Risk-Based Auditing Strategies

October 5, 2017
When the Audit Team Arrives
Are Compliance Audits Important?

- **Objectives**
  - Establish a baseline of compliance
  - Facilitate corrective action
  - Improvement in overall environmental, health and safety performance

- **So, audits should be of great interest to organizations**
  - But generally they aren’t, why?
Common Perceptions

- Points out what you are doing wrong...
- Focused on the minutia ("nit picking")...
- Added burden to workload for plant to answer repeat questions...
- Auditor coming in to tear down our program (seagull auditors)...

As a result management focuses on reducing costs

- Audit less frequently
- Decrease audit duration
- Use less experienced auditors

Does this really make sense?
What if we change the way we think?

- Focus on risks to the business
  - Environmental impacts, regulatory non-compliance (fines), public perceptions, business disruption
- The auditors will not be able to identify ALL risks, but can identify failures that lead to breakdowns
  - Systems, culture, engineering controls
- Focus on identifying/recognizing consequences and effectiveness of controls
- Increase engagement with the employees who do the work
Risk Assessment Concepts

So, how does this relate to compliance?
Example – Wastewater Discharge Permit

- What are the consequences?
  - Not having a permit
  - Not meeting permit limits
  - Unauthorized discharges
- What controls do we have?
- How effective/reliable are these controls?
- Will employees be more engaged if:
  - A) you cite the applicable regulatory requirement?
  - B) you have a discussion about consequences and controls?
# Example Risk Rating

## Inherent Risk

<table>
<thead>
<tr>
<th>Topic</th>
<th>Hazard</th>
<th>Consequences of Failure</th>
<th>Uncontrolled Significance Rating (0 - 3)</th>
<th>Uncontrolled Likelihood Rating (1-5)</th>
<th>Uncontrolled Risk Rating</th>
<th>Current Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spill Prevention Control and Countermasures Plan</td>
<td>Discharge of oil to surface water</td>
<td>Environmental impairment, regulatory fines, business disruption, negative press</td>
<td>0 3 1 3 2 9 5 45</td>
<td></td>
<td></td>
<td>SPCC Plan, secondary containment, integrity testing, inspections, training, emergency response</td>
</tr>
</tbody>
</table>

## Residual Risk

<table>
<thead>
<tr>
<th>Observations on Controls</th>
<th>Controlled Significance Rating (0-3)</th>
<th>Controlled Likelihood Rating (1-5)</th>
<th>Controlled Risk Rating</th>
<th>Recommended Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cracks in containment, weekly inspections indicated no deficiencies, annual training not provided, spill kits not stocked</td>
<td>0 2 1 2 2 7 4 28</td>
<td></td>
<td></td>
<td>Increased accountability for personnel tasked with conducting inspections, establish crack repair program, conduct employee training, add spill kits to inspection checklist</td>
</tr>
</tbody>
</table>
Risk Communication

- Risk mapping – effective tool for communicating risks
- Holistic view of risks, not just a laundry list of regulatory findings and action items
Benefits of Risk Based Audits

- Review EHS program and effectiveness of controls, not just compliance verification
- Identifies what is working well (not just problems)-balanced review
- Aligns resources with higher risk topics
- Hindsight (lagging indicator) vs. Insight (leading indicator)
- Provides site personnel with skills to drive SH&E performance after the audit
- Audit viewed as a more collaborative process
Questions?

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