

# EMCBC Office of Cost Estimating & Analysis

## FY11 Accomplishments

The EMCBC Office of Cost Estimating & Analysis (OCE&A) was established in 2007.

### OCE&A Mission

The mission of the EMCBC Office of Cost Estimating & Analysis 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.

### OCE&A Corporate Objectives

Support EM's Journey to Excellence, Goal No. 6; 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 EMCBC Office of Cost Estimating & Analysis 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 independently review and validate (IR&V) contractor-developed cost estimates, and 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. The ability to collect, analyze, and use historical EM cleanup project cost data improves the accuracy of EM's Independent Government Cost Estimates.

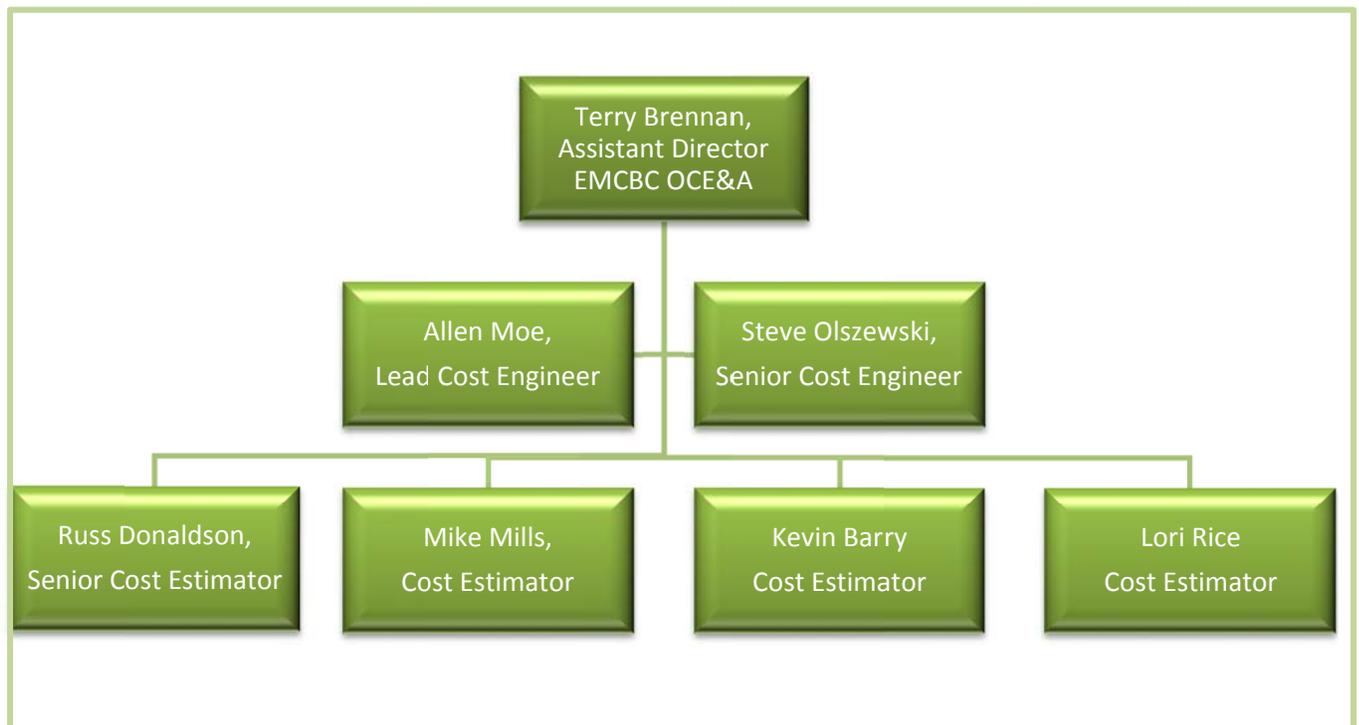
## OCE&A EM Customers

EMCBC (Internal)	EM HQ (External)	EM Field Offices (External)
Office of Contracting	EM-4 / EM Chief Business Officer	EM Small Sites (ANL, BNL, ETEC, LANL, LBNL, LLNL, MOAB, NSO, SLAC, SPRU & WVDP)
Office of Logistics	EM-3.1 / EM Recovery Act Program	Idaho Operations Office
Office of Technical Services	EM-4.1 / EM Mgt. Systems & Analysis	Oak Ridge Operations Office
External to EM	EM-50 / EM Program & Site Support	Office of River Protection
NNSA Office of Environmental Operations (NA-173)	EM-62 / EM Strategic Planning & Analysis	Richland Operations Office
	EM-80 / EM Acquisition & Contract Management	Savannah River Operations Office

## OCE&A Staffing & Organization

This office is currently staffed with six experienced professional cost estimators/engineers and one EM Career Development Program Intern. This staff has more than 75 years of experience estimating the cost of environmental cleanup activities.

### OCE&A Organization Chart



## OCE&A Services Provided to EM's Cleanup Program

### Functions

#### Acquisition Support:

- Acquisition Integrated Project Teams
- Independent Government Cost Estimates
- SEB Support (TRC between offerors & IGCE)
- Contract Administration (IGCE, IR&V, & ICRs to support change control activities)
- Cost & Pricing Support (Reasonableness Reviews)

#### Program/Project Planning & Execution Support:

- Project IPT Support
- Life-Cycle Cost Estimate Development, Management, and Maintenance

- Life-cycle Cost Analysis (Alternatives Analysis)
- Contractor PMB Evaluation & Analysis
- Independent Project and Cost Estimate Reviews
- Baseline Development & Maintenance (cost estimate updates & IGCEs to evaluate contractor-generated change requests)
- Risk Management Support (Cost Estimate Uncertainty, Schedule Risk, and Technical & Programmatic Risk Analyses)
- Historical Cost Collection
- Actual Project Cost & EVMS Trend Analysis

### Functions

#### EM Corporate CE&A Support:

- Policy Development & Management;
  - IGCEs (FAR compliant)
  - LCCA
  - Life-cycle Baseline Management
- Procedures Development & Management;
  - EM Cost Estimate Development
  - IPR, ICR, and IR&V Standard Practices
  - EM Cost Guide
- EM CE&A Tool-kit
  - EM Environmental Cost Analysis System (ECAS)
  - Environmental Cost Element Structure (ECES / Hybrid WBS & COAs)

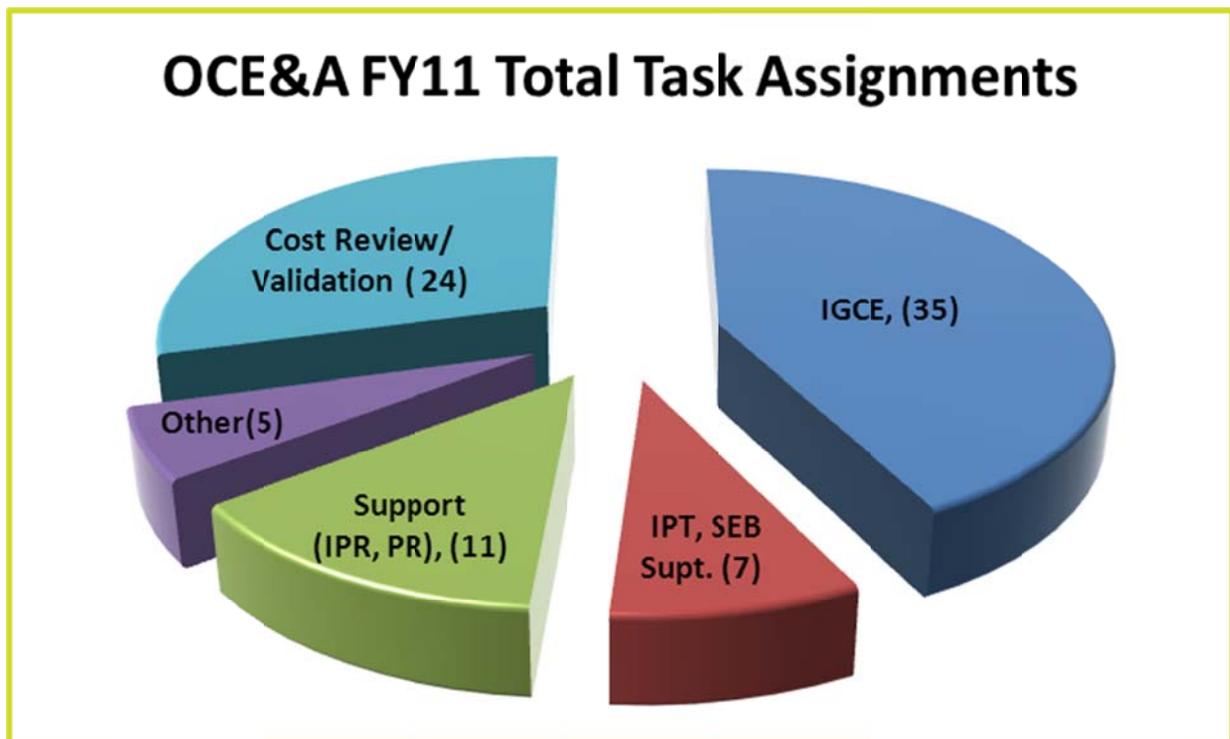
- MII, RACER, & CostRisk
- EM Program Evaluation
  - ICR, IR&V, and EIRs at EM Field Offices
  - HQ Review & Assessment Team Support
  - Cost Analysis
- DOE Corporate CE&A Support
  - DOE-wide CE&A Orders & Guides
  - Staffing EIR & IPR teams (NNSA & OECM)
- Inter-agency CE&A Coordination
  - Tri-Services Cost Estimating Group
  - Environmental Cost Engineering Committee (EC<sup>2</sup>)

## OCE&A Accomplishments (FY09 thru FY11)

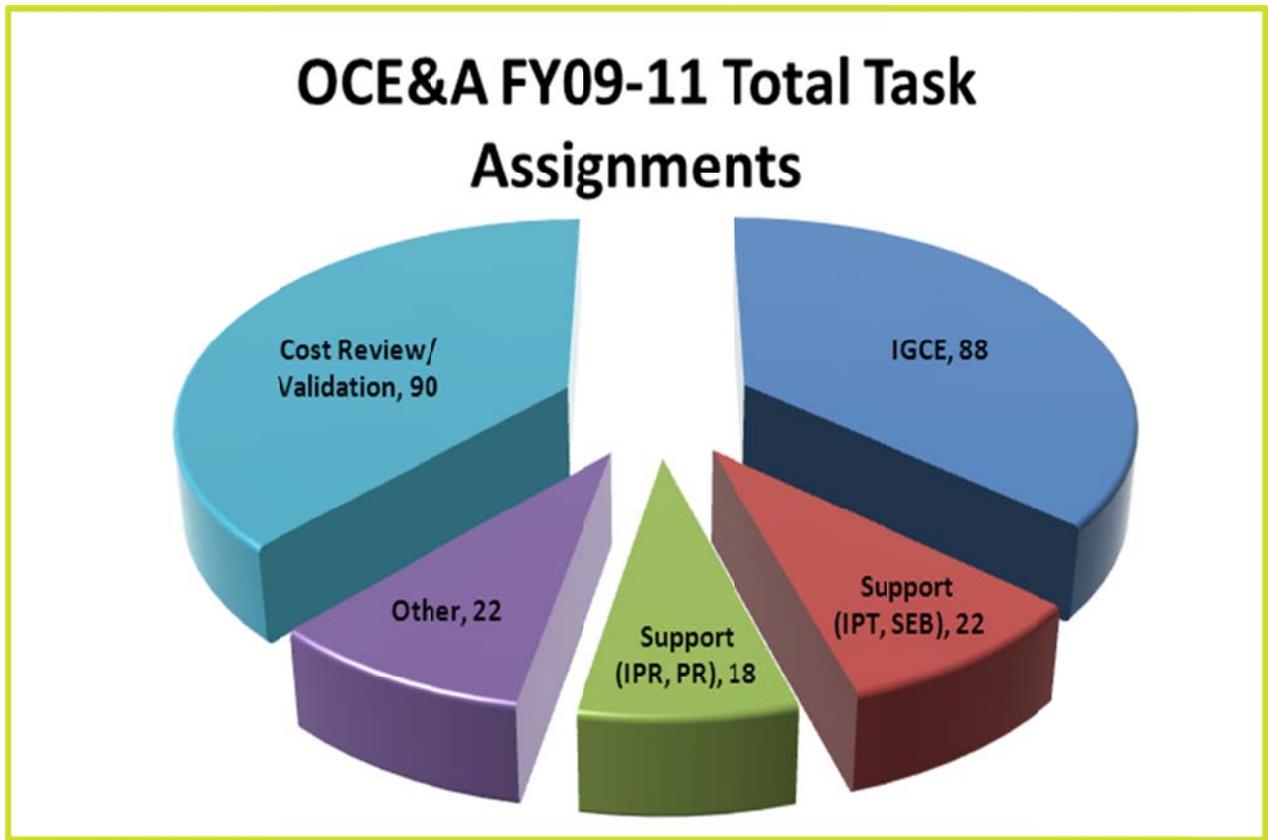
Since the beginning of FY09, the OCE&A has completed 242 individual task assignments from our EM and NNSA customer base. The following table segregates all completed task assignments into our primary EM support categories.

Description	FY09	FY10	FY11	TOTALS
IGCE	29	24	35	88
Support IPT, SEB	7	8	7	22
Support IPR's	4	3	11	18
Other	9	8	5	22
Independent Cost Review/ Validation	30	38	24	92
<b>Totals</b>	<b>79</b>	<b>81</b>	<b>82</b>	<b>242</b>

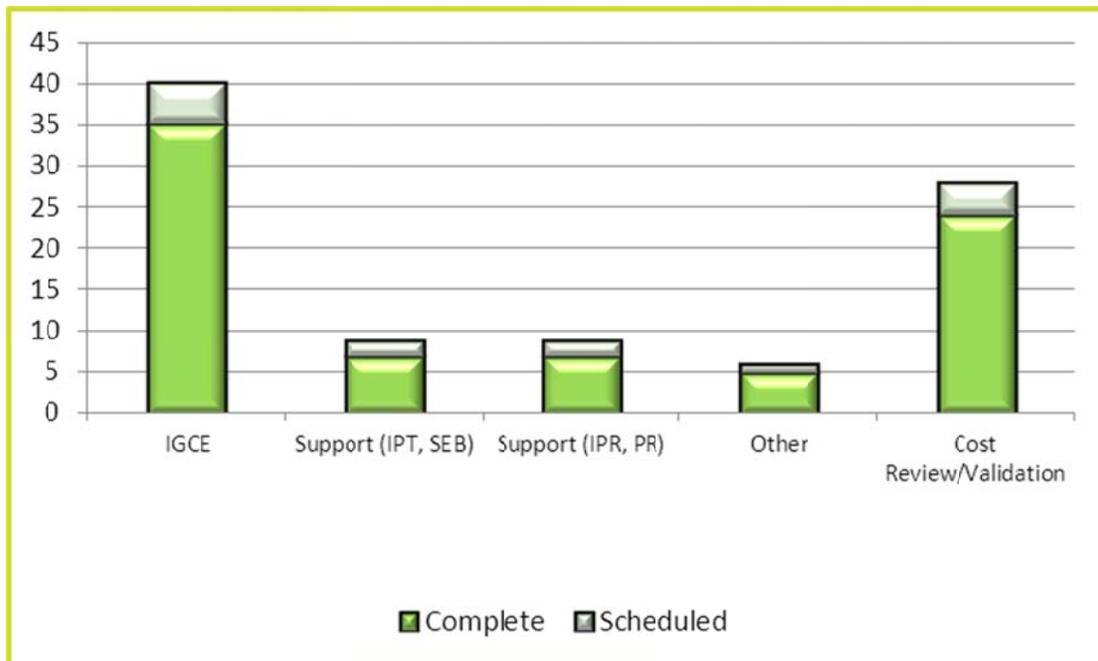
The following figure depicts organizational workload accomplished, segregated by primary service areas or task assignments, during FY11.



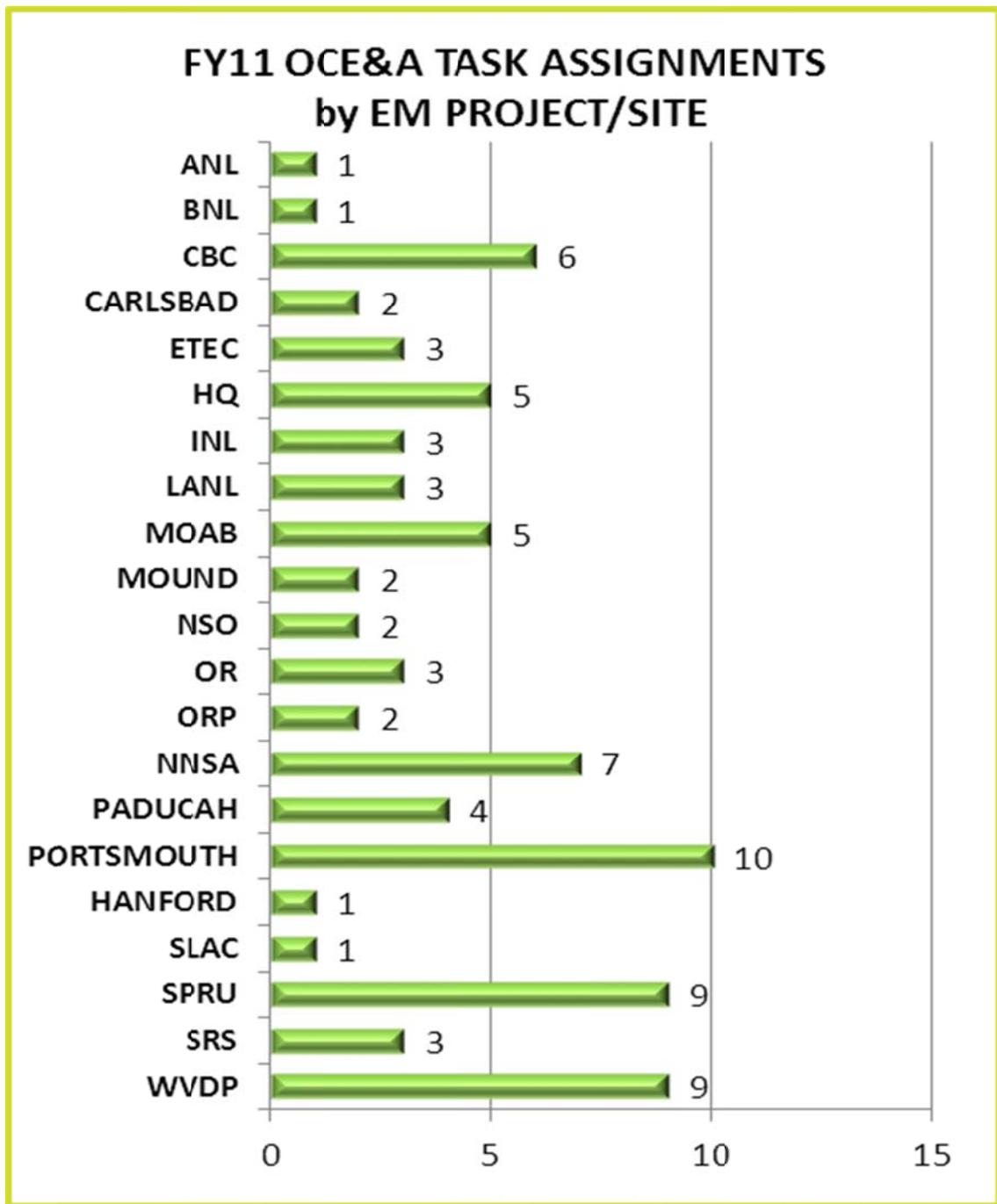
The following figure depicts organizational workload, segregated by primary service areas or task assignments, completed from FY09 to FY11.



The following figure shows current organizational workload, segregated by primary service areas or task assignments, in FY11.



The following figure represents task assignments, segregated by customer sites, completed in FY11.



## **FY11 Notable Accomplishment**

### **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.
- Over 170 completed EM Cleanup projects included.
- Projects include: D&D, Environmental Remediation, Waste Management and disposal, and related projects.

### **Completed Thirty Five (35) IGCE's FY-11**

- Over 90% of IGCE's have been within 20% of awarded contract price.

### **Supported EM's Acquisition Center in FY11**

- Completed 3 Technical Evaluations of Cost (TEC) to support award of 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

### **Supported EM's Project Planning and Execution Mission in FY11**

- Completed 24 Independent Cost Estimate Reviews and Independent Project Reviews for EM-HQ and Field Offices/Project Sites.

**Assisted with development of DOE G 413.3-21, DOE Cost Estimating Guide for Capital Asset Projects (issued in May 2011)**