APPROACH TO A FULLY INTEGRATED PERFORMANCE ASSURANCE SYSTEM

Integrated Safety Management Summit
Knoxville, TN
August 24-27, 2009

Presented by: Gary Grant
Personal BIO -- Gary Grant

Director, CH2M HILL Plateau Remediation Company (CHPRC)

Current responsibilities include leading the ISMS/EMS Phase II implementation for the CHPRC. Experience includes: Director Quality and Performance Assurance for CHPRC where he led the development and implementation of the contractor assurance and quality assurance systems. In addition, he lead the development and implementation of the quality and safety assurance programs for the CH2M HILL’s commercial nuclear projects. He has over 25 years of nuclear experience that spans both commercial and Department of Energy sites including operations, construction, and D&D. He provided support to the NRC’s operations analysis group and served in the U.S. Navy’s nuclear propulsion program. He has a BS in Nuclear Technology and a Masters in Business Administration.
Agenda

• Mission of CHPRC
• Practical Attributes of a Learning Organization
• Strategy CHPRC used, including how the graded approach was employed for:
  – Self-Assessment Program
  – Corrective Action (Issues Management)
  – Lessons Learned
  – Performance Trending & Analysis
• Tools used to monitor and improve performance
  – Condition Reporting & Resolution System
  – Safety Analysis Center
  – Executive Safety Review Board
Project Mission: Decommissioning and remediating the Central Plateau, 100K Area, 400 Area, and site groundwater

$4.5 billion, 5-year contract with 5-year option

• Primary Mission:
  – Protect the Columbia River and safely and efficiently complete the Central Plateau remediation

• Overarching Mission Objectives:
  – Maintain safety envelope; reduce surveillance and maintenance costs and apply cost reductions to accelerate Plateau remediation
  – Maintain environmental compliance
  – Reduce risks and long-term liabilities
CHPRC Core Values and Expectations

Expectations for Implementation of the Integrated Safety Management/Environmental Management Systems

Demonstrating ISMS accountability by our behavior in the workplace

Expectations for all Employees

E1 Perform all work safely using the core functions of the Integrated Safety Management System, and
  • Watch out for each other
  • Apply ALARA principles to any potential hazardous task
  • If you aren’t sure, pause and get the right answer
  • Issue a Stop Work for imminent safety hazard
  • Leave from both your successes and mistakes
  • Report to work fit for duty; go home as healthy and safe as you were when you came to work
E2 Earn each other’s trust by treating each other with dignity and respect; be open and honest
  • View participation in event critiques as an opportunity to truthfully and openly discuss the event and capture Lessons Learned
E3 Comply with our procedures and any written instructions that direct how to do a task
  • If a procedure or written instructions can’t be followed, pause and get clarification or correction before proceeding on that specific activity
  • If you think it can be done safer or more efficiently, provide that recommendation to the procedure owner
E4 Demonstrate a questioning attitude
  • If something doesn’t seem right, it probably isn’t. Bring it to the attention of supervision (or the appropriate person)
E5 Participate and complete required training; only perform tasks that you are qualified and authorized to do
E6 Maintain a safe and well-kept work environment
E7 Comply with the requirements of Labor Contract agreements
E8 Exempt and Non-exempt personnel fully participate in employee performance review and improvement processes (supervisors and direct reports)
E9 Support Voluntary Protection Program approaches to safety
E10 Never engage in or tolerate harassment, intimidation, retaliation, or discrimination
E11 Adhere to Conduct of Operations requirements
E12 Work with your customer to set expectations, then meet or exceed those expectations
E13 Be a good steward of employee/owner assets
E14 Professional staff members develop/submit thought-out, technically defendable, high-quality products
E15 Give your best effort every day; take pride in your work; help us find better, more efficient ways to do our work; challenge the status quo

Additional expectations for managers and supervisors

M1 Set, demonstrate and enforce high standards of Integrated Safety Management System performance with emphasis on safety, quality, mission progress, procedure compliance, and personal conduct
M2 Maintain a safe work environment where employees feel free to raise issues without fear of reprisal
M3 Be present in the field/worker place with your employees at least 50% of the time. Earn the trust of your employees. (Senior management refer to ISMS)
M4 Demonstrate your commitment to CH2M HILL corporate core values
M5 Own the plan; join the team; seek out win-win solutions
M6 Challenge the status quo
  • Resolve issues or escalate quickly to the next level of management
M7 Recognize and reward individual and team performance for safe and productive work
M8 Treat your employees as your most important resource
  • Actively listen
  • Ensure that employees are actively engaged in work planning
  • Support their needs and keep them informed; treat them as if they were your customer
  • Recognize the benefits of diversity; seek out differing perspectives
  • Help them develop to the best of their abilities
M9 Treat employees fairly, consistently, and with respect
M10 Take immediate action to stop inappropriate behaviors (e.g., harassment, intimidation, retaliation, discrimination) and address any potential chilling effect impact on your employees
M11 Learn from both mistakes and successes; use them as teaching opportunities
  • Demonstrate that we are a learning organization
M12 Honor the Labor Contract including support of its safety agreements and RAMC Safety Representatives
M13 Manage and supervise contractors and contract personnel in accordance with CH2M HILL safety and performance standards
M14 Demonstrate your commitment to a free flow of information

Additional expectations for senior management

SM1 Use the Guiding Principles of the Integrated Safety Management System and Voluntary Protection Program to lead your team
SM2 Establish and communicate an achievable vision for the future
SM3 “Set the example” every day by your words and actions
SM4 Foster an environment where people can get work done safely and productively
SM5 Be visible in the field/worker place with your employees
  • Dedicate at least 25% of your time to face-to-face contact with your people
  • Schedule time on your calendar to meet directly with employees in their work area, or attend “all employees” type informational update sessions
  • Be open with the work force; no hidden agendas, people must know what you are thinking
SM6 Challenge the status quo; actively seek ways to remove barriers and question “why”
SM7 Set and hold your employees and yourself accountable to expectations, achievable but challenging goals and our corporate values
SM8 Establish reward and recognition systems
SM9 Develop your managers and employees
SM10 Demonstrate a positive attitude; support your peer’s, as well as your employees
SM11 Support the right of any member of the workforce to raise any concern and to have that concern addressed in a timely, effective and respectful manner without fear of retaliation. Be available to resolve any issue or concern
SM12 Contribute to the well being of our communities
SM13 Demonstrate good stewardship of client’s (government’s) money, assure only appropriate expenditures of authorized funding

Establish ES&A Public Safety Management Review
Learning Organization

Practical Behaviors We Seek

• There is a healthy intolerance of “stuff” not right. The organization is “painfully” self-critical

• Everyone demonstrates the ability to give and accept coaching

• Everyone holds each other accountable

• Corrective action program (CAP) is robust
  – Input from all levels, no such thing as a bad CR
  – Issues identified outside the organization are viewed as a learning opportunity. Why did we not find this?
  – CAP is hard, if no-one is complaining it’s not working
  – Trending finds things to improve, it doesn’t justify all is OK
Learning Organization (continued)

What it Will Look Like

• Communication is open and candid
• Identifying issues (large or small) is a valued behavior, identifying a problem is not “writing someone up”
• There are no hidden agendas; everyone is focused on achieving
• Mistakes (even those with no consequence) are reported so the organization can learn from them
• There is a high level of trust between individuals
• Continuous improvement is demonstrated and not just talked about
Self-Assessment Program

Contractor Assurance System Description

CHPRC Assessment Program Plan
Provides overview of the Assessment Program

- Assessment types (Independent, Management, Surveillances, Work Site, Management Observation Program [MOP], and Worker)
- Roles and Responsibilities – including Safety Management Program Owners
- Annual integrated assessment schedule
- Assessment Matrix – guide for functional program owners/managers to develop assessment schedules
Assessment Program Overview

Focused on assessing work

Independent Assessment
Parent Company Oversight
Broad Scope ISMS - Project
Targeted Audits
Surveillances

Management Assessment
Management Assessment
• Targets Program Activities
Work Site Assessment
• Targets Work Site Activities
Management Observations

Readiness Assessment
DOE Order 425.1C Startup and Restart of Nuclear Facilities

Integrated Assessment Planning
Approved by Executive Safety Review Board
Performance Analysis and Trending Process Overview

Quarterly – Collect Data
Sources
- CR System
- OA Reports
- ORPS
- NTS

Develop charts and distribute for analysis
By Project
By Program area
Cross cutting

Performance Analysis
Develop both positive and negative trends
Negative trends
- Adverse
- Emerging
- Monitored

Negative Performance Trend
Issue ORPS if reportable
Issue CR Negative trends
- Adverse
- Emerging
- Monitored

Develop and Transmit Quarterly Report

Brief ESRB

Monitor Negative Trends
Issues Management Process

People

Equipment

Procedures

Work Product

Work Meets Rqmts

Yes

管理工作

No

Issues Management

Trending

Initiate CR

Screen CR

Analyze Problem

Plan Corrective Actions

Implement Corrective Actions

Close CR

Root Cause Analysis

Extent of Condition

Apparent Cause Analysis

Lessons Learned

Assessment

Yes

No

No

Yes

Work Needs Improvmt

管理工作

工作产品

工作满足要求

工作需要改进

Trending

Initiate CR

Screen CR

Analyze Problem

Plan Corrective Actions

Implement Corrective Actions

Close CR

Root Cause Analysis

Extent of Condition

Apparent Cause Analysis

Lessons Learned

Assessment

Yes

No

Yes
CHPRC Tools

- Condition Reporting & Resolution System
  - A Low-threshold, Web-based workflow process
  - Anyone can enter a condition report (CR), Management owns CR resolution
  - Integrated with assessment, PAAA screening/reporting, and occurrence reporting processes
  - Provides source for trending data
CHPRC Tools (continued)

- **Safety Analysis Center**
  - Provides a method for the collection of data from events, assessments, and other safety issues, the analysis of that information, the dissemination of results, and the coordination of management action to be taken on a real-time basis

- **Executive Safety Review Board**
  - Oversees and monitors the effectiveness of programs and processes associated with the Safety Management Programs (SMPs), Quality Program, and the *Price-Anderson Amendment Act* Program
  - Oversees causal analysis and corrective action plan development for Noncompliance Tracking System (NTS) and other significant issues
  - Provides senior management feedback and direction concerning focus and conduct of assessments
  - Periodically reviews SMP performance
  - Reviews events, issues, and adverse trends with programmatic implications
Every organization is identifying and resolving issues

Low level precursor trends are identified through the SAC and actions taken before they are issues of high consequence