

# **EMCBC Office of Cost Estimating & Project Management Support**

## **FY12 Cost Estimating Team Accomplishments**

The Environmental Management Consolidated Business Center (EMCBC) Office of Cost Estimating & Analysis was established in 2007 in response to GAO's root cause analysis which identified that EM had not developed high quality estimates. The plans to address GAO concerns and for the development of the office, along with a draft cost estimating strategy were developed and approved by HQ in early 2008. The Cost Estimating Team was put together starting in August of 2008. The team is made up of cost estimators and cost engineers and currently has six cost professionals operating under direction of an EMCBC Assistant Director. In 2012, the Office of Project Management Support was added to create the Office of Cost Estimating and Project Management Support (OCE&PMS). This integrated seven program analysts into the organization and created an organization offering a full range of cost related and project management related support services.

## **Cost Estimating Team Mission**

The mission of the EMCBC Cost Estimating Team is to fully integrate sound cost estimating practices into all of EM's acquisition and project management processes by:

- Establishing standards, policy, and procedures to ensure that EM cost and schedule estimates are accurate, traceable, and reliable,
- Providing Independent Government Cost Estimating (IGCE), Independent Cost Estimating (ICE), and Independent Cost Analysis (ICA) capabilities required to support EM acquisition and project management program requirements
- Providing independent cost estimating and analysis support to EM management, the EM Acquisition Advisory Board (EMAAB), and EM budget formulation processes, and
- To lead the development and management of cost and schedule databases, methodologies, and tools needed by EM to improve and standardize its cost estimating and analysis capabilities.

## **Cost Estimating Team Corporate Objectives**

Support EM's Journey to Excellence, Goal No. 3; to improve contract and project management with the objective of delivering results on time and within cost. Additionally, this office supports DOE's overall goal of achieving and maintaining excellence in contract and project management, by meeting DOE objectives outlined in the 2008 Contract & Project Management Corrective Action Plan. Specifically, Corrective Measure 5 commits DOE to establish and implement a federal independent government cost estimating capability, including the development of appropriate policy and standards, allocation of required resources, and compilation of unit cost labor and material databases.

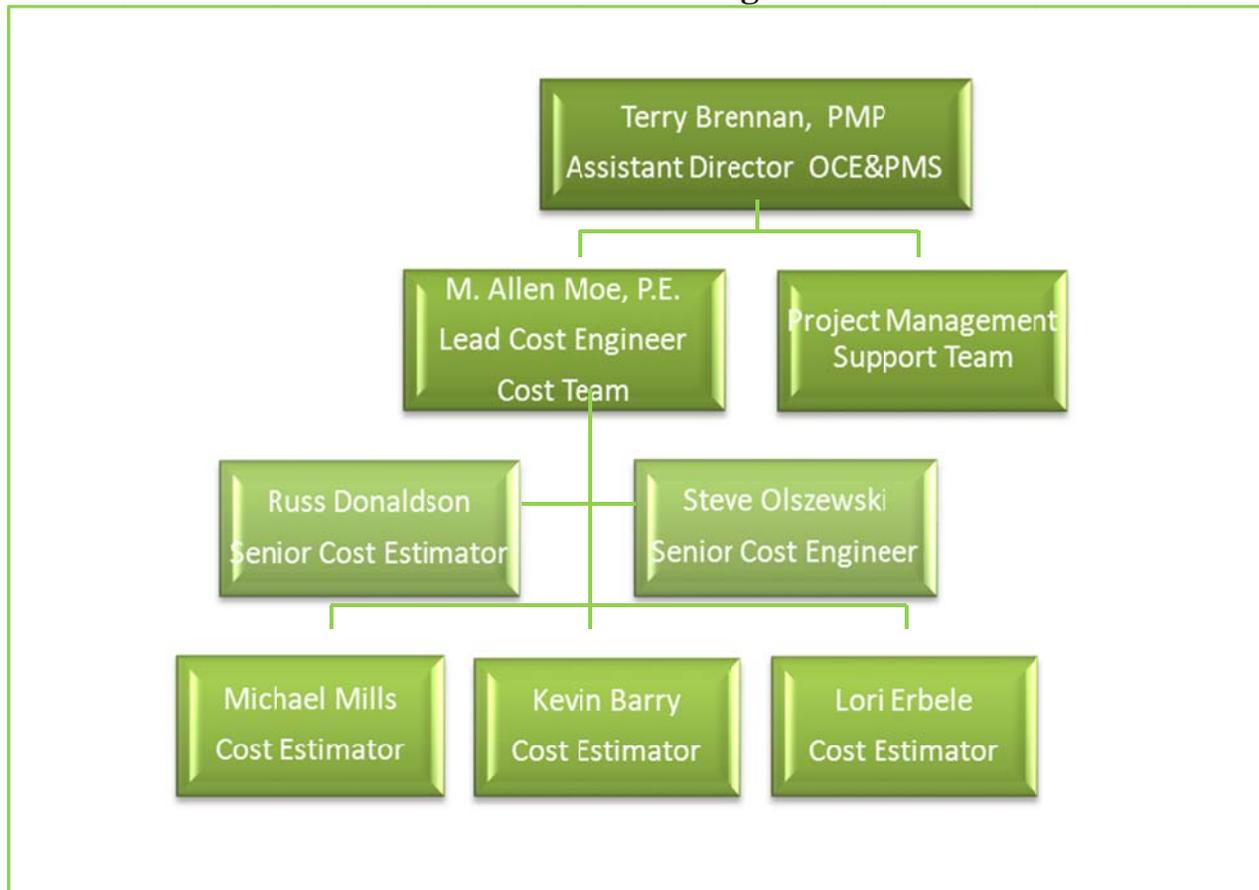
To that end, the Cost Estimating Team has been actively developing EM cost estimating policies and standardized practices to improve accuracy, traceability, and reliability of EM cost and

schedule estimates, improve our ability to develop independent cost estimates (ICEs) and independent cost reviews (ICRs) of contractor-developed cost estimates. The Cost Estimating Team also support benchmarking and cost realism reviews required to support EM acquisition objectives. This office has also developed the Environmental Cost Analysis System (ECAS). ECAS is a web-based system to collect, organize, store, and report historical project cost data from completed EM cleanup projects. In FY2012, seventy five projects, funded via the American Recovery and Reinvestment Act (ARRA), were added were added. This brought the total number of ECAS projects to 228, with an aggregate value exceeding \$7.8-billion. The ability to collect, analyze, and use historical EM cleanup project cost data improves the accuracy of EM's IGCE's.

## Cost Estimating Team Staffing & Organization

This office is currently staffed with six experienced professional cost estimators/engineers under the direction of the Assistant Director OCE&PMS. This staff has more than 75 years of experience estimating the cost of environmental cleanup activities.

### COST ESTIMATING TEAM Organization Chart



## Cost Estimating Team Customers

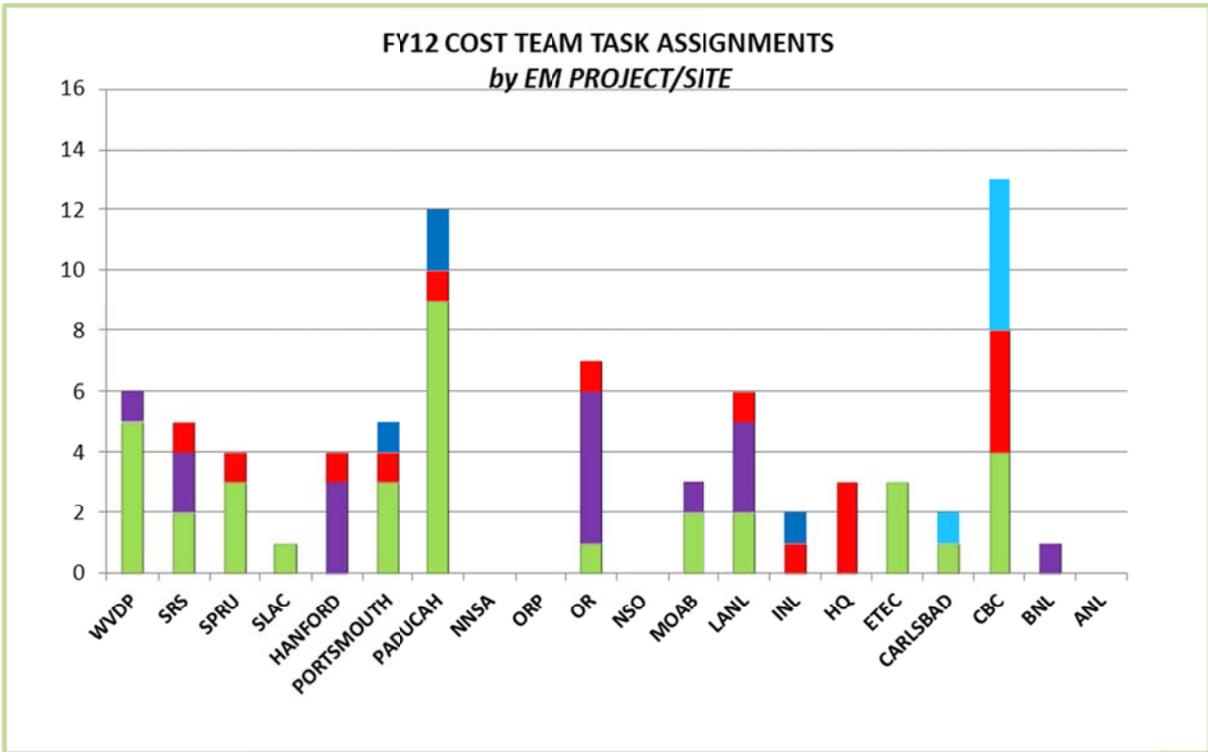
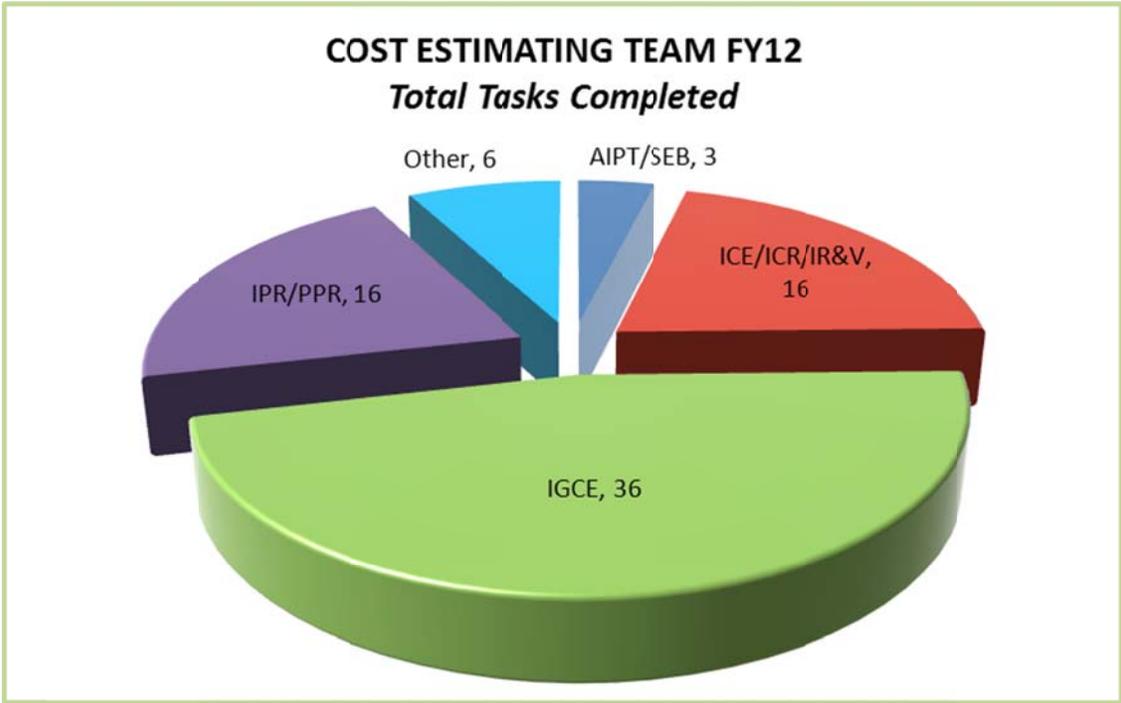
EMCBC (Internal)	EM HQ (External)	EM Field Offices (External)
Office of Contracting	EM-Mission Units (EM-10, EM-20, and EM-30)	EM Small Sites (ANL, BNL, ETEC, LANL,

EMCBC (Internal)	EM HQ (External)	EM Field Offices (External)
		LBNL, LLNL, MOAB, NSO, SLAC, SPRU & WVDP)
Office of Logistics	EM Recovery Act Program	Idaho Operations Office
Office of Technical Services	EM Mission Support (EM-40, EM-50, EM-60, and EM-70)	Oak Ridge Operations Office
External to EM	EM-50 / EM Program & Site Support	Office of River Protection
NNSA Office of Environmental Operations (NA-173)	DOE Office of Acquisition and Project Management (APM)	Richland Operations Office
	Others upon request and mission availability	Savannah River Operations Office

## Cost Estimating Team Services Provided to EM's Cleanup Program

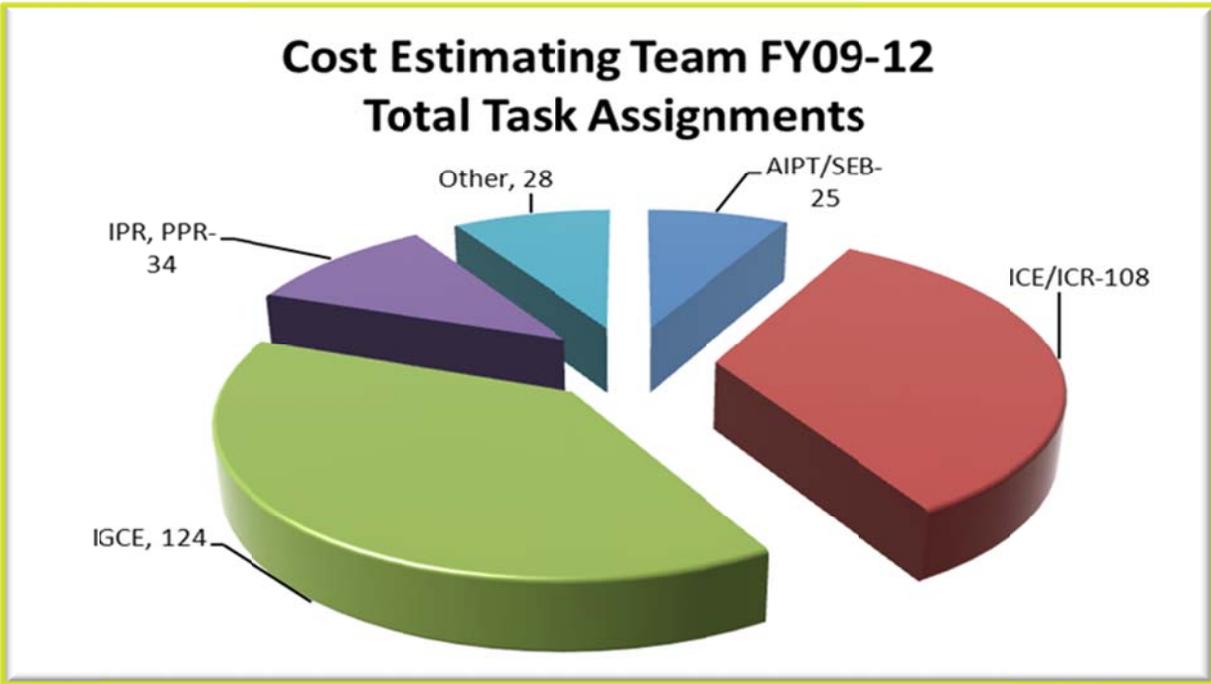
FUNCTIONS	
<b>Acquisition Support:</b>	<b>Program/Project Planning &amp; Execution Support:</b>
Acquisition Integrated Project Team (Solicitation development)	Acquisition Integrated Project Team (Solicitation development)
Independent Government Cost Estimates (IGCE's)	Independent Government Cost Estimates (IGCE's)
Source Evaluation Board (SEB) (Cost Subject Matter Expert (SME) and Technical review of Cost	Source Evaluation Board (Cost Subject Matter Expert (SME) and Technical review of Cost
Post Award Contract Administration (IGCE's, ICE's, ICR's)	Support Federal Project Directors (FPD) and serve on Integrated Project Teams (IPTs)
Cost and Pricing Support (Reasonableness Reviews)	Provide support and oversight for contractor-developed cost estimates
<b>Environmental Management Corporate Cost Estimating and Analysis Support</b>	
Support Contract Close-out activities by capturing actual project costs and integrating actual project cost data to the EM Environmental Cost Analysis System (ECAS)	
Performing life-cycle cost analyses	
Support risk management planning activities	
Supporting EM-HQ as needed for "Deep Dive" reviews for higher DOE offices	
Support performance evaluation activities ~ trend & cost variance analysis	
Support performance evaluation activities ~ trend & cost variance analysis	

The following figure depicts organizational workload accomplished, segregated by primary service areas or task assignments, during FY12. The bar chart reflects how these assignments related to each customer site.



## Cost Estimating Team Accomplishments FY2009-FY2012

Since the beginning of FY09, the Cost Estimating Team has completed 319 individual task assignments from our EM and NNSA customer base. The following figure depicts organizational workload, segregated by primary service areas or task assignments, completed from FY09 to FY12:



Description	FY09	FY10	FY11	FY12	TOTALS
IGCE	29	24	35	36	124
Support IPT, SEB	7	8	7	3	25
Support IPR/PPR/	4	3	11	16	34
Other	9	8	5	6	28
Independent Cost Estimate/Review (ICE/ICR)	30	38	24	16	108
<b>Totals</b>	<b>79</b>	<b>81</b>	<b>82</b>	<b>77</b>	<b>319</b>

*Note: At the end of FY12, there were another 29 active task assignments in various stages of completion.*

## FY12 Notable Accomplishments

### Expanded Project Repository within Environmental Cost Analysis System (ECAS)

- ECAS is a web-based system that is used to collect, organize, store, and report historical cost data from completed EM clean-up projects.
- ECAS contributes to EM's ability to improve accuracy, traceability, and reliability of EM cost and schedule estimates, and support benchmarking needed to perform cost realism reviews for contractor submitted costs.
- Includes costs and secondary parameter data from Rocky Flats, Oak Ridge-Melton Valley, Fernald and Mound Closure projects.

- Began adding American Recovery and Reinvestment Act (ARRA) projects from Nevada Test Site, Idaho, Oak Ridge and Savannah River Site. Increased total number of projects in ECAS from 153 to 228.
- Projects include: D&D, Environmental Remediation, Waste Management and disposal, and related projects.

### **Completed Forty Eight (48) IGCE's FY-12**

- Completed 17-New Award IGCE's with 80% coming within 15% of award costs.
- Completed 31-post award contract action IGCE's with 86% coming within 25% of final cost negotiated cost.
- Number of IGCE's has grown +40% per year over the last two years.

### **Supported EM's Acquisition Center in FY12**

- Assisted with development of RFP's on three major EM clean-up contract awards.
- Developed EMCBC Implementing Procedure (EMCBC IP-413.02); Technical Evaluation of Cost (TEC) Procedure in Support of Formal Source Evaluation Boards (SEB's) for Competitively Awarded Contracts.
- Developed EM IGCE policy and obtained HCA approval.

### **Supported EM's Project Planning and Execution Mission in FY12**

- Completed 16 Independent Cost Estimate and Independent Cost Reviews for (ICE/ICR) EM-HQ and Field Offices/Project Sites.
- Supported EM-HQ on 16- project peer reviews (PPRs) and/or independent project reviews (IPRs)
- Supported EM-HQ directed "Deep-dive" project/program reviews for the West Valley Demonstration Project (WVDP), Separations Process Research Unit (SPRU), Paducah Gaseous Diffusion Plant (PGDP), and PPPO, DUF<sub>6</sub>.

### **Developed EM's Corporate Cost Estimating Capability**

- Developed "H-Clause" to incorporate collection of cost data using the Environmental Cost Element Structure (ECES) and ECAS.
- Reactivated the EM Applied Cost Engineering (ACE) Team.
- Updated Basis of Estimate (BOE) template.
- Upgraded RACER and MII Toolkit items.
- Developed Independent Cost Review (ICR)/ Independent Cost Estimate (ICE) guide for use on project peer reviews.
- Updated customer feedback tool to better assess Cost Estimating Team performance on assignments.