letters mailed.
	Cultural Resource Management	PL	ICRMP due revision in 2016, project not funded. Working on Signal School Historic Eligibility Evaluation with CERL, USACE. Submitted Section 106 letter, working on HABS estimates drafting MOA for demo. Working on railroad bridge removal, Section 106 letter submitted, drafting MOA for removal.
	Forestry Sales	AR	Timber in TA 31 harvest is ongoing TA 14 has been sold but harvest has not started Next timber sales TA 45, 34, 35, and 23 drop zone expansion New Forester came on board the last week in September 2015
	Prescribed Fire Plan Execution	AR	29,042 acres scheduled for prescribed burning in FY16; 4,011 complete.
Wildfire Response	AR	FY16 Wildfire Responses – 0 total; 0 Ranges 0 Training Area.	

PL – Public Law

PC – Public Commitment

EO – Executive Order

AR – Army Regulation



FY16 Sustainability and Environmental Management System (SEMS) Objectives and Targets Briefing Schedule



SEMS Objectives and Targets FY16 Briefing Schedule



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• SEMS MANAGEMENT REVIEW

- 8: P2/RECYCLING
- 10: SEMS MONITORING AND MEASURING

4TH
QUARTER

1ST
QUARTER

• NATURAL AND CULTURAL RESOURCES

- 1: ENDANGERED SPECIES
- 3: SUSTAINABLE RANGES
- 9: COMMUNITY RELATIONS
- 10: SEMS MONITORING AND MEASURING

We are here

3RD
QUARTER

2ND
QUARTER

• ENVIRONMENTAL COMPLIANCE

- 2: HAZARDOUS WASTE REDUCTION
- 8: P2/RECYCLING
- 10: SEMS MONITORING AND MEASURING

• ENERGY CONSERVATION

- 4: ENERGY CONSERVATION
- 5: FOSSIL FUEL REDUCTION
- 6: WATER CONSERVATION
- 7: SUSTAINABLE DESIGN
- 8: P2/RECYCLING
- 10: SEMS MONITORING AND MEASURING



TARGETS

- 5; FUEL EFFICIENCY AND RENEWABLE FUELS
- 8; POLLUTION PREVENTION AND GREEN
PROCUREMENT
- 4; ENERGY EFFICIENCY & CO2 EMISSIONS
- 6; WATER CONSERVATION
- 7; LEED/SUSTAINABLE DESIGN AND LOW IMPACT
DEVELOPMENT (LID)
- 10; SUSTAINABILITY/MONITORING & MEASURING



Targets 5-1, 5-2, 5-3, 5-4

FUEL EFFICIENCY AND RENEWABLE FUELS

Logistics Readiness Center (LRC)

Targets 5-1 & 5-2 Progress Report

Objective #5: Increase Fuel Efficiency and the Use of Renewable Fuels	Performance Indicator	Freq	Target/Baseline ----- Date	Results Status ----- Comments
Target 5-1: Increase renewable electric energy use and clean energy use 10% in FY16 and FY17.	% Renewable per year			
Action 1: In accordance with the Energy Independence and Security Act of 2007, Fort Gordon is partnering with Georgia Power to accomplish this goal.			Target- 4 th qtr 2016	
Target 5-2: Improve fuel efficiency and fleet management to achieve a 4% reduction in fleet-wide per mile GHG emissions by the end of FY17.	% Reduction per year	Qtr	Establish baseline as 1st QTR 2011	39% Reduction (27% baseline, current fleet is 66%)
Action 1: Upgrading current vehicles with more efficient models	% Vehicles meeting efficiency standard	Qtr		66%
Action 2: Implement advanced technologies including: Nitrogen in tires, Fuel efficient tires, and Conduct routine maintenance	1. % vehicles using nitrogen in tires. 2. % fuel efficient tires used 3. Number of scheduled maintenance conducted	Qtr		%

Targets 5-3 & 5-4 Progress Report

Objective #5: Increase Fuel Efficiency and the Use of Renewable Fuels	Performance Indicator	Freq	Target/Baseline ----- Date	Results Status ----- Comments
Target 5-3: Increase the total fuel consumption that is non-petroleum-based by 10% annually.		Qtr	Base Line 1st QTR FY2011	%
Action 1: Increase the number of fleet vehicles capable of using alternative/renewable fuels	% fleet vehicles using alternative and renewable energy fuels	Qtr		66% (295 of total 446 vehicles are flex-fuel capable)
Action 2: Increase the availability of alternative/ renewable fuel sources on or within close proximity to the installation	# of alternative and renewable Fueling sources available on or near Fort Gordon	Qtr		Subject to DLA funding availability
Target 5-4: Use plug-in hybrid (PIH) vehicles when PIH vehicles are commercially available.				1 (2013 Chevrolet Volt)

REFERENCES:

- Energy Independence and Security Act of 2007 (EISA §142)
- Executive Order 13693 - *Planning for Federal Sustainability in the Next Decade*, 25 March 2015
- Memorandum, ASA(IE&E), 24 Aug 2012, subject: Energy Goal Attainment Responsibility Policy for Installations



Target 8-3

Solid Waste Reduction and Recycling

Ms. Kelly, DFMWR

Target 8-3 Progress Report

Objective #8: Pollution Prevention and Green Procurement	Performance Indicator	Freq	Target/ Baseline ----- Date	Results Status ----- Comments
Target 8-3. Maintain cost effective waste prevention and recycling programs throughout the installation (plastic, metals, paper, and cardboard).	1. Tons of post- consumer products recycled/ year 2. Number of organizations participating in QRP	YR WK	FY 11- 834.3 T 150 locations	1. FY15 814.01 T RECYCLED 2. (lower due to no glass) 2. Currently 275 collection stops on 2 installations
Action 1: Develop policy letter requiring complete participation of all units, activities, and organization; prohibiting individual unit recycling.	% Complete (currently being rewritten)			
Action 2: Increase the percentage of number 1 and 2 plastics recycled.	Ft Gordon QRP *Does not include AAFES All material Processed	YR	26,000 lbs	26,000 lb. FY12 38,000 lbs. FY13 22,871 lbs .FY 14 26,180 lbs. FY15 0 FY16
Action 3: Require all recycling totals be reported to the QRP Manager.	Outside responses.			Hospital-No information No on use shredding for them PHI/HIPPA AAFES- No Deca-No
Action 4: Amend GC Policy #89 – Recycling to include requirement for entities that do not use the QRP to report weight totals to the QRP Manager.	With Mr. Ramey			In Process
Action 5: Sponsor Fort Gordon Unit Recycling Challenge 1 April – 30 June 2016.	Increase # of Units and pounds recycled	QTR	1 st Qtr 5 units 651 lbs- plastic/aluminum cans	FY16 1 st QTR- 16 units with 18,095 lbs
Action 6: Enter MOA with Balfour Beatty to provide 18-gal. recycling bins at post housing with weekly pickup by Recycling Center.	MOA not signed by BBC		All housing areas Lakeview 6/15	4 housing areas with 454 households

Target 8-3 Progress Report

RECYCLING CENTER STATISTICS

FY	OCC		Paper		Metal		Plastic	
	TON	\$	TON	\$	TON	\$	TON	\$
2010	272		119.4		221.3		0	
2011	425.3		162.82		221.39		15	
2012	534.72		94.63		316.03		18.3	
2013	510.94		100.2		473.01		19.04	
2014	289.99		86.86		328.95		9.74	
2015	451.56	\$36,477.41	87.06	\$20,203.65	152.34	\$33,704.57	13.09	\$2,042.04
2016	167.3	\$15,1120.00	75.6	\$8,737.67	103.8	\$9,380.85	0	0

Target 8-3 Progress Report

RECYCLING CENTER STATISTICS

FY	Toner		Brass		Pallets		OTHER \$	TOTAL \$
	TON	\$	TON	\$	Tons	\$		
2010	0		8	\$30,420.90	Na		\$75,831.77	\$106,252.67
2011	0		9.83	\$46,376.36	Na		\$153,777.66	\$200,154.02
2012	1.55		19.53	\$85,506.32	Na		\$202,712.53	\$288,218.85
2013	5.4		17.51	\$59,001.05	Na		\$242,836.11	\$301,837.16
2014	4.5		18.42	\$24,654.93	Na		\$156,418.92	\$181,690.30
2015	4.28	\$2,664.65	9.20	\$31,110.56	78.78	\$1,804.00	\$10,413.78	\$138,420.66
2016	4.7	\$4,052.40	3.2	\$9,024.40	23.4	\$417.00	\$582.36	\$47,808.89



Target 4-1 Energy Efficiency

Targets 6-1 & 6-2 Water Conservation

Mr. Travis, DPW



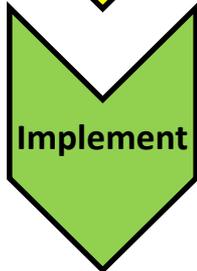
Objective 4: Energy Conservation



- Energy Policy Act 2005 (**EPACT 05**)
- Energy Independence and Security Act 2007 (**EISA 07**)
- Presidential Executive Orders 13514 October 2009
- ASA (IEE) Memorandum: **AR 420-1** states building will be heated to 68F during the winter season & cooled no lower than 78F during the summer season
- Fort Gordon Energy Strategy: Signed by Fort Gordon Senior Mission Commander



- Eliminate Energy Waste in Existing Facilities.
- Meter Facilities 10,000 Square Feet and larger.
- Increase Efficiency
- Increase Energy Security.



- DPW will Heat/Cool facilities only when the facility is occupied.
- Monitor and compare consumption with identical facilities 10,000 Square Feet and larger.
- Provide redundant systems to critical facilities in an event of natural or man made disasters.



- DPW controls temperatures for buildings using base wide Utility Monitoring Control System.
- Community ensures doors/windows are closed during the heating/cooling season and calls in Service Orders.
- Survey Buildings for exceptions.

Target 4: Energy Conservation

Objective 4: Energy Conservation	Performance Indicator	Freq	Target/Baseline ----- Date	Results Status ----- Comments
Target 4-1: Improve energy efficiency and reduce greenhouse gas emissions by reducing building energy intensity by 2.5% annually, a total of 25% through FY25 relative to the FY15 baseline.	% Reduced	Annual	2.5% Annual Reduction compared to FY15 baseline	2.5% Energy Reduction (2016)
Action 1: Eliminate Energy Waste in Existing Facilities. DPW will Heat/Cool facilities only when the facility is occupied $\geq 10,000$ sq. ft.	% Controlled	Qtr	Number of buildings controlled by UMCS	$\geq 10,000$ sq. ft. 260/260 or 100%
Action 2: Meter Facilities. Meter Facilities with 29,000 Square Feet or facilities with over \$35,000 in annual utility cost.	% Metered	Qtr	Number of buildings metered	97/113 or 86%
Action 3: Increase Energy Security. Provide redundant systems to critical facilities, and increase use Renewable Energy.	% Substation Capacity increased	Qtr	80MVA-Main (two-40MVA) 25MVA-Hospital	80MVA-Main 25MVA-Hospital 100%

REFERENCES:

- Energy Policy Act of 2005 (EPA Act 2005)
- Energy Independence and Security Act of 2007 (EISA 2007)
- Executive Order 13693 - *Planning for Federal Sustainability in the Next Decade*, 25 March 2015
- Memorandum, ASA(IE&E), 16 December 2013, subject: Sustainable Design and Development Policy Update
- DoD Directive 4180.01, DoD Energy Policy, April 16, 2014
- Army Regulation (AR) 420-1, Army Facilities Management, Chapter 22–12. Energy conservation and management guidelines for facilities and buildings.

Target 6: Water Conservation

Objective 6: Water Conservation	Performance Indicator	Freq	Target/Baseline ----- Date	Results Status ----- Comments
Target 6-1: Reduce potable water consumption intensity 36% by FY25 through 2% annual reductions relative to the FY07 baseline.	% Reduced	Annual	2% Annual Reduction compared to 2007 baseline	37% reduction 2014
Target 6-2: Reduce industrial, landscaping, and agricultural (ILA) water consumption intensity by 2% annually relative to the FY10 baseline.	% Reduced	Annual	2% Annual Reduction compared to 2010 baseline	
Action 1: Reduce water use to conserve water resources. DPW will expand the non-potable water line (purple pipe system) to replace potable water lines used only for irrigation.	% Complete	Qtr	Quads connected with the non-potable water	3/3 100%
Action 2: Eliminate wasteful practices. Implement cost effective water conservation by installing high efficient landscape irrigation fixtures.	% Complete	Qtr	Number of landscape irrigation	3/3 100%

REFERENCES:

- Energy Policy Act of 2005 (EPA Act 2005)
- Energy Independence and Security Act of 2007 (EISA 2007)
- Executive Order 13693 - *Planning for Federal Sustainability in the Next Decade*, 25 March 2015
- Memorandum, ASA(IE&E), 16 December 2013, subject: Sustainable Design and Development Policy Update
- Army Regulation (AR) 420-1, Army Facilities Management, Chapter 22. Army Energy and Water Management Program.

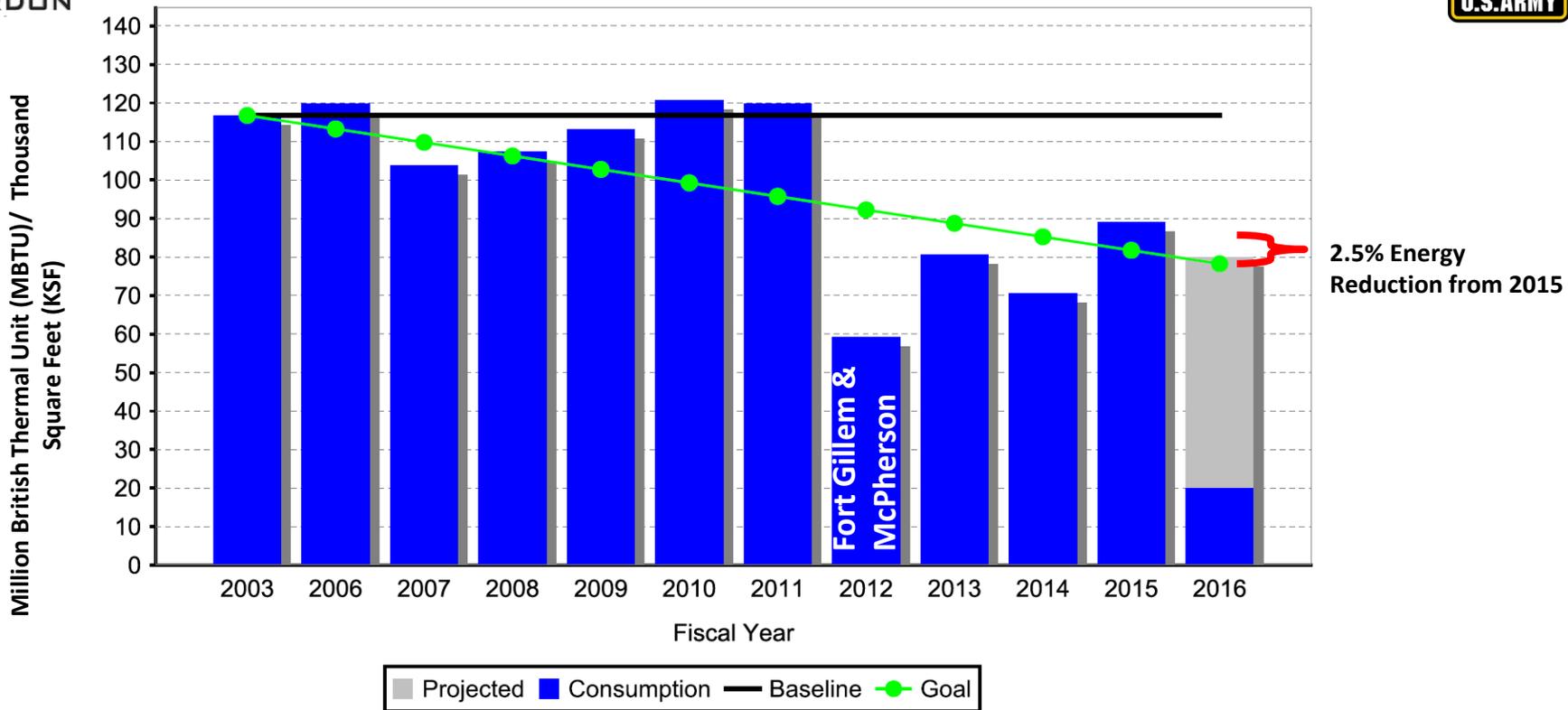
Specific Projects to Meet Action

QUTM Efforts: Metrics to Success	Performance Indicator	Freq	Target/Baseline ----- Date	Results Status ----- Comments
<p>Repair Central Energy Plant manual controls with automated controls: DPW Project which will automate the operation of the central Energy Plant by optimizing the chillers, cooling tower, boilers, heat frame exchange , cold storage tower, pumps, motors, and ran by the base wide UMCS</p>	% Complete	Annual	Central Energy Plant controlled by UMCS	<p>-25910 under construction \$3.6M -310 in queue for funding FY16 \$22M</p>
<p>Vision Project: Heat/Cool Facilities only when occupied. Occupant Sensor will turn on lights and HVAC system only when the room is occupied.</p>	% Complete	Annual	Number of Buildings with Vision Project Implemented	<p>-4 facilities completed \$1.2M -6 in queue for funding FY16 \$11.6M</p>
<p>Renewable Project:</p>				
<p>30 Megawatt Solar Project: Fort Gordon is partnering with the Office of Energy Initiatives and Georgia Power to Build a 30 MW Solar Project (\$75M) on the garrison. The majority of the energy produce will be consumed by the garrison at current tariff rate.</p>	% Complete	Annual	O/A 1 st Quarter FY17	<p>Construction complete on/about 01 OCT 2016 \$75M</p>



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Energy Glide Path

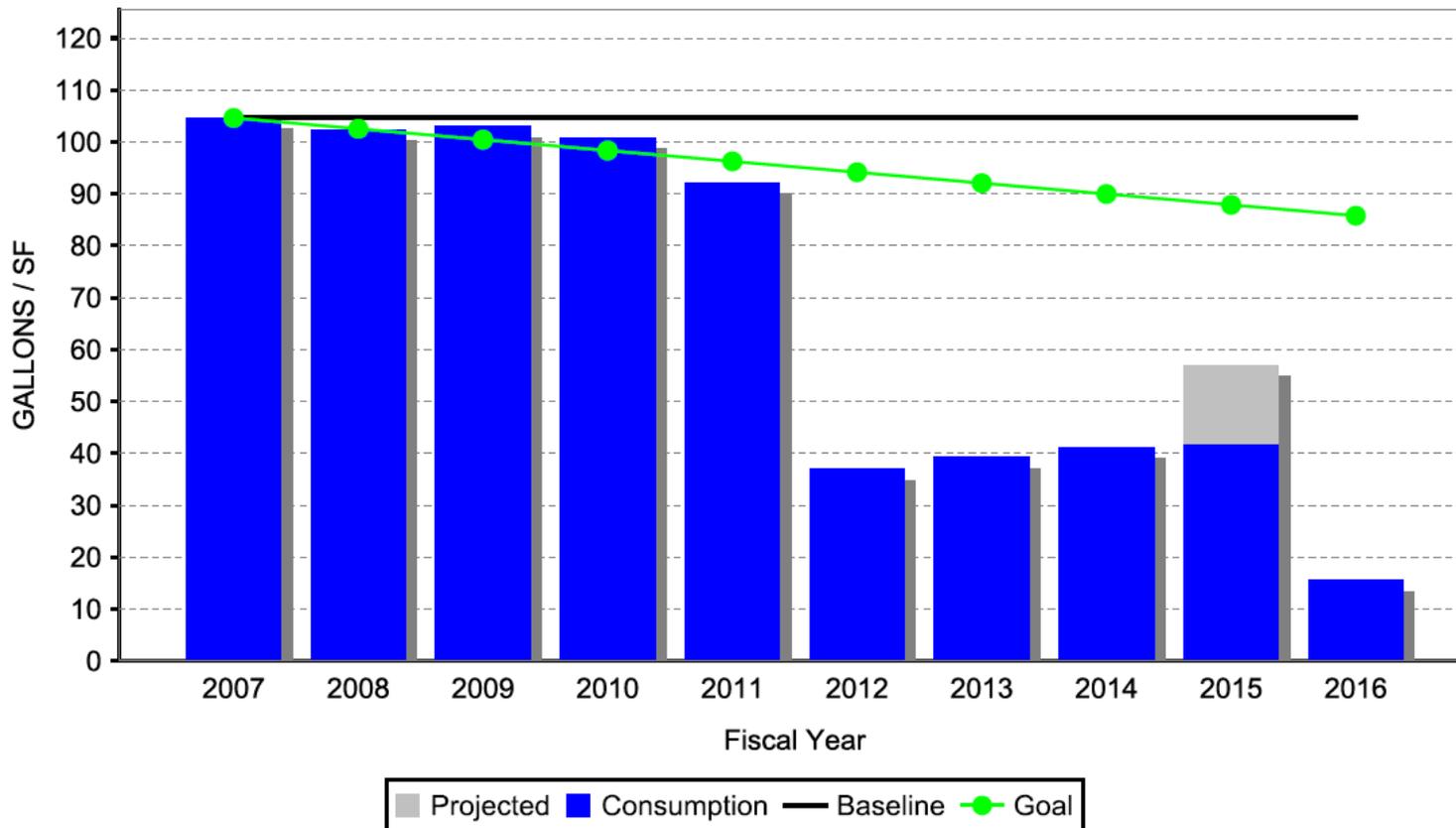


Energy Consumption Factors:

- **Population:** increase 6K
- 2003 (16,958) to 2016 (23,197)
- **Cost of Energy:** Time of Use
- **Weather:** Heating/Cooling Days
- **Building Efficiency:** BUP
- **Standards/Accountability:**



Water Glide Path



Water Consumption Factors:

- Population: Increase 6K
- Weather
- Building Efficiency: Water Fixtures 30% more efficient
- Cost of Water/Sewer
- Non Potable Water

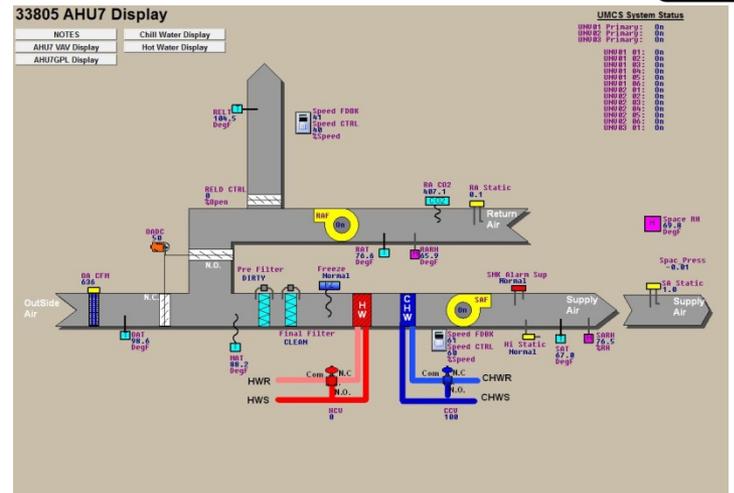


Energy & Utility Actions

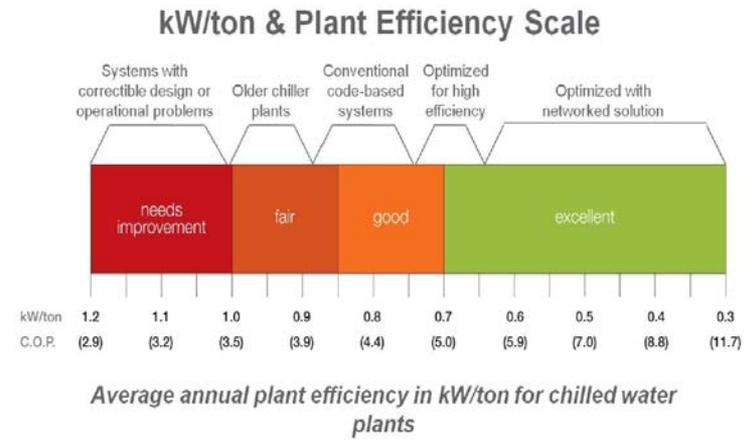


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- Energy & Water Management Projects: Develop, Plan, Implement, Monitor.
 - Utility Monitoring Control System (UMCS)
 - Backbone of Fort Gordon's Energy Management Plan-Supervises (i.e., room temperature settings, pump and fan control, etc.) approximately large 260 facilities
 - Control room manned 24/7/365
 - Saves >\$3.85M annually



- Classroom "Vision" Projects
 - Saves 100K annually
 - Emphasis on Preventative Maintenance and controlling lighting and HVAC systems in large classrooms.
 - 4 Facilities completed, 6 projects in the que for \$11.6M

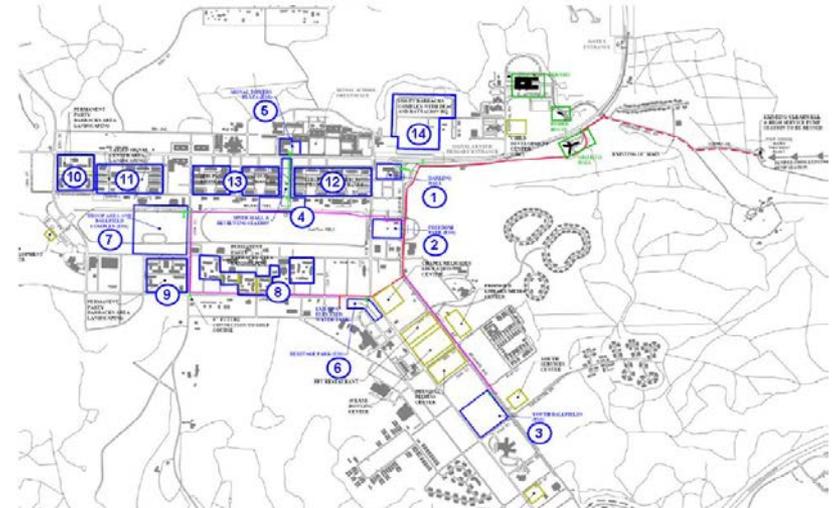




Energy & Utility Actions (Cont)



FORT GORDON



- *Electrical Smart Meters*
 - *Renovated barracks 30% less consumption vs. Original design barracks*
 - *Back Hall (data center) vs similar classroom facility*
 - *Project for natural gas and water smart meters will be ready to award at the end of FY 16*

- *Central Energy Plant Automation*
 - *Will save \$600K annually (LCCA)*
 - *Will improve operational efficiency*
 - *Reduce chiller energy, pump energy & water use*

- *Non Potable Water System*
 - *Backbone of system installed though water privatization contract*
 - *Annual use is 57.6million gallons = \$126K in savings annually*
 - *Planned expansion to areas (a map may go well here)*



Energy & Utility Actions



FORT GORDON

- *Incorporating Ground Source Heat Pump technology into AIT barracks (ongoing construction). Annual savings will exceed \$100K.*

Energy Security Projects

- *Main & Hospital Substation Repairs (increased redundancy capacity)- completed*
- *Substation Interconnection completed*
- *30 megawatt Solar Farm*
 - *planning micro grid capabilities*
- *Steam Line Repairs – Hospital Heating & Cooling Plant-completed*
- *Retrofitting our 13.5 megawatt generating plant to meet EPA emission standards –passed emission tests*





Target 7-1, 7-2, 7-3

LEED/ SUSTAINABLE DESIGN AND LOW IMPACT DEVELOPMENT (LID)

Directorate of Public Works (DPW)

Targets 7-1 & 7-2 Progress Report

Objective #7: LEED/Sustainable Design	Performance Indicator	Freq	Target/Baseline ----- Date	Results Status ----- Comments
Target 7-1: Ensure that new construction and major renovations comply with the Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings set forth in the Federal Leadership in High Performance and Sustainable Buildings MOU.	% Complete	Yearly	2 nd Qtr 2016/1 st Qtr 2015	
Action: Implement Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings requirements are captured in the DD 1391 and USACE RFP	% Complete	Yearly	2 nd Qtr 2016/1 st Qtr 2015	100% of new and recapitalization projects.
Target 7-2: Ensure 15 % of the existing capital asset building inventory as of the end of fiscal year 2025 incorporates the sustainable practices.	% Complete	Yearly	2 nd Qtr 2016/1 st Qtr 2015	
Action: Ensure all DPW managed projects require and receive a maintenance plan for roofing, lighting and mechanical equipment repair projects.	% Complete	Yearly	15% Annually	15% complete 2016



Review of Sustainability Objectives and Targets



Target 7-3 Progress Report

Objective #7: LEED/Sustainable Design	Performance Indicator	Freq	Target/Baseline ----- Date	Results Status ----- Comments
Target 7-3: Ensure by FY2020 all new buildings (>5,000 GSF) entering the planning process are designed to achieve energy net-zero, and, where feasible, water or waste net-zero by FY2030.	%Complete	Yearly	2 nd Qtr 2016/1 st Qtr 2015	
Action:	%Complete	Yearly	>5,000 GSF	100% of new and recapitalization projects.

REFERENCES:

- Energy Policy Act of 2005 (EPA Act 05), 8 Aug 2005.
- Energy Independence and Security Act of 2007 (EISA 2007), 19 Dec 2007.
- Executive Order 13693 - *Planning for Federal Sustainability in the Next Decade*, 25 March 2015
- Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings, Memorandum of Understanding (MOU), 6 Mar 2006, and 1 Dec 2008 update, High Performance and Sustainable Building Guidance Memorandum, ASA(IE&E), 16 Dec 2013, subject: Sustainable Design and Development Policy Update



Sustainability/Monitoring & Measuring



Environmental Performance Assessment and Assistance System
Quarterly Report

Installation Corrective Action Plan Update Target 10-1

DPW, Environmental Division



Review of Sustainability Objectives and Targets



FORT GORDON

Target 10-1 Progress Report

Objective #10: Monitoring and Measuring	Performance Indicator	Freq	Target/Baseline ----- Date	Results Status ----- Comments
Target 10-1: EPAAS quarterly update.	% of findings closed	Qrtly	100% ----- Ongoing	number of findings closed -----
Action 1: Installation Corrective Action Plan (ICAP) Progress	% complete	Qrtly	2010 ----- Ongoing	% of corrective actions completed. Provide quarterly status updates to IMCOM and EQCC. -----
Action 2: Internal Annual Environmental Performance Assessment (AEPA)	% of deficiencies	Annual	Minimize # of deficiencies	Follow-up on corrective actions through periodic inspections and documentation. Track corrective action status through ICAP.
Action 3: External Environmental Performance Assessment and Assistance System (EPAAS)	% of deficiencies	Every 3 years	Minimize # of deficiencies	Follow-up on corrective actions through periodic inspections and documentation. Track corrective action status through ICAP.

REFERENCES:

- AR 200-1, Environmental Protection and Enhancement, 13 December 2007.
- Executive Order 13693 - *Planning for Federal Sustainability in the Next Decade*, 25 March 2015



FY16 2ND QTR ICAP Finding Summary



(Before EPAAS 2016 Findings)

Compliance Area	Open Findings	Location	Finding Summary	Corrective Actions
Air Emissions	1 – Class I	Fort Gordon - Power Plants, Akima Global	Fuel gauge on bldg 310 generator not working for last 2 years. (Permit requirement)	DDEAMC project in process to replace the Bldg. 310 generator (4283 submitted)
Environmental Management System	1- Class I 6 – Class III 1 – NC	Fort Gordon/ Gillem Enclave	Operational Controls not maintained IAW GC Env Policy; HazCom/HW training not completed by assigned personnel	Actions to close EMS findings in process; Re-declaration of conformance allowed once AEC validates corrective actions have been implemented
Hazardous Materials/Hazardous Waste	2 – Class I 2 – Class III	Fort Gordon/ Gillem Enclave	HW containers in the Fisher Dental Lab were improperly managed. HW training needed at Gillem Enclave	Working with Preventive Medicine to correct finding; HW training to be completed
Storage Tanks/Petroleum Oils and Lubricants (POL)	2 – Class I	Fort Gordon	Bldg. 310 Heating Oil UST has inadequate containment; No confirmation or records that some USTs have been removed	Bldg. 310 UST included in regular inspection/monitoring; A 4283 has been submitted requesting survey of unknown tank sites; a phased plan for tank removals has been prepared and submitted to DPW and Real Property.
Spill Prevention (SPCC)	2 – Class I 1 – Class III	Fort Gordon/ Gillem Enclave	Tank integrity testing not conducted on a regular schedule; Used Cooking oil tank has no secondary containment. SPCC Training needed at Gillem Enclave	Schedule developed for required tank testing; Removal of used cooking oil tanks requires BASOPs contract mod; Coordinating for SPCC Training at Gillem Enclave
Water Management	4 – Class I	Fort Gordon/ Gillem Enclave	Failure to meet MS4 permit requirements. Open Notice of Violation.	Perform Best Management Practices (BMPs) and properly maintain Stormwater outfalls to meet permit requirements. (Contract in progress to address outfalls).



External EPAAS 2016 Summary (7-11 Dec 2015)



Corrective Action Milestones

20 Jan

•EPAAS Review period ends

1 Feb

•Finalize and add findings to Installation Corrective Action Plan (ICAP)

1 May

•Deadline for corrective actions on **records** findings (7 findings)

1 June

•Deadline for corrective actions on **operational practices** findings (21 findings)
•Deadline for corrective actions on EMS **Minor nonconformance** findings (3 findings)

1 Aug

•Deadline for corrections on **Projects accomplished in-house** (1 finding); **Testing/Sampling** (1 finding)
•Deadline for corrective actions on **Training findings** (2 findings)
•Deadline for corrective actions on EMS **Major nonconformance** (2 findings)

1 Nov

•Deadline for corrective actions on **Program Management findings** (2 findings)

1 Feb
2017

•Deadline for corrective actions on **Surveys/studies** (1 finding)

1 Feb
2018

•Deadline for corrective actions on **Projects accomplished by O&M contract or unspecified Minor Military Construction** (2 findings)

1 Feb
2021

•Deadline for corrective actions on **Projects accomplished by MILCON contract finding** (1 finding)

TOTAL FINDINGS: 43

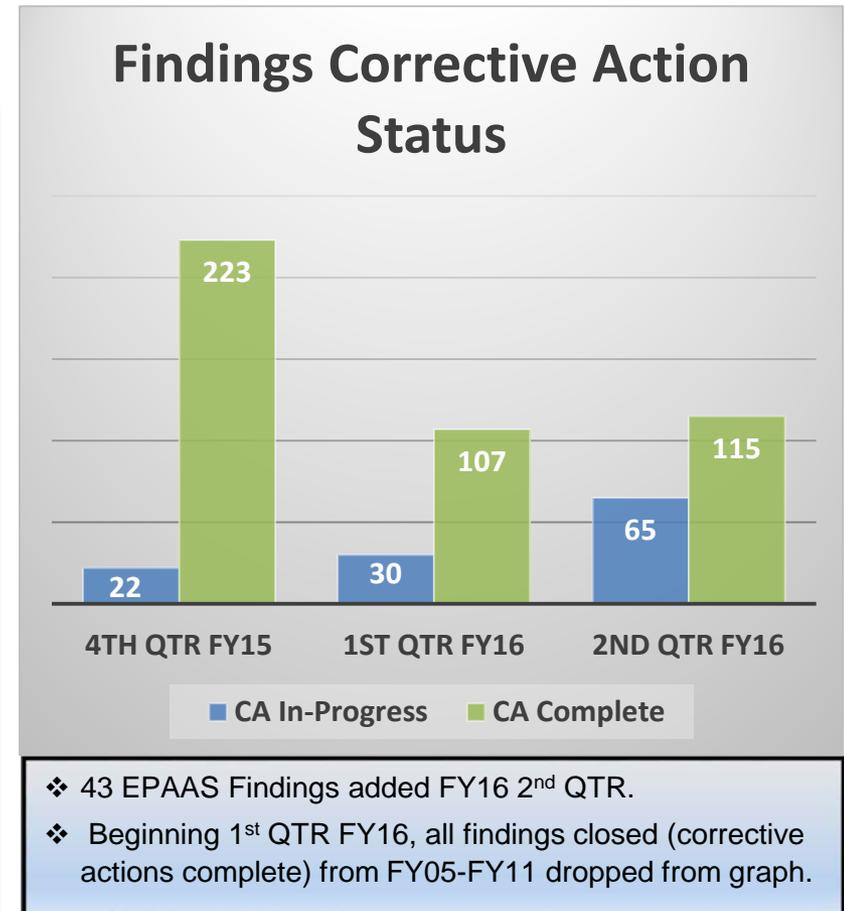
1. **Records** – Program related documents and reports.
2. **Operational practices** – procedures for management of waste to prevent non compliance.
3. **Minor nonconformance** – a minor issue that could lead to a major nonconformance if not addressed.
4. **Major nonconformance** – a significant failure to implement and/or maintain conformance to the requirements of the EMS standard.

Training Activities & Corrective Actions

- **Goal:** Minimize the number of repeat and long term findings by identifying root causes and implement measures to ensure compliance.

2016 Ongoing Actions

2016 TRAINING ACTIVITIES & SUSTAINABLE ACTIONS			
Actions Planned (CY)	Actions Completed	No. of Participants	Training Class/Activity
2	0	0	Environmental Officer Course
5	1	9	Hazardous Materials/ Waste Management
11	2	26	Hazardous Waste Management Refresher
6	2	51	SPCCP (Spill Training)
4	1	15	Industrial Stormwater Training
12	2	26	ACM & LBP Awareness Training at Self-Help
4	2	93	Pre-Command/General Environmental Awareness course
4 (FY)	2	24	Cross-Functional Team Meetings
4 (FY)	1	GC & DPW Deskside	Environmental Quality Control Committee
20	3	280	Environmental Division Outreach Activities





SEMS Conformance Target 10-2

DPW, Environmental Division



Review of Sustainability Objectives and Targets



Target 10-2 Progress Report

Objective #10: Monitoring and Measuring	Performance Indicator	Freq	Target/Baseline ----- Date	Results Status ----- Comments
Target 10-2: Maintain SEMS Conformance	% Conformance with ISO 14001	Annual	100% Conformant ----- Ongoing	External SEMS audit completed 6 Nov 15. EPAAS audit scheduled for 7-11 Dec; Per AEC, do not re-declare EMS conformance until the EPAAS team validates corrective actions have been implemented and are effective at closing EMS major non-conformances.
Action 1: Maintain document control and operational controls.		Monthly	Ongoing	Noise Plan update completed May 2015. Draft Hazardous Waste Management Plan in review. Mechanism in place to document and track incoming and outgoing actions (NOIs, NOVs, Action summary).
Action 2: Monitor status of objectives and targets.		Qtly	Ongoing	Presented to EQCC Quarterly.
Action 3: Conduct installation-wide Environmental Performance Assessment.		Annual	FY16	AEPA to be scheduled June 16.

Target 10-2 Progress Report – continued

Objective #10: Monitoring and Measuring	Performance Indicator	Freq	Target/Baseline ----- Date	Results Status ----- Comments
Action 4: Review installation environmental aspects and impacts.		Annual		FY16 review to be scheduled for Cross-Functional Team (CFT).
Action 5: Hold Quarterly CFT Meetings.		Qtly	On Track	2 nd QTR CFT meeting held 14 Jan 2016.
Action 6: Update SEMS Manual and EMS Procedures in accordance with ISO 14001.		Annual	On Track	FY16 review and update underway.
Action 7: Conduct Management Review of SEMS.		Annual	Ongoing	Scheduled for 4 th Quarter EQCC Meeting.



Environmental Topics, Updates & Special Reports

DPW-Environmental



2016 Earth Faire, Barton Field

- 22 April 2016 – Educational Displays and Recyclable Art
- 23 April 2016 – 5K/3K run and Educational Displays, GA Southern Raptor Program.



Closing

COL Anderson



Summary of Guidance and Directives

Next Meeting will be:
FY 16 3rd QTR EQCC
Meeting

1 June 2016
GC Conference Room,
Darling Hall



RECYCLE OVERVIEW COMMITTEE

DFWMR, QUALITY RECYCLING PROGRAM (QRP)



Ms. Jean Kelly, QRP Manager

Our mission is to support Fort Gordon soldiers, tenants, households and visitors in recycling to the fullest extent while diverting materials from the landfill, and generating funds for the installation.

Members

- QRP Manager
- Representative from installation organizations including the:
 - RMO
 - DOC
 - DPW
 - Logistics Readiness Center(LRC)
 - Environmental Management
 - Staff Judge Advocate (SJA)
 - Safety Office
 - Public Affairs (PAO)
 - Supply
 - Directorate of Morale, Welfare, and Recreation (DMWR)
 - Family Housing
 - DRMO/DLA
 - Tenant activity representatives
 - The Fire Department

Objectives

Committee members establish program objectives to maximize recycling of materials and minimize solid waste disposal.

The primary objective of the committee is to advise the GC on program decisions, such as recycling program changes, facility improvements, and equipment purchases, as well as excess recycling fund disbursements

Items Accepted

- Cardboard
- ALL PAPER
 - White Paper
 - Color Paper
 - Newspaper (with inserts)
 - Books, Magazines, Telephone Books, and Manuals
- Plastics #1 and #2
- Aluminum Cans
- Toner Cartridges
- Pallets
- Scrap Metal
- Tin Cans
- Brass for scrap
- Grocery Bags
- Plastic Wrap
- Single-shred Paper
- Lead-Acid Batteries
- PENDING - Glass

Voting Items

- All entities, units, and Service Members on the installation will comply with Garrison Commander's Policy #89 in the mandatory execution and use of the recycle program, unless specifically stated in Army Regulation 420-1, paragraph 23-11F. Upon approval, containers will be placed in common areas of building and recycling will be collected.

Taskings

1. Hospital will provide any and all information regarding HIPPA and paper recycling including AMED regulations by 15 Apr 16. From this information, a plan for hospital PII, and PHI will be formulated.
2. AAFES needs to report all recycle numbers including plastics, cardboard, cooking oil, pallets, and paper.
3. DECA needs to report all recycle numbers including plastics, cardboard, cooking oil, pallets, and paper.

Industrial Shredding Services Available



No need to spend hours shredding material. We will shred paperwork FREE of charge.
No Appointment Needed



FORT GORDON



INSTALLATION MANAGEMENT COMMAND



FORT GORDON

SUSTAIN, SUPPORT, DEFEND