Enforcement Activities and Observations

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Office of Worker Safety and Health Enforcement
Office of Enterprise Assessments

http://energy.gov/ea/services/enforcement
## Enforcement Activities

<table>
<thead>
<tr>
<th>Contractor – DOE Facility</th>
<th>Event(s)</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. National Technology and Engineering Solutions of Sandia, LLC (NTESS) – Sandia National Laboratories</td>
<td>High Voltage &amp; Electrical Shocks</td>
<td>Investigation Report (IR)</td>
</tr>
<tr>
<td>3. Triad National Security, LLC (Triad)- Los Alamos National Laboratory</td>
<td>Material Handling-related Injury</td>
<td>Notice of Intent (NOI)</td>
</tr>
<tr>
<td>4. Consolidated Nuclear Security, LLC (CNS) – Pantex</td>
<td>Toluene Overexposure</td>
<td>Enforcement Letter (EL)</td>
</tr>
<tr>
<td>5. Los Alamos National Security, LLC (LANS) - Los Alamos National Laboratory</td>
<td>Low Oxygen Alarm</td>
<td>Preliminary Notice of Violation (PNOV)</td>
</tr>
</tbody>
</table>
Sandia National Laboratories
Coyote Test Field - High Voltage Event

- Subcontractors to NTESS
- Retrieving Salvage Utility Poles
- Severed 46kV Utility Line
- Digger Derrick Truck Boom Breached Minimum Approach Distance
Thunder Range- Electrical Shock Event

- Energetic Testing – Detonator failed to fire
- Failure diagnosis resulted in electrical shock
  - Removed coaxial firing cable from fireset
- Heat Stress (?)
SWiFT - Electrical Shock Event

- Wind Turbine Tower – 100 feet above ground
- Electrical shock occurred while replacing part in nacelle
  - Screwdriver made contact with energized terminal
- Heat Stress (?)
Waste Isolation Pilot Plant
Heat Stress, NO$_2$, SO$_2$, CCl$_4$

- IH Instrumentation
- Exposure Assessment
- Ventilation
- Technical Amendment (NO$_2$)
Los Alamos National Laboratory

Material Handling-related Injury

- 4 person crew assembling flanges
- Skid Steer affixed with 350lb JLG Crane/Lift Hook Telehandler (fixture)
- Fixture used to lift 268lb flange from ground onto table for welding
- Fixture slid off forks and struck worker
  - severe laceration to face and fractures to arm
Toluene Overexposure

- 8-hour TWA exceeded ACGIH TLV – 50 ppm
- Touch up paint operation performed in Paint Booth
  - Ventilation system inoperable
  - No Respiratory Protection

<table>
<thead>
<tr>
<th>Name</th>
<th>EC No.</th>
<th>CAS-No.</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-METHOXY-1-METHYLETHYL ACETATE</td>
<td>203-603-9</td>
<td>108-65-6</td>
<td>1-5%</td>
</tr>
<tr>
<td>ACETONE</td>
<td>200-662-2</td>
<td>67-64-1</td>
<td>30-60%</td>
</tr>
<tr>
<td>BUTANE/PROPANE BLEND</td>
<td>270-704-2</td>
<td>68476-85-7</td>
<td>5-10%</td>
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<tr>
<td>BUTYL ACETATE - norm</td>
<td>204-658-1</td>
<td>123-86-4</td>
<td>10-30%</td>
</tr>
<tr>
<td>ETHYLBENZENE</td>
<td>202-849-4</td>
<td>100-41-4</td>
<td>&lt;0.5</td>
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<tr>
<td>IPA</td>
<td>200-661-7</td>
<td>67-83-0</td>
<td>1-5%</td>
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<tr>
<td>ISO-BUTANOL</td>
<td>201-148-0</td>
<td>78-83-1</td>
<td>1-5%</td>
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<tr>
<td>TOLUENE</td>
<td>203-625-9</td>
<td>108-88-3</td>
<td>5-10%</td>
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<tr>
<td>XYLENE</td>
<td>215-535-7</td>
<td>1330-20-7</td>
<td>1-5%</td>
</tr>
</tbody>
</table>
Los Alamos National Laboratory
Low Oxygen Alarm

- Employee entered work area during low oxygen alarm activation.
  - Potential exposure to oxygen deficient atmosphere within laboratory
- Pressure relief valve discrepancies within system design
  - Froze in open position
- Low oxygen alarm procedures were not well established
  - Training deficiencies related to emergency response during low oxygen alarm events