Course Outline

- Introduction to Salt River Project Audit program
- History of environmental, health and safety audits
- EHS audit organizations, certification programs, and references
- Important elements of a successful EHS audit program
- BREAK
- Examples of typical audit findings
- Vendor audit program
- Environmental Site Assessments
- Summary
Salt River Project

- Oldest multipurpose federal reclamation project in the United States (1903)
- Integrated utility, providing generation, transmission and distribution services.
- One of the largest raw-water suppliers in Arizona
- Manage a 13,000-square-mile watershed and extensive system of reservoirs, wells, canals and irrigation laterals.

Mission of SRP EHS Audits

- Identify EHS non-compliance
- Promote and provide tools for EHS “Self Assessments”
- Assess corporate risk exposure
- Reduce costs associated with accidents, injuries, environmental harm, losses, litigation, fines and penalties
- Establish defense under EPA & OSHA Policy and Sentencing Guidelines and Arizona Revised Statutes
History of EHS Auditing

- **1970s**
  - Proliferation of regulatory statutes (EPA and OSHA)
  - Allied Chemical indicted on pollution violations
  - Occidental Petroleum lawsuit

- **1980s**
  - Superfund
  - Formation of Auditing Roundtable
  - Union Carbide incident in Bhopal, India and Emergency Planning and Community Right-to-Know
  - Exxon Valdez oil spill and Oil Pollution Act
  - First official EPA policy on auditing published
  - Lead and hearing conservation standards

- **1990s**
  - ISO 14000 Standards for Environmental Management Systems
  - EPA Brownfield and Land Revitalization program
  - EHS Auditor certifications through BEAC

- **2000s**
  - OSHA Audit Policy
  - Sarbanes-Oxley Act
  - Global Harmonization System
  - BP Refinery explosion in Texas City
  - Arizona Environmental Audit Policy
History of EHS Audits at SRP

- 1980s – Focus on Superfund Liability, TSDFs, and used oil recycling (“vendor audits”), and environmental site assessments
- 1990s – Started SRP facility audits. Added audits of solid waste landfills and battery, scrap metal, tire, transformer, and computer recyclers
- 2000s – Included fire protection as part of facility audits. Added audits of green waste, plastics, paper, and refrigerant recycling vendors

Our Audits

- Facilities and Programs: Over 40 SRP Facilities and programs
- Waste and Recycling Vendors: Over 85 vendors used for waste disposal and recycling
- Environmental Site Assessments: All appropriate inquiry on land bought/sold/exchanged by SRP/USBR
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EHS Auditing Resources

- The Auditing Roundtable
- Board of Environmental, Health and Safety Auditor Certifications (BEAC)
- Reference books / websites
The Auditing Roundtable

The Auditing Roundtable’s mission:

- Use authoritative body of audit knowledge to be the voice of the profession
- Advance best practices, principles and values of auditing
- Provide resources to enable and enhance professional growth and learning
- Offer forums for the exchange of ideas and information

Founded in 1982; currently 600 members
- Code of Ethics (adopted in 1987)
- Auditing Standards (published in 1994)
- Meetings and conferences
- Skills Training
  - EHS Audit Skills
  - Environmental Compliance
  - Health & Safety Compliance
  - Process Safety Management
  - Lead Auditor
BEAC Organization

Board of Environmental, Health & Safety Auditor Certifications

BEAC was created in 1997 as a joint venture between The Institute of Internal Auditors and the Auditing Roundtable.

What does BEAC do?

- Certifies professional EHS auditors
- Issues Standards
- Recognizes training course providers

[images of certification logos]
Other Audit References

- **Books**
  - “Environmental, Health and Safety Audits”; Lawrence Cahill and Raymond Kane (2011)

- **Websites**
  - EHS Journal – www.ehsjournal.org
  - The Auditing Roundtable – www.auditing-roundtable.org
  - BEAC – www.beac.org

EHS Audits – Why Do It?

- **General Driving Forces**
  - Increased Awareness Of EHS Issues
  - Increase In Number Of Laws
  - Increase In Complexity Of Requirements
  - Increase In Enforcement
What is Audit Defense?

  - 100% mitigation for gravity-based penalties from violations of federal environmental laws
  - No recommendation for criminal prosecution
  - Companies must meet nine criteria to take advantage of policy
    - Systematic discovery of the violation through an audit program
    - Voluntary discovery
    - Prompt disclosure within 21 days
    - Violations must be discovered independently from third-party audits
    - Violations must be promptly corrected
    - No repeat violations
    - No imminent damage to environment
    - Cooperation with the EPA

  - Self-audits are an evidence of “good faith” of the employer
  - 25% reduction for penalties from violations of federal health and safety laws

- **Arizona Audit Privilege (49-1401)**
  - Audit reports are not admissible as evidence or subject to discovery
  - Audit reports must be noted as a “Compliance Report: Privileged Document”
  - Tracking system to correct past noncompliance
  - Audit shall be completed within 6 months
Audits as an Effective Risk Management and Control Process

- Institute of Internal Auditors – “Three Lines of Defense”
- 1st Line – Operational Management
  - Own and manage risk
- 2nd Line – Risk Management and Compliance Functions
  - Oversee risks
  - Support, inform and alert management
  - Monitor internal controls that are in place
- 3rd Line – Internal Audit
  - Independent assurance
  - Governance in accordance with recognized standards
  - Higher reporting level within organization

What Makes a Successful Audit Program – Seven Steps

1. Have top management support for auditing and commitment to follow-up on audit findings.
2. The auditing function is independent of audited activities.
3. There is an adequate and well trained audit team.
4. Explicit audit program objectives, scope, resources and frequency.
What Makes a Successful Audit Program – Seven Steps

5. Have a process to collect, analyze, interpret and document information to achieve audit objectives.

6. Have a process to generate written reports of audit findings and track corrective actions and schedules for completion.

7. Have in place quality assurance procedures to assure accuracy and thoroughness of audits.

Management Support

SRP “Key Management Principle”

Implement comprehensive compliance programs and regularly perform in-depth self-assessments and compliance audits of our facilities and operations.
Management Review Process

Audit Exit Meeting:
- Present audit findings to facility management

Sr. Director / AGM Meeting: Present audit findings of operating groups

GM Staff Meeting:
- Semi-annual presentation of consolidated audit findings, trends and recommendations

President Staff and Board:
- Annual summary of audit findings

Independent Audit Process

Department in Which the EHS Auditing Function is Located

- Combined EHS: 11
- Environmental: 6
- Legal: 10
- Health and Safety: 7
- Other: 2
- Auditing: 57
- HR: 2

SRP®
Trained Audit Team

- Professional Competence
  - Knowledge
  - Skills (verbal and written)
  - Experience
  - Objective
- Ethics and Standards of Conduct (BEAC)
- Lead Auditor role and roles of other team members
- Good communicator and decision maker

Size of ESH Audit Staff

- Number of Companies
- Staff Size
  - 1 to 2
  - 3 to 4
  - 5 to 6
  - 7 to 9
  - Small
  - Medium
  - Large

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Audit Scope, Resources, Objectives and Frequency

Examples of Audit Scope

<table>
<thead>
<tr>
<th>Environmental</th>
<th>Health and Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous Waste</td>
<td>Personal Protective Equipment</td>
</tr>
<tr>
<td>Air Quality</td>
<td>Working Surfaces</td>
</tr>
<tr>
<td>Water Quality</td>
<td>Electrical</td>
</tr>
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<td>Underground Storage Tanks</td>
<td>Lock Out / Tag Out</td>
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<tr>
<td>Asbestos</td>
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<td>Drinking Water</td>
<td>Hearing Conservation</td>
</tr>
<tr>
<td>Sewage Treatment</td>
<td>Material Handling</td>
</tr>
</tbody>
</table>

Standards Used to Measure Compliance During an Audit

- Environmental
  - EPA 40 CFR
  - State, County and Tribal regulations
- Health and Safety
  - OSHA 29 CFR 1910 (General Industry) or 1926 (Construction)
- Fire Prevention
  - OSHA; National Fire Prevention Association; International Fire Code
- Department of Transportation
Standards Used to Measure Compliance During an Audit

- Management Systems
  - Company Accident Prevention Manual
  - Laboratory Chemical Hygiene Plan
  - Hearing Conservation Plan
  - Contractor Safety Programs
  - Training Program
  - Hazardous Communication Program

Objectives and Available Resources

- How Audits will be used?
  - Meet EPA/OSHA Audit Policy
  - Compliance assurance only
  - Performance evaluation
  - Compliance versus management system audits

- Resources
  - Audit team
  - Audit documentation
  - How to track corrective actions to completion
Frequency of Audits - Assessment of Risk

Risk Factors

- **Regulatory Risk** - “No fine or penalty” → “Criminal penalty”
- **Health and Safety Risk** – “No injury” → “Serious injury or death”
- **Production Risk** – “No impact to operations” → “Potential shutdown”
- **Environmental Risk** – “No impact to environment” → “Offsite release”
- **Management System** - “Procedures in places” → “No procedures”

---

Annual SRP EHS Audit Production

<table>
<thead>
<tr>
<th>Year</th>
<th>Program</th>
<th>Facility</th>
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<tr>
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<tr>
<td>FY14</td>
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</table>
The Audit Process

- Pre-Audit Planning
- On-site Data Gathering
- Reporting
- Corrective Actions
- Follow-Up
- Management Briefing

Pre-Audit Planning

- Access Issues
- Activities planned during the audit
- PPE requirements-site data gathering
- Daily audit objectives
- Review past audit reports
- Develop scope of audit
- Identify site contacts
- Compile checklists (Yes/No versus Procedures)
- Audit tools (camera, tape measure)
On-site Audit Activities

- Ensure All Findings Have Been Substantiated
  - Work as a team to review and cross check audit observations
  - Develop complete list of exceptions/issues and observations
  - Did you talk to the right people?
  - Are you clear that you identified all the equipment, processes, etc.?
  - Did you address all the regulatory areas?
Audit Documentation

- Audit Report
  - Findings
  - Auditors’ Opinion
  - Ratings
- Root Cause Analysis
- Corrective Action Plans
- Tracking of Findings and Follow-up

SRP Audit Reporting Approach

- Hybrid approach that uses external and internal reporting databases
- External – Dakota Software
  - Establish “Profiles” for each facility
  - Generate regulatory checklists
  - Add “Custom Questions’ for site-specific permits
  - Regular updates to regulations
SRP Audit Reporting Approach

Internal

- Record scope for each audit
- Document audit findings (regulatory basis, root cause, citation, severity)
- Assign responsibilities for corrective actions
- Automate corrective action tracking
- Generate Word reports and PowerPoint presentations
- Search function for finding and corrective action type
- Compile statistics on audit types, risk-ranking by site and finding

SRP Audit Database – Initial Setup
### SRP Audit Database – Scope

<table>
<thead>
<tr>
<th>No.</th>
<th>Regulatory Area Type</th>
<th>Regulatory Area Medium</th>
<th>Findings</th>
<th>Contacts</th>
<th>Documents</th>
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<td>1</td>
<td>Environmental</td>
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<td>Waste</td>
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<td>General Duty - Compliance to provide safe work place (OSHA 29 CFR 1900.10)</td>
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<td>Toxic and Hazardous Substances - Ventilation</td>
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<td>Hazard Communications</td>
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<td>Toxic and Hazardous Substances - Occupational Exposure to Hazardous Chemicals (OSHA Chapter 13)</td>
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<td>Fire Protection - (OSHA, MSHA, NFPA)</td>
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<td>Management Systems</td>
<td>Program implementation</td>
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### SRP Audit Database – Findings

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<tr>
<th>No.</th>
<th>Regulatory Area Type</th>
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<th>Citation</th>
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<tbody>
<tr>
<td>1</td>
<td>Environmental</td>
<td>Air</td>
<td>MCAQD Air Permit #200231 rev 2.0.1.12</td>
<td>Krysten Watt</td>
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<td>2</td>
<td>Environmental</td>
<td>Electrical</td>
<td>29 CFR 1910.305(c)(2)</td>
<td>James Kneiss</td>
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<td>3</td>
<td>Safety - General Industry</td>
<td>Company policy/SRP Accident Prevention Rule Book Requirement Program Implementation</td>
<td>EMPC Training Matrix</td>
<td>Robert Vertefeuille</td>
<td>Closed</td>
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<td>4</td>
<td>Environmental</td>
<td>Air</td>
<td>DQCY Rule 312 Section 304, 10(a)</td>
<td>Krysten Watt</td>
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<tr>
<td>5</td>
<td>Environmental</td>
<td>Water</td>
<td>40 CFR 112.7(c)</td>
<td>Jeffrey Estes</td>
<td>Open</td>
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</table>
SRP Audit Database – Findings

Regulatory Area Type
Safety - General Industry

Regulatory Area Medium
Materials, Handling and Storage - Powered Industrial Trucks

Regulatory Area Description
2.33.3 Training

Description
Sub-Findings (0) Citations (0) Root Cause (1) Documents (0) Scores (0)

Regulatory Requirement:
Short Description: Post-Incident Forklift Refresher Training

The OSHA Powered Industrial Truck Standard requires refresher training and a performance evaluation in the relevant topics when an operator has been involved in an accident or near-miss incident. SRP created course code EQL016103 (September 15, 2010) to track refresher training and evaluations. This course should be taken within two weeks of the incident.

Finding Description:
Three forklift incidents were recorded for warehouse personnel since June 1, 2011. Course code EQL016103 was not documented on the transcripts for the individuals involved in the incidents.

SRP Audit Database – Corrective Actions

Corrective Action Plan (Work Completed)

Finding Description Text (Explain in Details):

Corrective Action Number
71248

Contact
Distributors: Director of Safety and Health; Contact email: jsull@srpnet.com

Scheduled Completion Date: 05/20/2014

Goal Area
Vehicular/Equipment Handling

Corrective Action Plan Name
Chemical Response Plan

Corrective Action Plan Description
Addendum to Chemical Response Plan has been completed, removing AZ Radiation Agency reporting requirement.

Comments (0) Corrective Action Plan Comments (0) Documents (1)

Due Date/Scheduled Date
7/12/2014 7:36 AM

Sponsor
Michele Smith

Comment
An additional personal communication on 7/15/2014, as requested, was made in an effort to ensure that the training addendum had been addressed. Addendum to Chemical Response Plan, removed by AZ Radiation Regulatory Agency, resulting in no reporting requirement.
SRP Audit Database – Audit Notes

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Typical Audit Findings

- **Health and Safety**
  - Annual list of highest enforcement items based on OSHA

- **Environmental**
  - Air Quality
  - Waste Management
  - Oil Storage/Water Quality
# Health and Safety Findings (2013)

## Subpart & Standard 1910.

<table>
<thead>
<tr>
<th>Subpart &amp; Standard</th>
<th>1200(e)(1)</th>
<th>HAZARD COMMUNICATION – WRITTEN PROGRAM</th>
<th>2203</th>
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<tr>
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<td>MACHINE GUARDS – GENERAL</td>
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<td>1200(h)(1)</td>
<td>HAZARD COMMUNICATION – INFORMATION &amp; TRAINING</td>
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<td>303(b)(2)</td>
<td>ELECTRICAL – PROPER INSTALLATION &amp; USE OF EQUIPMENT</td>
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<td>23(c)(1)</td>
<td>WALKING/WORKING SURFACES – OPEN SIDES FLOORS</td>
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<td>151(c)</td>
<td>EYE &amp; BODY FLUSHING FACILITIES</td>
<td>763</td>
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<td>215(b)(9)</td>
<td>GRINDERS – TONGUE GUARDS</td>
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<td>178(l)(1)(i)</td>
<td>POWERED INDUSTRIAL TRUCKS – COMPETENCY TRAINING</td>
<td>717</td>
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<td>134(e)(1)</td>
<td>RESPIRATORS – MEDICAL EVALUATIONS</td>
<td>705</td>
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<td>147(c)(4)(i)</td>
<td>LOCKOUT/TAGOUT – PROCEDURES</td>
<td>667</td>
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</table>

## Walking and Working Surfaces

- **Open-sided Floors**: 766
- **Housekeeping**: 437
- **Wet Floors**: 213
- **Posted Floor – Load Rating**: 191
- **Stairway Railing and Handrails**: 129
Walking and Working Surfaces

Walking and Working Surfaces
Walking and Working Surfaces

Means of Egress

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<th>Description</th>
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<tr>
<td>37(a)(3)</td>
<td>EXIT ROUTES FREE &amp; UNOBSTRUCTED</td>
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<tr>
<td>37(b)(2)</td>
<td>EXIT MARKING</td>
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<tr>
<td>36(d)(1)</td>
<td>EXIT ROUTE UNLOCKED</td>
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<tr>
<td>37(b)(4)</td>
<td>EXIT ROUTE SIGNS</td>
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<tr>
<td>37(b)(5)</td>
<td>“NOT AN EXIT” SIGNS</td>
<td>163</td>
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**Personal Protective Equipment**

1. **134(e)(1)**  
   - Respirators – Medical Evaluation  
   - 705

2. **134(c)(1)**  
   - Respirators – Written Program  
   - 617

3. **132(d)(2)**  
   - PPE – Certification of Hazard Assessment  
   - 502

4. **132(a)**  
   - PPE – Provided, Used, and Maintained in Sanitary and Reliable Condition  
   - 444

5. **133(a)(1)**  
   - PPE – Appropriate Eye and Face Protection  
   - 444

---

**Personnel Protective Equipment**
Personnel Protective Equipment

Medical First Aid

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<th>151(b)</th>
<th>151(a)</th>
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<td>Eye &amp; Body Flushing Facilities</td>
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<td>First Aid Training/Supplies</td>
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<td>Medical Personal Advice/Consultation</td>
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Material Handling and Storage

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<th>Section</th>
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<tbody>
<tr>
<td>178(l)(1)(i)</td>
<td>Powered Industrial Trucks – Competency Training</td>
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<tr>
<td>178(l)(4)(iii)</td>
<td>Powered Industrial Trucks – Refresher Training in Relevant Topics</td>
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<td>178(l)(6)</td>
<td>Powered Industrial Trucks – Certification of Training</td>
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<td>178(p)(1)</td>
<td>Powered Industrial Trucks – Safe Operating Condition</td>
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<td>178(q)(7)</td>
<td>Powered Industrial Trucks – Examination for Defects</td>
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Material Handling and Storage

[Images of various material handling and storage equipment]
Material Handling and Storage

General Electrical

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<tr>
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<th>Title</th>
<th>Value</th>
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<td>303(b)(2)</td>
<td>Proper Installation &amp; Use of Equipment</td>
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<td>305(b)(1)(ii)</td>
<td>Grounding Permanent and Effective</td>
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<td>305(g)(2)(iii)</td>
<td>Flexible Cord Strain Relief</td>
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<td>305(g)(1)(iv)(A)</td>
<td>Flexible Cords Used as Fixed Wiring</td>
<td>532</td>
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<tr>
<td>305(b)(2)(i)</td>
<td>Pull/Junction Box Covers</td>
<td>471</td>
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General Electrical

General Electrical
General Electrical

General Electrical
General Electrical

Hand & Portable Powered Tools

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>242(b)</td>
<td>Compressed Air for Cleaning</td>
<td>504</td>
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<tr>
<td>243(c)(1)</td>
<td>Portable Abrasive Wheels – Guards</td>
<td>59</td>
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<tr>
<td>243(c)(3)</td>
<td>Vertical Portable Grinders – Guards</td>
<td>54</td>
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<tr>
<td>242(a)</td>
<td>Condition of Tools and Equipment</td>
<td>50</td>
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<tr>
<td>244(a)(1)(ii)</td>
<td>Jack Load Rating</td>
<td>16</td>
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</table>
Hand & Portable Powered Tools

Welding, Cutting & Brazing

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
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<tr>
<td>253(b)(4)(iii)</td>
<td>Oxygen Cylinder Storage – Separation</td>
<td>245</td>
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<tr>
<td>252(b)(2)(iii)</td>
<td>Arc Welding Protection</td>
<td>86</td>
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<tr>
<td>253(b)(2)(ii)</td>
<td>Cylinder Storage, Inside of Buildings</td>
<td>84</td>
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<tr>
<td>253(b)(4)(i)</td>
<td>Oxygen Cylinder Storage – Near Combustibles</td>
<td>72</td>
</tr>
<tr>
<td>253(b)(2)(iv)</td>
<td>Empty Cylinder Valve Closure</td>
<td>58</td>
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</table>
Welding, Cutting & Brazing

Machinery & Machine Guarding

<table>
<thead>
<tr>
<th>MACHINE GUARDS — GENERAL</th>
<th>1816</th>
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<tr>
<td>GRINDERS — TONGUE GUARDS</td>
<td>733</td>
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<tr>
<td>212(a)(1)</td>
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<tr>
<td>215(b)(9)</td>
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<tr>
<td>MACHINE GUARDS — POINT OF OPERATION</td>
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<tr>
<td>212(a)(3)(ii)</td>
<td>643</td>
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<tr>
<td>GRINDERS — WORK RESTS</td>
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<tr>
<td>215(a)(4)</td>
<td>546</td>
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<tr>
<td>POWER TRANSMISSION APPARATUS — PULLEYS</td>
<td></td>
</tr>
<tr>
<td>219(d)(1)</td>
<td>400</td>
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</tbody>
</table>
Machinery & Machine Guarding

![Image 1]

![Image 2]

Machinery & Machine Guarding

![Image 3]

![Image 4]
## Machinery & Machine Guarding

![Image of machinery and machine guarding](image1)

## Fire Protection

<table>
<thead>
<tr>
<th>Section</th>
<th>Checklist</th>
<th>Code</th>
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<tbody>
<tr>
<td>157(c)(1)</td>
<td>EXTINGUISHERS – PROVIDED &amp; ACCESSIBLE</td>
<td>415</td>
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<tr>
<td>157(e)(2)</td>
<td>EXTINGUISHERS – VISUAL MONTHLY INSPECTIONS</td>
<td>245</td>
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<tr>
<td>157(e)(3)</td>
<td>EXTINGUISHERS – ANNUAL MAINTENANCE CHECKS</td>
<td>228</td>
</tr>
<tr>
<td>157(g)(2)</td>
<td>EXTINGUISHERS – INITIAL &amp; ANNUAL TRAINING</td>
<td>221</td>
</tr>
<tr>
<td>157(g)(1)</td>
<td>EXTINGUISHERS – TRAINING PROGRAM</td>
<td>169</td>
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</tbody>
</table>

![Image of fire protection](image2)
Fire Protection

Toxic and Hazardous Substances

<table>
<thead>
<tr>
<th>Section</th>
<th>Requirement</th>
<th>Code</th>
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<tbody>
<tr>
<td>1200(e)(1)</td>
<td>Written Program</td>
<td>2203</td>
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<tr>
<td>1200(h)(1)</td>
<td>Information and Training</td>
<td>1583</td>
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<tr>
<td>1200(g)(8)</td>
<td>Safety Data Sheets Readily Accessible</td>
<td>611</td>
</tr>
<tr>
<td>1200(g)(1)</td>
<td>Safety Data Sheets for each Chemical</td>
<td>496</td>
</tr>
<tr>
<td>1200(f)(5)(i)</td>
<td>Labeling (old standard)</td>
<td>302</td>
</tr>
</tbody>
</table>
Toxic and Hazardous Substances

Environmental Findings

- Air Quality
  - Emission of hazardous air pollutants
  - Ozone-depleting air emissions
- Water Quality
  - Effluent exceedances
  - Incomplete storm water discharge reporting
  - Improper hazardous chemical release reporting
- Waste Management
  - Storing hazardous waste without permit
  - Improper waste characterization
  - Poor management of universal waste
  - Poor container management
  - Incorrect container labeling
  - Failure to train employees for hazardous waste management
Air Emissions

Oil Storage Management
Waste Management
Course Outline

- Introduction to Salt River Project Audit program
- History of environmental, health and safety audits
- EHS auditor organizations, certification programs, and references
- Important elements of a successful EHS audit program
- BREAK
- Examples of typical audit findings
- Vendor audit program
- Environmental Site Assessments
- Summary

SRP Waste and Recycled Material Vendor Audit Program
Recyclable Materials

- Ferrous and non ferrous metals
- E-waste
- Used oil
- Antifreeze
- Batteries
- Paper / Cardboard
- Soil
- Plastics
- Street lights
- Tires
- Salvaged transformers and other electrical equipment
- Used Tires
- Concrete

Waste Disposal

- General refuse
- Construction and demolition debris
- Asbestos
- Mercury contaminated debris
- Hazardous waste
- PCB-contaminated and PCB waste
Vendor Audits Annual Production

FY14 Revenue - Investment Recovery Department

- Scrap Aluminum $1,153,290
- Scrap Copper $817,688
- Scrap Steel $538,347
- Scrap Wire $61,538
- Recycled Meters $50,755
- Salvaged Transformers $741,351

TOTAL REVENUE $3,362,970
Vendor Evaluation Criteria

- Necessary Permits
- Compliance Status
- Litigation Status
- Financial and Business Condition
- CERCLA and State Superfund Status
- Location and Environmental setting
- Company Size and Experience
- Community Relations
- Other Large Customers
- Operations
- Site Conditions
- Insurance
- Customer Service
- Closure and Post-Closure
- Env Management Systems
- Health and Safety
- Emergency Preparedness

How We Evaluate

- Rating based on 17 elements:
  - Minimal risk
  - Moderate risk
  - Unacceptable risk (not approved for use)

- "Conditionally Approved"
  - Deficient in one or more elements that can be corrected
  - Restrict material sent to a vendor
Necessary Environmental Permits

- Spill Prevention Control and Countermeasures
- General Storm Water Plan
- Non-Title V Air Permit (Dust Control Plan)
- EPA Waste ID
- Registered UST
- Registered Drywells

Compliance Status

- EHS Compliance
  - Regulatory inspections
  - Fines / Penalties / Notice of Violations
- Regulatory Resources
  - Arizona Department of Environmental Quality
  - Maricopa County Air Quality Department
  - EPA ECHO Database
Litigation / Financial Condition / Superfund

- Regulatory enforcement actions/ Consent Orders
- Current or pending criminal or relevant civil action
- Financials
  - Public disclosures (10-k)
  - Dunn and Bradstreet Ratings
  - Altman Z”-Score
  - Clear and stable market for recyclables
- Potential Responsible Party (PRP)

Altman Z’’ - Score for Non-Manufacturers

- Z’’ - Score = 6.56T1 + 3.26T2 + 6.72T3 + 1.05T4
  - T1 = (Current Assets – Current Liabilities) / Total Assets
  - T2 = Retained Earnings / Total Assets
  - T3 = Earnings before Interest and Taxes / Total Assets
  - T4 = Market Value of Equity / Total Liabilities
- Zones of Discrimination
  - Z’’ > 2.9 “Safe” Zone
  - 1.22 , Z” < 2.9 “Grey” Zone
  - Z” < 1.22 “Distress” Zone
Location and Environmental Setting

- Floodplains/ Waterways
  - Water wells
- Facility surroundings
  - Heavy vs. light industrial
  - Agricultural
  - Residential
- Sensitive Receptors
  - Schools / nursing homes
  - Environmentally sensitive areas

Company Size & Experience / Community Relations / Customers

- Number of employees and years in business
- Former business names
- Public perception
  - Local/nationwide news feeds
  - Facility tours
  - Community support
  - Impact to permit renewals
- Other customers that make up more than than 10% of business
Operations Status

- Activities performed at the site
- Waste generation and management
- Inspection of storage tanks
- Onsite laboratory
- Transportation facility
- Security

Site Conditions

- Housekeeping
- Visible air emissions and dust control
- Storm water controls
- Noticeable spills
- Storage of waste
- Condition of tanks and secondary containment
- Paved areas
Customer Service / Insurance / Closure Funding

- Customer service history
- Insurance
  - General liability
  - Environmental / Excess / Umbrella / Pollution Prevention
  - Copy of insurance certificate
- Closure plan and funding source

EMS / Health & Safety / Emergency Preparedness

- Environmental Management System – Policies and Procedures
- Health and Safety Program
  - Identification of hazardous
  - Training of employees
  - Visible use of correct PPE
  - Posted OSHA 300 Log
- Emergency Preparedness
  - Fire Prevention / Emergency Response plans
  - Emergency response equipment onsite
  - Training and drills
SRPVendor Information

SRP Approved Vendors
The following is a list of vendors approved for use by SRP. You may sort the list by Name, Location or Vendor Type by clicking on the heading. You may filter the list by Location, Vendor Type or by Approved Service Waste Stream by selecting items from the drop-down lists. Selecting an item will automatically filter the list:

<table>
<thead>
<tr>
<th>Vendor Name</th>
<th>Location</th>
<th>Vendor Type</th>
<th>Service Waste Stream</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-Line E.D.G.</td>
<td>Mesa, AZ</td>
<td>Scrap Metal</td>
<td>Gravel, crushed and concrete waste</td>
</tr>
<tr>
<td>Arizona Metals</td>
<td>Phoenix, AZ</td>
<td>Recycler</td>
<td>Copper, brass, lead, and zinc</td>
</tr>
<tr>
<td>Arizona Waste Oil Service</td>
<td>Tuscon, AZ</td>
<td>Oil Recycler</td>
<td>Oil</td>
</tr>
<tr>
<td>Basket Metal Recycling</td>
<td>Phoenix, AZ</td>
<td>Scrap Metal</td>
<td>Copper, brass, lead, and zinc</td>
</tr>
<tr>
<td>Boilerflex Mesa Landfill</td>
<td>Phoenix, AZ</td>
<td>Solid Waste Landfill</td>
<td>Hazardous waste, construction debris</td>
</tr>
<tr>
<td>Boyer Recycling</td>
<td>Phoenix, AZ</td>
<td>Recycler</td>
<td>Concrete, rebar, and iron</td>
</tr>
<tr>
<td>Cactus Regional Landfill</td>
<td>Phoenix, AZ</td>
<td>Solid Waste Landfill</td>
<td>Hazardous waste and construction debris</td>
</tr>
<tr>
<td>Casa Grande Landfill</td>
<td>Casa Grande, AZ</td>
<td>Solid Waste Landfill</td>
<td>Hazardous waste, construction debris</td>
</tr>
<tr>
<td>Clean Harbors - Arizona</td>
<td>Apache Junction, AZ</td>
<td>Incinerator</td>
<td>Hazardous waste disposal, treatment or storage</td>
</tr>
<tr>
<td>Clean Harbors - Green Mountain Landfill</td>
<td>Green Mountain, AZ</td>
<td>Abandoned Landfill</td>
<td>Hazardous waste disposal, treatment or storage</td>
</tr>
<tr>
<td>Clean Harbors - LA</td>
<td>Los Angeles, CA</td>
<td>Oil, Solvent Recovery</td>
<td>Oil-filled equipment and batteries</td>
</tr>
<tr>
<td>Connolly Management Services</td>
<td>Phoenix, AZ</td>
<td>Metal Recycling</td>
<td>Metal, electronics</td>
</tr>
<tr>
<td>Connecticut Resources and Environmental</td>
<td>Middletown, CT</td>
<td>Metal Recycling</td>
<td>Metal, electronics</td>
</tr>
<tr>
<td>Connecticut Landfill and Recycling</td>
<td>Mesa, AZ</td>
<td>Recycler</td>
<td>Concrete, rebar, and iron</td>
</tr>
</tbody>
</table>

Vendor Audit Observations

- The vendor should know their environmental regulatory obligations
- Regulatory documents should be available and in one place
- Have a documented Health & Safety Program
Environmental Site Assessments

- Purpose of Phase I ESA to evaluate the potential for recognized environmental conditions as defined in ASTM E 1527-13
- Meets All Appropriate Inquiry and allows the user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability

Environmental Site Assessments

- Scope
  - Property bought or sold by SRP
  - USA/USBR exchanges and abandonments

- Purpose
  - Minimize SRP environmental liability for property transfers
  - Meet EPA requirements for All Appropriate Inquiry
SRP Process for Environmental Site Assessments

- Phase I ESAs are performed by qualified environmental professional on-call consultants
- Only SRP can rely on consultant reports prepared for SRP
- SRP must meet *user responsibilities* outlined in the ASTM E 1527-13
- SRP Field Services performs sampling for Phase II Environmental Site Assessments

Environmental Site Assessment Production

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of ESAs</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY09</td>
<td>60</td>
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<tr>
<td>FY10</td>
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<tr>
<td>FY11</td>
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<td>FY12</td>
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<td>FY13</td>
<td>60</td>
</tr>
<tr>
<td>FY14</td>
<td>50</td>
</tr>
</tbody>
</table>
Environmental Site Assessments

- Phase I - Identifies Recognized Environmental Conditions

Environmental Site Assessments

- Phase II ESA will be recommended based on results of the Phase I
Environmental Site Assessments

- USBR Exchange Parcels

Environmental Site Assessments

- SRP Projects
Environmental Site Assessments

- Phase III ESA may be recommended if a Phase II ESA positively identifies the presence of contaminated material
- Remediation may follow the Phase III ESA

ASTM E 1527-13 Key Changes

- Revised/simplified definition of recognized environmental condition
- Revised definition of historical recognized environmental condition
- New definition for controlled recognized environmental condition
- Clarified that vapor migration is part of a Phase I ESA
- New language for agency file reviews
Summary

- History of environmental, health and safety audits
- EHS audit organizations, certification programs, and references
- Important elements of a successful EHS audit program
- Examples of typical audit findings
- Vendor audit program
- Environmental Site Assessments

Future of EHS Auditing

- Pressure on EHS audits to expand scope
- Improve cost effectiveness
- Improve quality assurance and control
- Deliver on stakeholder value
- Increase corporate governance and assurance
- Increased third-party audits
- Consistent audit metrics
Questions and Takeaways