



# THE HANFORD SITE

## Integrated Communication at Large Sites

Michelle Oates

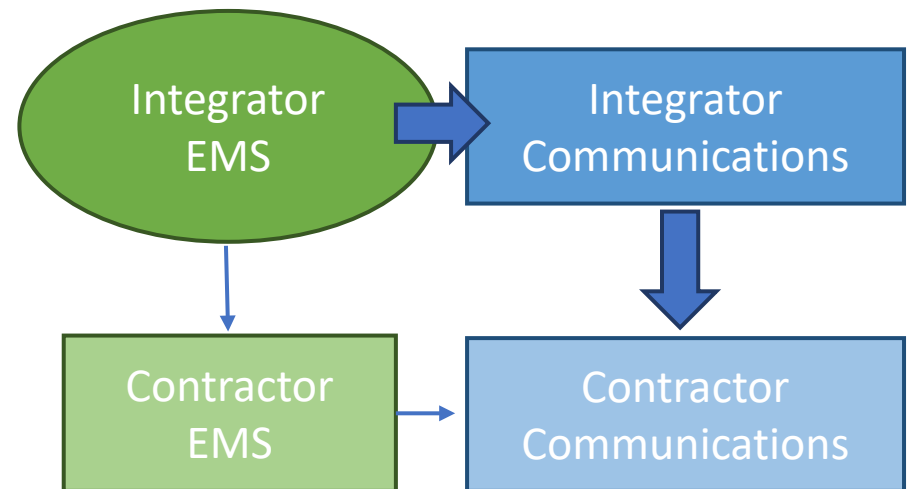
*October 2019*

- Background information
- Communication challenges at large sites
- ISO 14001 requirements addressed
- Hanford Site EMS communication & collaboration
- Contractor EMS communication
- Importance of integration

- The Hanford Site

- Three primary contractors to the DOE owned Hanford Site
- 580 square miles of shrub-steppe desert in southeastern Washington State, along the Columbia River
- Produced plutonium for nuclear weapons during World War II and throughout the Cold War Era
- Environmental cleanup mission to remediate contaminated facilities, soil, and groundwater

- Multiple contractors & EMS scopes
  - Ex: signage & processes may vary
- Employee behavior
  - Home versus work environments
- EMS communication pathway
- Large number of employees
  - ~9,300 total employees sitewide
  - Varied communication preferences
  - Data collection for sitewide environmental reporting



## Mission Support Alliance (MSA)

- Provide integrated infrastructure and site services to support the cleanup mission
  - Roads and transportation services
  - Electrical and water services
  - Facility maintenance
  - Emergency response
  - Network and software engineering

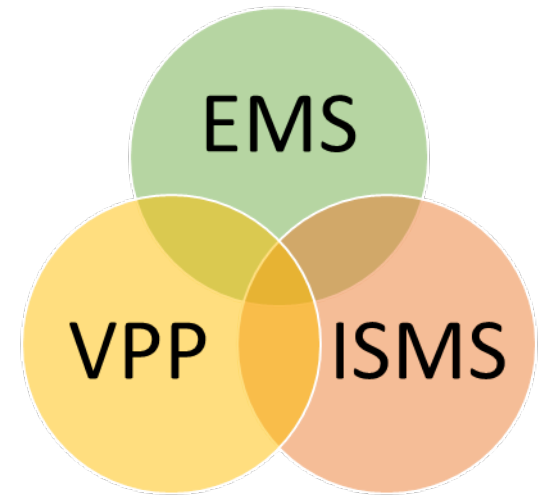
## CH2M HILL Plateau Remediation Company (CH2M HILL PRC)

- Facility demolition and waste site cleanup of the Central Plateau and River Corridor
- Groundwater remediation
- Waste retrieval and fuels management

## Washington River Protection Solutions (WRPS)

- Maintain underground waste storage tanks
- Retrieve, treat, and store radioactive and hazardous tank waste
- Prepare for and provide waste feed delivery to the Waste Treatment and Immobilization Plant

- 2019 external audit strengths
  - Environmental enthusiasm at all work levels
  - Environmental awareness and culture
  - Institutional knowledge sharing
  - Environmental Compliance Officer program
  - Integrated Safety Management System (ISMS) and Voluntary Protection Program (VPP) integration

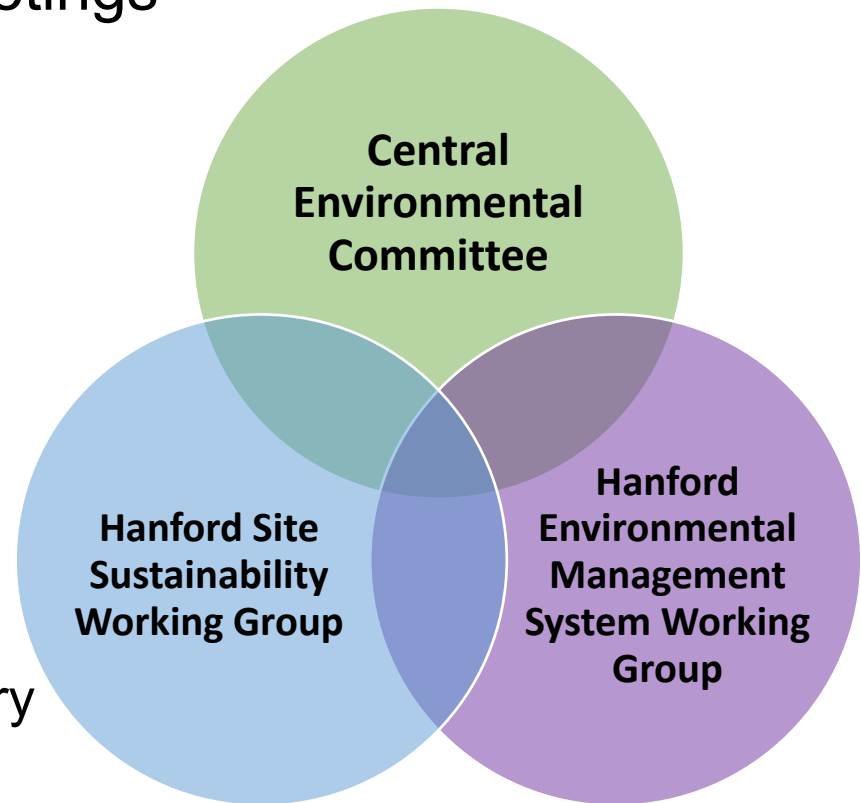




- 7.3 Awareness
  - Environmental policy
  - Significant environmental aspects and potential impacts of work
  - Contribution towards effectiveness of the EMS
  - Implications of not conforming with EMS requirements
- 7.4 Communication
  - Internal communication
  - External communication
  - Collaboration methods

- Sitewide working group meetings

- Subgroups of the Central Environmental Committee
- Lessons learned, benchmark discussions, focused topics
- Preparation for sitewide environmental reporting and environmental awareness campaigns
- Benchmarking with Pacific Northwest National Laboratory (PNNL)





- Internal sitewide EMS SharePoint
  - Meeting minutes, helpful resources, example documents

## Hanford Sitewide Environmental Management Systems

The Hanford Sitewide EMS site was created to aggregate EMS information from across the Hanford site and includes the following three general categories of information: EMS Policies and Manuals; Environmental Metrics; and Environmental Reports. Additional information may be included as needs and resources are identified.

### Hanford Environmental Management System Working Group (HEMSWG)

The HEMSWG was established to facilitate the implementation of ISO 14001 - based Environmental Management Systems (EMS) across the Hanford Site. The HEMSWG supports all Hanford contractors in developing, evaluating and reviewing EMS documentation and shares lessons learned and best practices to promote sitewide continual improvement.

## Helpful Links

[Hanford Contacts](#)  
[HEMSWG Meeting Minutes](#)  
[HSSWG Meeting Minutes](#)  
[Audit Reports](#)

CHPRC



HPMC

HPMC OCCUPATIONAL  
MEDICAL SERVICES

MSA



Right solution.  
Right time.  
Right value.

WRPS



VNSFS



- Sitewide surveys
  - Gain sitewide input on topics of interest
  - Created and distributed by MSA
- Collaborative reporting
  - Annual Hanford Site Environmental Report
  - Site Sustainability Plan

## Environmental Reports

## HANFORD SITE



## Annual Environmental Reports

The Hanford Site environmental report is prepared annually to summarize Hanford Site environmental data and information, describe environmental management performance, demonstrate the status of compliance with environmental regulations, and highlight major environmental programs and efforts. The reports are written to meet reporting requirements and guidelines of the U.S. Department of Energy (DOE) and to meet the needs of the public, public officials, regulators, and Hanford Site contractors.

Environmental Reports 2011 - Latest

Environmental Reports 1959 - 2010



## Electric Vehicle Charging Station Survey

MSA and fellow Hanford contractors would like to learn more about your needs as a Hanford employee and gauge the interest for personal electric vehicle charging stations. [Read more...](#)

- Outreach efforts to highlight performance
  - Local news outlets
  - EM newsletter
  - What's Happening at Hanford
  - Social media





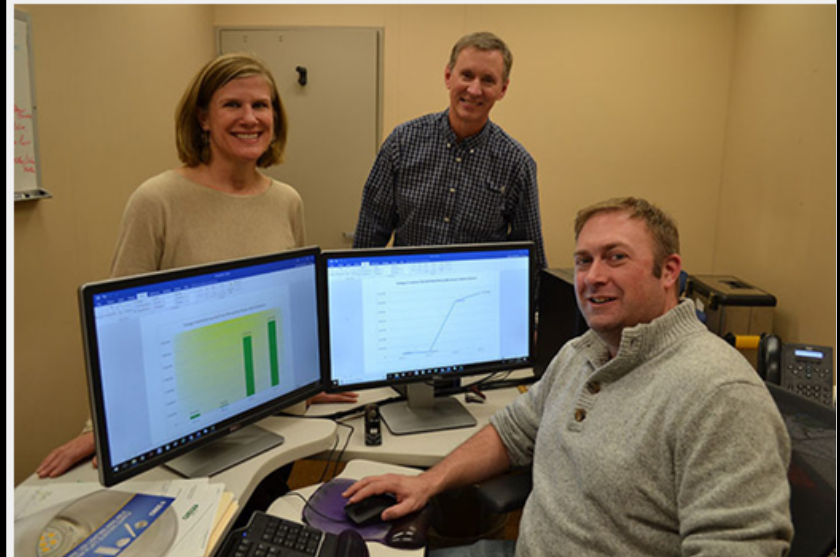
U.S. DEPARTMENT OF  
**ENERGY**OFFICE OF  
ENVIRONMENTAL  
MANAGEMENT

## Hanford Site Crew Improves Trail on Earth Day

**RICHLAND, Wash.** – More than 20 volunteers from [Hanford](#) site services contractor Mission Support Alliance worked with the Tapteal Greenway Association in West Richland, Wash., near the Hanford Site, to help reestablish about 1,000 feet of trail near a bustling residential development to mark Earth Day, which is celebrated April 22. The work included grading and smoothing the trail; bringing in rocks by hand to be placed along the edge of the trail; and placing a short timber crib wall to raise the level of the trail across a small gully.



## Hanford Site Energy Efficiency Incentives Soar



Lana Stricking, Greg Sullivan, and Christian Seavoy with EM Richland Operations Office contractor Mission Support Alliance work with contractors across the Hanford Site to identify projects that qualify for the Bonneville Power Administration's regional energy efficiency incentive program.

**RICHLAND, Wash.** – Contractors at the [Hanford Site](#) are expected to earn more than \$1.1 million in government incentives for saving energy over the past four years, thanks to a collaborative effort led by contractor Mission Support Alliance (MSA) for the [EM Richland Operations Office](#) (RL).



## Mission Support Alliance Environmental Policy

It is Mission Support Alliance's (MSA) policy to be responsible stewards of the environment. Sustainable environmental stewardship practices shall be incorporated as a core value in all our operations. MSA is committed to achieving environmental excellence through the systematic integration of environmental protection, as well as worker health and safety protection, and quality principles in all operations. To this end, MSA will establish, document, implement, maintain and continually improve an environmental management system (EMS) that will be an integral component of the MSA Integrated Safety Management System.

### In support of this policy, MSA shall:

- **Continual Improvement:** Foster environmental stewardship and strive to continually improve our environmental performance.
- **Objectives and Targets:** Determine, on an annual basis, the aspects of our operations that impact the environment and establish environmental performance objectives, indicators and/or targets.
- **Environmental Communication:** Provide employees, stakeholders and interested members of the public timely, accurate, and meaningful information related to our environmental performance.
- **Pollution Prevention:** Integrate environmental monitoring, pollution prevention, resource conservation, waste minimization, energy and transportation management, chemical management, ecological and cultural resource management, and green purchasing into our operations.
- **Stakeholder Engagement:** Work together with our customer, other prime contractors, subcontractors, regulators, tribal nations, stakeholders, and the public, when practical or required, to improve our environmental performance.
- **Environmental Protection:** Assess our activities and promptly report and seek to correct environmental incidents and deficiencies.
- **Performance Review:** Perform an annual review of objectives, indicators and targets, as well as our EMS, to identify programmatic strengths, weaknesses and areas needing improvement. Top management shall review the results of this assessment.
- **Compliance with Requirements:** Comply with all applicable environmental laws, regulations, directives and agreements.

This policy shall be communicated to all MSA employees and to MSA subcontractors and shall be made available to the public. Employees and subcontractors shall adhere to this policy.

Bob Wilkinson  
MSA President

**MSA**  
Mission Support Alliance

MSA-POL-B-004

- The environmental policy and badge card provide visual reminders to employees of the commitment we demonstrate towards environmental stewardship.

### Environmental Management System



### MSA Environmental Policy

- Practice Environmental Stewardship
- Comply with Requirements
- Continually Improve Environmental Performance
- Prevent Pollution and Minimize Waste
- Assess Performance
- Communicate with Stakeholders

**MSA**  
Mission Support Alliance

MSC-POL-EI-5054 MSA Env. Policy

### Environmental Management System EMS and You

**Know:**

- How your work can impact the environment.
- How you can prevent these impacts.
- What to do in case of an emergency or incident.

**Do:**

- Consider environmental impacts when planning and performing your daily work.
- Identify ways to eliminate or reduce environmental impacts from your work.

**MSA**  
Mission Support Alliance

MSC-PLN-EI-42081 MSA EMS Description



## The Four Essentials of EMS

All CHPRC workers must be aware of:

### 1. The Environmental Policy,

**PRC-POL-EP-5054**

*Which can be summed up as...*

**C2P2!**

Compliance  
Continual improvement  
Pollution  
Prevention

2. The significant environmental aspects (activities) and related impacts associated with their work.

See the EMS website for CHPRC's aspects



3. Their role in the EMS, including the benefits of enhanced environmental performance

*To protect and improve the environment*

4. The implications of not conforming with EMS requirements or CHPRC's compliance obligations.

*Environmental damage, stop work, violations, fines, or other legal actions*

**CHPRC**  
is



**CH2MHILL**

Plateau Remediation Company



Environmental Management System

## 7 Core Elements



### Context of the organization

- Understanding the organization and its context
- Understanding the needs and expectations of interested parties
- Determining the scope of the environmental management system
- Environmental management system

### Support

- Resources
- Competence
- Awareness
- Communication
- Documented information

### Operation

- Operational planning and control
- Emergency preparedness and response

### Planning

- Actions to address risks
- Environmental objectives and planning to achieve them

### Performance evaluation

- Monitoring, measurement, analysis and evaluation
- Internal audit
- Management review

### Improvement

- General
- Nonconformity and corrective action
- Continual Improvement

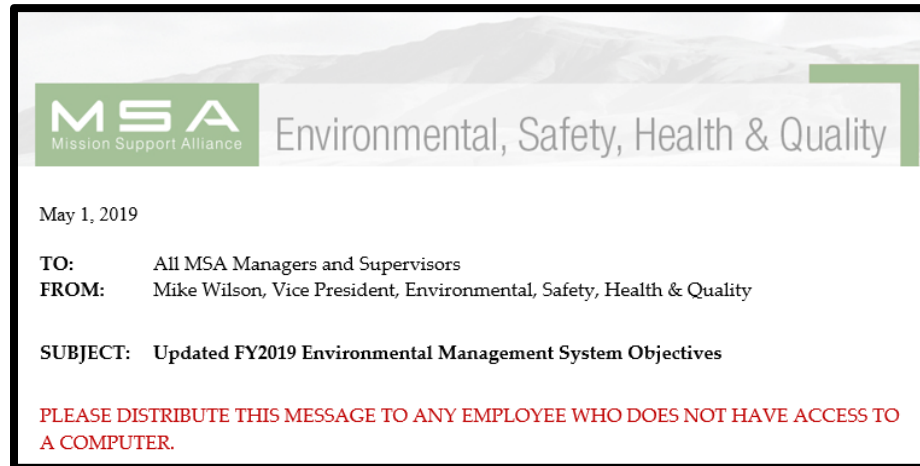
### Leadership

- Leadership and commitment
- Environmental Policy
- Organizational roles, responsibilities and authorities



FY2019 MSA Environmental Aspects		
MSA Rank	Environmental Aspect	Example Work Activities
1	Emissions to Air	Driving vehicles (commuting and at work), generator and engine use, heavy equipment operation, road maintenance, delivery and pickup of Hanford mail, AC repairs, freon installation and removal
2	Pollution Prevention	Recycling, green procurement, printing double sided, skype meetings, records storage
3	Toxic and Hazardous Material Use and Storage	Use of batteries, toner, chemicals, etc, fixing BizHub copiers, printing, spraying pesticides and herbicides, use of chlorine
4	Petroleum Use	Driving vehicles (commuting and at work), generator and engine use, heavy equipment operation, road maintenance, shipping materials for offsite storage, use of generators
5	Regulated Waste Generation and Management	Disposition of batteries, toner, universal wastes, etc., lubrication and repairs of vehicles and equipment, asbestos removal
6	Energy Use	Use of electricity (lighting, computers, etc.), printing,
7	Sanitary Waste Generation and Management	Catering, printing, disposition of regular trash (paper, plastic, cardboard, aluminum cans, scrap metal, furniture, wood, etc.)
8	Water Use	Use of water (drinking, kitchens, etc.)
9	Discharge to Wastewater System	Use of restrooms
10	Potential for Wildland Fires	Driving off-road, surveillance and sampling
11	Noise, Dust, or Odor Creation	Loud equipment use, work at project sites
12	Releases to Soil	Driving off-road, emergency response, traffic management, surveillance and sampling, water line flushing, spill cleanup
13	Cultural, Historical, and Ecological Resource Disturbance	Driving off-road, maintenance and repairs, excavations, environmental monitoring and sampling, landscaping, reactor entry preparations
14	Radioactive/Mixed Waste Generation and Storage	Disposition of property and equipment, service work in radiological areas, tumbleweed removal, building and removing scaffolding and fencing, repairing RCVs
15	Physical Interaction with the Environment	Moving undisturbed soil, altering drainage patterns, removing brush, landscaping (digging and grading), pole replacement, water line excavations, trenching
16	Radioactive Material Use and Storage	Some training exercises, RAD response, disposal of property and equipment
17	Biological Waste Generation and Management	Emergency response, environmental testing, carcass removal
18	Discharge to Surface Water	Discharge to the Columbia River
Significant Environmental Aspects		

- Company employee messages and newsletters
  - Communicate changes
  - Upcoming activities
  - Highlights
  - Performance



#### Environmental Management System Recommended For Certification!

Following last week's Environmental Management System (EMS) audit, MSA's EMS has been recommended for certification to ISO 14001:2015.

According to the audit team, "MSA employees are well educated, experienced, motivated and perform their job diligently!" EMS strengths brought to light are the corporate policy and organizational culture that supports EMS, the Refrigerant Reclamation Program (reuse of refrigerant) and the Energy Conservation Program (energy incentives and savings).

Thank you to the EMS team for their hard work and dedication and thank you to the employees and management who took the time to meet with the auditors and EMS staff during this important review! By understanding our collective role in protecting the environment, we ensure a more sustainable future. Thank you all for doing your part.



IVISA employees were not afraid to roll up their sleeves and clean up a biking/walking path for Earth Day! Thanks to everyone who helped make this community a little brighter for others to enjoy!












## Our ISO 14001-Certified Environmental Management System (EMS):

*Upcoming audits: what YOU need to know*

Our EMS has been ISO 14001-certified since 2012. This certification assures CHPRC's commitment to preventing pollution and waste, managing our environmental impacts and complying with our environmental requirements, all while striving to continuously improve our system.

All Hanford contractors must *conform* to the ISO standard, but CHPRC is one of only two contractors on Site who are **ISO-14001 certified** through third-party independent NSF certification.

CHPRC is conducting the internal EMS assessment throughout the month of May in advance of the annual external EMS audit scheduled for **June 24-27**.



An updated poster of the **"The Four Essentials of EMS"** now includes the top three significant environmental aspects. Click [here](#) to print copy for reference.

**All workers must be aware of:**



Issue: 05/06/2019

**CH2M-HILL**  
Plateau Remediation Company

## SUPERVISOR BRIEFINGS POINTS

*We all play a role in environmental compliance by understanding the requirements and by meeting our environmental obligations every time.*

### CHPRC's top three environmental aspects

The work we do cleaning up the Hanford Site includes many activities (or, **aspects**) with the potential to effect (or **impact**) the environment.

The **three most significant** company-wide environmental aspects for the 2019 Fiscal Year are:

#### 1. Other Emissions to Air

Non-greenhouse gas emissions to air including stack emissions and accidental releases

#### 2. Water use

Impacts associated with the use of potable and non-potable water (e.g., restroom and other facility water use)

#### 3. Environmental Remediation

Impacts from work at various projects, such as 100K soil remediation and D4 activities

### Ask the following questions:

- ▶ Do you know what **your project or organization's environmental aspects** are?
- ▶ How does your work impact the environment?
- ▶ What are the potential consequences of not meeting our compliance obligations?



For questions, contact  
Sara Austin, 376-4339.

Comments and suggestions for Thinking Target Zero can be sent via email to \*CHPRC Occupational Safety & Industrial Hygiene

Issue: 05/06/2019

**CH2M-HILL**  
Plateau Remediation Company



- EMS incorporated into the integrated assessment schedule and management observation program
- Track the number of assessments that cover each ISO 14001 requirement
- Utilize in combination with the internal audit program



Question Title

Question Start Date

Original Date: 01/23/2019

Question Text [Edit Question](#)

MSA identifies environmental compliance obligations applicable to the Environmental Management System (EMS) in MSC-RD-EI-15332, *Environmental Protection Requirements*, in accordance with federal, state, and local environmental regulations and permits that protect human health and the environment.

Who should you contact if you have a question about environmental compliance while at work?

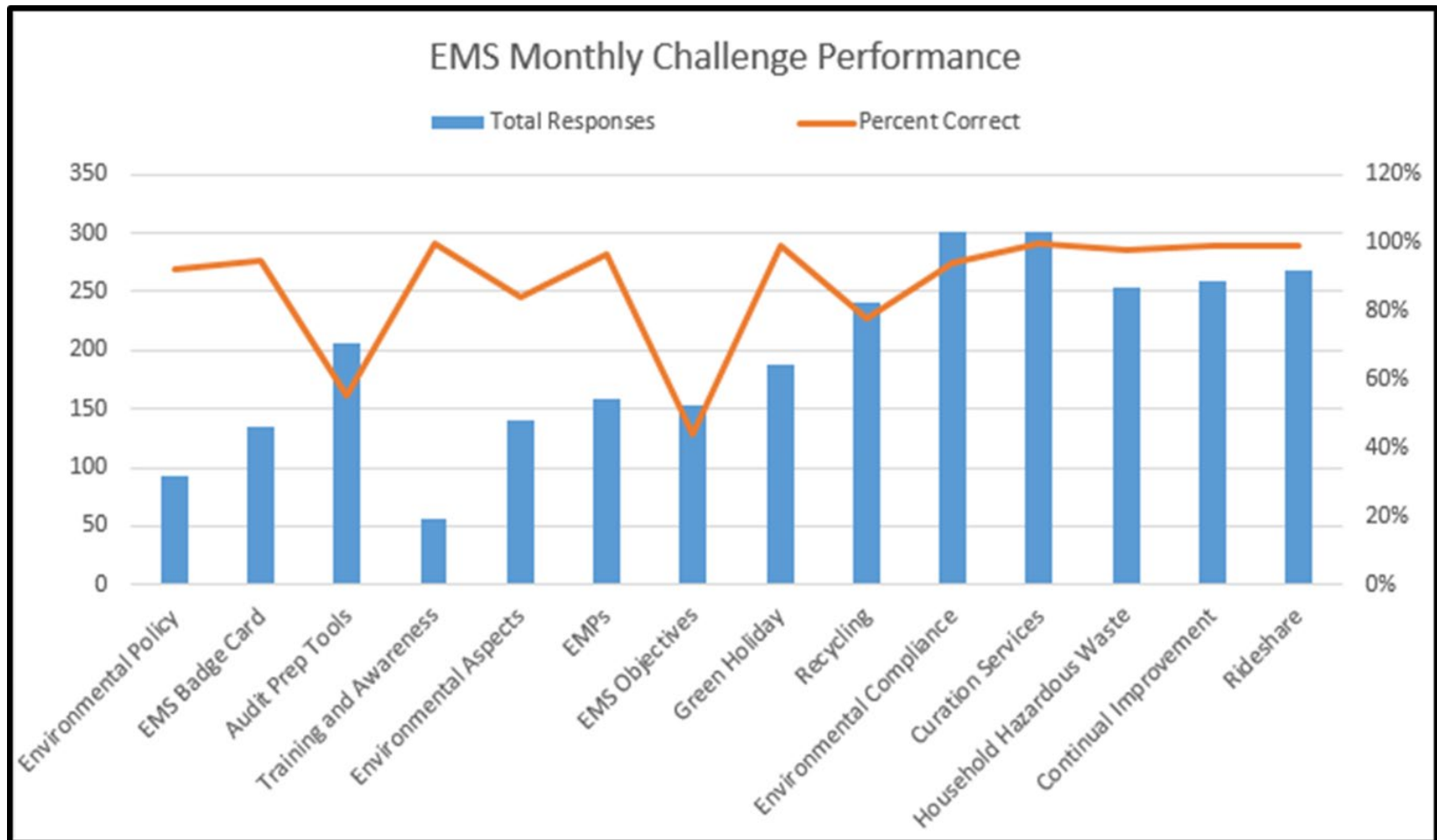
Answers  
[Add Answer](#)

- ☐ **A.** Employee Zero Accident Chair (EZAC)  
[Edit Answer](#)  
[Up](#) | [Down](#) | [Remove](#)
- ☒ **B.** Environmental Compliance Officer (ECO)  
[Edit Answer](#)  
[Up](#) | [Down](#) | [Remove](#)
- ☐ **C.** Industrial Hygienist (IH)  
[Edit Answer](#)  
[Up](#) | [Down](#) | [Remove](#)
- ☐ **D.** Department of Energy (DOE)  
[Edit Answer](#)  
[Up](#) | [Down](#) | [Remove](#)

Question Response  
[Edit Response](#)

The correct answer is **B) Environmental Compliance Officer (ECO)**. ECOs ensure environmental compliance obligations are met and are environmental resources for your team. Need to know your ECO? Check out the ECO POC List.

- Track participation and awareness of EMS



- Fosters environmental stewardship
- Highlights stellar performance
- Allows project review in preparation for the DOE Sustainability awards



**MSA**  
Mission Support Alliance

Environmental, Safety, Health & Quality

Who Will You be Nominating for MSA's  
**2019 Environmental Leadership Awards?**

- ✓ MSA individuals or work groups including MSA subcontracted employees
- ✓ Completed project or work activity in the last 12 months (June 1, 2018 - May 31, 2019) that resulted in environmental improvement
- ✓ Submit a nomination online using site form **A-6007-671** by the deadline **May 31, 2019**

**LANDFILL DIVERSION**

**ENERGY REDUCTION**

**WASTE REDUCTION**

For questions on the Environmental Leadership Awards, email [Michelle\\_M\\_Oates@rl.gov](mailto:Michelle_M_Oates@rl.gov).

# THE HANFORD SITE | Importance of Integration

- Streamline work processes
- EMS part of daily work
- Protection of workers & the environment
- Unified EMS efforts





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