Industrial HazMat Response Teams

A Case Study

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Amway Corporation
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Introduction

- Who we are
- Definition of an Emergency
- Business Impact Analysis
- HazMat Team Considerations
- Amway HazMat Team Today
Who we are

- 50-year Anniversary!
- Business in more than 80 countries worldwide
- Over $8 billion in sales in 2008
- Headquartered in Ada, Michigan with 4,600 employees
- Manufacture home care, personal care, & nutritional products
HazMat Team History

- Original Team Formed in 1991
- 80 Team Members - Specialized
- Capital Investment
- Reorganized in 2001 as ABG, LLC
What is an emergency?

**Incidental Release**

29 CFR 1910.1200

- Can be absorbed, neutralized, or controlled at time of release
- No potential safety or health hazard

**Emergency Response**

29 CFR 1910.120(q)

- Uncontrolled release of a hazardous substance
- Requires response from outside area of release
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“Too MUCH Spilled” Posters

Defines “Emergency” by Department

Department Specific HazMat Response Guidelines

Too

M More than 1 chemical has spilled/released simultaneously and are mixing/reacting?

U Unknown chemical has spilled/released?

C Can’t contain the spill/release within the building using department & operating containment controls?

H Hazardous chemical has spilled/released outside of normal operating procedures? (See below for various departmental definitions for “hazardous”)

Spilled/Released?

1. Employee contacts Supervisor or Department Management.
2. Management calls AllCOR Protection Services at ext. 6333 or 6354 to contact a Hazardous Materials Incident Commander, and they will dispatch one to the area.
3. The employee may call 6333 or 6354 if management is not on site or accessible.

<table>
<thead>
<tr>
<th>Department</th>
<th>Hazard Codes</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cosmetics</td>
<td>A, B, O, F, E</td>
<td>Released &gt;25 gallons and 3 in the Hazard Code &amp; Cannot be Contained</td>
</tr>
<tr>
<td>Liquids</td>
<td>A, B, O, F, E</td>
<td>Released &gt;25 gallons and 3 in the Hazard Code &amp; Cannot be Contained</td>
</tr>
<tr>
<td>Paper Products</td>
<td>A, B, E, F, C, I</td>
<td>Released &gt;25 gallons and 3 in the Hazard Code &amp; Cannot be Contained</td>
</tr>
<tr>
<td>Personal Care</td>
<td>A, B, O, F, E</td>
<td>Released &gt;25 gallons and 3 in the Hazard Code &amp; Cannot be Contained</td>
</tr>
<tr>
<td>Powder</td>
<td>A, B, O, F, E</td>
<td>Released &gt;500 pounds and 3 in the Hazard Code &amp; Cannot be Contained</td>
</tr>
<tr>
<td>Pressure Packaging</td>
<td>A, B, O, F, E</td>
<td>Released &gt;500 pounds and 3 in the Hazard Code &amp; Cannot be Contained</td>
</tr>
<tr>
<td>Central Warehouse</td>
<td>A, B, O, D, E, F, C, I</td>
<td>Released &gt;500 pounds and 3 in the Hazard Code &amp; Cannot be Contained</td>
</tr>
<tr>
<td>SSC</td>
<td>A, B, O, D, E, F, C, I</td>
<td>Released &gt;500 pounds and 3 in the Hazard Code &amp; Cannot be Contained</td>
</tr>
</tbody>
</table>
What if I have an emergency?

Option 1
Evacuate employees and call for assistance.

Option 2
Respond with your own HazMat Team
Business Impact Analysis

- Risk - Severity & Probability
- Response Time Requirements
- Response Expertise (Level of Response Required)
Business Impact Analysis

- Cost
- Protection of People & Preservation of Property
- Community Impact/Reputation
How do you decide?

- Meet with local fire department
- Benchmark with other companies
- Research 3rd party response organizations
How do you decide?

Research & Gather Data

<table>
<thead>
<tr>
<th></th>
<th>Fire Department</th>
<th>Vendor A</th>
<th>Vendor B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quote – Level A response – 5 hrs.</td>
<td></td>
<td></td>
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<tr>
<td>Response Time</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Equipment Availability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expertise/Response capability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel Availability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experience</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Response Locations</td>
<td></td>
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</tbody>
</table>
**Pros**

- CAN Respond offensively to NON-emergency spills
- CAN respond defensively to emergency spills
- CAN conduct Decontamination
- Low Cost – Less Regulatory Requirements

**Cons**

- CANNOT respond offensively to emergency spills
- Still requires Technician Level response in an emergency
Technician Level Response Team

Pros

- CAN respond offensively to ALL emergency spills
- Reduce response time, resulting downtime, and impact on environment

Cons

- Prescriptive response & staffing requirements
- Extensive program requirements
- Significant capital investment
Tech Level Regulatory Compliance

- Medical Surveillance Program
  29 CFR 1910.120(q)(9) & (f)

- Air Monitoring
  29 CFR 1910.120(h)

- Decontamination
  29 CFR 1910.120 (k)

- Training
  29 CFR 1910.120 (q)(6)(iii)

- Written Plans

- PPE Program
  29 CFR 1910.120 (g)

- Respiratory Protection Program
  29 CFR 1910.134

- Vehicle Licensing

- Environmental Compliance: waste management, RQ’s, waste & storm Water discharge, air quality
Tech Level Capital Investment

- PPE/SCBA’s
- Decon Equipment
- Air Monitoring
- Sorbents
- Plugging/Patching tools & equipment
- Communications Equipment
- Chemical Information Resources
- Vehicle/trailer
**Tech Level HazMat Team**

**Staffing/Team Configuration**

*What the regulations require...*

<table>
<thead>
<tr>
<th>1910.120 (q) Personnel Requirements</th>
<th>1910.120 (q) Functional Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Incident Commander</td>
<td>Incident Command System Evaluation/Use of PPE</td>
</tr>
<tr>
<td>4 Responders (buddy system)</td>
<td>Decontamination Monitor</td>
</tr>
<tr>
<td>1 Safety Officer</td>
<td>Critique</td>
</tr>
<tr>
<td>1 Advanced First Aid</td>
<td>Site Security</td>
</tr>
</tbody>
</table>

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- Staffing
- Training
- Program Management
- Response History
- Challenges
**Amway HazMat Team Staffing**

- Incident Commanders & Responders: Paid Volunteers
- Safety Officers: EH&S Safety Professionals
- First Aid: MFR Trained Security Staff

**One Team with Interchangeable Parts**

<table>
<thead>
<tr>
<th>First Shift</th>
<th>Second Shift</th>
<th>Third Shift</th>
<th>Weekends/Holidays</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 IC’s</td>
<td>2 IC’s</td>
<td>2 IC’s</td>
<td>Rotational</td>
</tr>
<tr>
<td>10 Responders</td>
<td>4 Responders (Support from first shift)</td>
<td>4 Responders (Support from first shift)</td>
<td>1 IC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4 Responders (All Team page and support from Ada Fire Department)</td>
</tr>
</tbody>
</table>
Amway HazMat Team Programs

- Initial Training
- Annual Refresher Training
- Fit Testing/Respiratory Protection Program
- Safety Training Programs (Lockout/Tagout, Bonding & Grounding, etc.)
- Equipment testing & maintenance
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Response History
2002-2008

- 13 - Emergency Responses
- 55 - NON Emergency Responses
- 20 - IC Consultations
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Challenges

- Cost/Time/Certifications for keeping equipment working, maintained, inspected
- Managing staff movements between shifts
- Keeping staff trained and engaged
- Consistent & reliable communications
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