

Understanding and Addressing Hidden EHS Risks

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Certification Maintenance Points

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-IHMM (Institute of Hazardous Material Managers)

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Guest Speaker

- 36+ years experience in public and private sector environmental experience
- Former Director of Solid Waste with the EPA
 - Built major EPA programs and represented the US government in international arenas
- Consulting and testifying expert in waste, chemical regulation and risk management
- Currently Director of LECG, a global expert services firm

Marcia Williams' Background

- 18 years at USEPA
- In-house EHS experience as VP of Fortune 500 company
- Experience on Board of Directors of Fortune 500 company
- 17 years experience consulting to governments and companies
- Extensive expert witness testimony

Risks vs. Opportunities

IS THE GLASS HALF
FULL OR HALF
EMPTY?



Agenda for Today:

A Broader Way to Think About EHS Risk

- What is a hidden EHS risk
- Impacts and types of hidden EHS risks
- Underlying causes of hidden EHS risks
- Triggers – why hidden risks become externally recognized (and costly)?
- Setting a foundation for risk reduction program – measurable EHS goals
- Quantifying EHS risks
- Tailoring risk reduction programs

Hidden EHS Risk

A risk that has the potential to result in an unanticipated or unplanned impact on business operations; something that is not factored into and accounted for in a business plan.

Impacts of EHS Risks – 6 Types

- Payment of money
- Jail time
- Litigation – time and money
- Limitations on business operations
- Adverse impacts on public/customer image
- Uncertainty

Two Ways to Think About Risk Impacts

- Absolute impacts on the entity
 - How much will the new regulation cost my organization?
 - What are the restrictions in my facility permit?
- Relative impacts on the entity
 - How will my organization be impacted by the new regulation compared with my competitors' facilities?
 - How do the restrictions in my permits compare with those in competitor permits?

Reasons Competitors Face Different EHS Risks

- Geography – state, type of plant location
- Technology
- Age of equipment
- Stringency and timing of permits
- Quality of baseline data
- Difference in risk causes and trigger events
- Examples – TMDLs, marketable permits, tort litigation, enforcement attention

Six Broad Categories of EHS Risks:

1. Non-Compliance

- Fines and penalties
- Mandated EHS management systems
- Injunctive provisions
- “Innovative” order requirements
- Non-compliance links to more litigation – shareholder suits, tort suits

Six Broad Categories of EHS Risks:

2. Regulatory Risks Beyond Compliance Cost

- Competitor costs to implement are significantly less
- Competitor products or processes appear superior from a public image standpoint
- Competitor permits provide additional business flexibility
- Competitor can operate with few government approvals or can get approvals more quickly
- Selective enforcement

Six Broad Categories of EHS Risks:

3. Changing Requirements/Information/Values

- Positioning for future legislation/regulation
- Tracking and anticipating emerging trends
- Tracking and anticipating emerging technical data
- Anticipating changing public values

Six Broad Categories of EHS Risks:

4. Tort Liabilities

- Property damage or personal injury
- Current conduct or historical conduct
- Damage awards and punitive awards
- Examples

Six Broad Categories of EHS

5. Risks: Property Contamination

- Acquisitions
- Divestitures
- Leases
- Toll manufacturing
- Joint venture agreements
- Many types of onsite contractors

Six Broad Categories of EHS Risks:

6. Contractual Liability

- Document wording
- Data limitations
- Clear responsibilities

Understanding Common Causes of Internal EHS Risks

- Failure to track EHS requirements
- Inadequate resourcing
- Inadequate training
- Inadequate integration of EHS and BU operations
- Failure to install adequate management safeguards
- Inadequate EHS disclosures

Risk Triggering Events – What Makes an Internal EHS Risk an Externally-Driven Issue?

- Disgruntled employees, contractors, neighbors
- Accidents
- Union disputes
- Poor relationships with regulators
- Priority industry group for government
- New information on EHS risks

What Drives the High “Costs” Often Found With Externally Driven EHS Risk Issues?

- Patterns and practices across locations/products
- Use of different performance standards in different parts of the world/different plants
- Bad documents in files
- Failure to effectively handle an accident
- Poor internal controls

Underlying EHS Program Weaknesses + Triggering
Events + Key Cost Factors =

Major Impacts

Easiest Way to Address:
Strengthen Internal Management Controls

Getting a Clear EHS Mission Statement

- Select a focus
 - Regulatory Compliance
 - Stewardship
 - Avoidance of liability surprises
 - Minimize EHS costs
 - Combination
- How good do you want to be?
 - Overall industry leader
 - Sector leader
 - Middle of the pack
 - Different levels for different topics

Does the Current EHS Policy Clearly State the Mission?



Consider a survey of employees and managers

Selecting EHS Goals

- Compliance Related
 - No fines
 - Reduction in fines from previous year
 - X% of inspections with no findings
 - Reduction of y% in average findings/inspection
 - Inspection record better than the state average
- Risk Reduction Related
 - Use of management control score
 - Use of risk score
 - X% of sites are VPP
 - Y% of sites are ISO certified
 - Continuous improvement in reputation with regulators

Measuring EHS Goals

- Assessments/audits (compliance or risk metrics)
- Evaluation of government inspection data
- Surveys (if external, can also measure comparison with competitors)
 - Internal
 - Customers
 - Regulators
 - Neighbors

Survey Example

- Determine facility risk scores
- Sample topics (@ 25 questions)
 - Any significant near-term expansions in physical plant?
 - Any significant near-term changes in production processes or technology?
 - Any significant near-term changes in staff size?
 - Facility adjacent to or $< \frac{1}{4}$ km of a school?
 - Facility $< \frac{1}{4}$ km of residential or public drinking water wells?
 - Reportable spills in last year?
 - Permit renewals scheduled in next 12 months?
- Develop a facility score
- Compare over time and across the organization

Prioritizing EHS Risk Reduction Opportunities Based on the EHS Mission

1. Awareness
2. Assess EHS management system components
3. For each facility or product line or corporate group, begin identifying hidden EHS risks by type of risk
 - Strengths/weaknesses in the risk category
 - Probability of a risk manifesting itself externally in the next 1 year, 3 years, 5 years
 - Likely size of a risk that manifests externally



Sample Risk Projections (specify year and business evaluated)



	Risk Probability	Size (\$)	Description
Non-compliance			
Other Regulatory Obligations			
Changing Requirements or Information or Values			
Tort Liabilities			
Property Contamination			
Contractual Liability			

Prioritization – Step 3 Techniques

- Internal meetings/reviews
- Internal survey instruments or interviews
- Assurance letters
- Independent business risk audit (facility and product related)

Internal Review Meeting - Example

- Annual basis
- Chaired by senior EHS official
- Key management of a business unit
- Review covers previous 12 months and upcoming trends
- Sample topics
 - Compliance performance (inspections and internal audits)
 - Upcoming compliance challenges – permit renewals, changing business operations, etc.
 - Impact of upcoming legislation, regulations, new product introduction, plant expansions, new acquisitions or divestitures
 - Identification of potential EHS-related litigation
 - Existing progress on remediation activities and potential future uncertainties and issues
 - Other potential risk concerns
 - Competitive positioning with regard to EHS

Prioritizing EHS Risk Reduction Opportunities Based on the EHS Mission

4. Prioritize by performing expected value analysis – expected cost of risk if not corrected
5. For high priority risks, look at potential risk reduction options and costs of options
6. Compare expected value of risk cost with cost of risk reduction options
7. Select actions
8. Measure effectiveness of risk reduction results

Final Thoughts

- Awareness of “hidden” risks is the starting point
- Hidden risk impacts on competitive positioning can be equally important as absolute impacts
- A clear EHS mission is the foundation for prioritizing risks
- A quantitative risk and risk reduction analysis can help senior managers make decisions