September 2007 Incident

“A state prisoner was badly burned early Tuesday when another inmate threw gasoline on him and set him aflame.”

“We will try to determine how gasoline got into the barracks and how (the attacker) got matches or a lighter.”

Gasoline is sometimes brought behind the fence for mowing or running other maintenance machines.
HAZARDOUS MATERIAL TRAINING

DEFINITION

NFPA 704 is a standard maintained by the U.S.-based National Fire Protection Association. It defines the colloquial "fire diamond" used by emergency personnel to quickly and easily identify the risks posed by nearby hazardous materials. This is necessary to help determine what, if any, specialty equipment should be used, procedures followed, or precautions taken during the first moments of an emergency response.
HAZARDOUS MATERIAL TRAINING

NFPA 704 SYMBOL
HAZARDOUS MATERIAL TRAINING

Health Hazard

4 Very short exposure could cause death or serious residual injury even though prompt medical attention was given.

3 Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.

2 Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

1 Exposure could cause irritation but only minor residual injury even if no treatment is given.

0 Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.
HAZARDOUS MATERIAL TRAINING

Flammability

4 Will rapidly or completely vaporize at normal pressure and temperature, or is readily dispersed in air and will burn readily.

3 Liquids and solids that can be ignited under almost all ambient conditions.

2 Must be moderately heated or exposed to relatively high temperature before ignition can occur.

1 Must be preheated before ignition can occur.

0 Materials that will not burn.
HAZARDOUS MATERIAL TRAINING

**Instability**

4 Readily capable of detonation or of explosive decomposition or reaction at normal temperatures and pressures.

3 Capable of detonation or explosive reaction, but requires a strong initiating source or must be heated under confinement before initiation, or reacts explosively with water.

2 Normally unstable and readily undergo violent decomposition but do not detonate. Also: may react violently with water or may form potentially explosive mixtures with water.

1 Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.

0 Normally stable, even under fire exposure conditions, and are not reactive with water.
SPECIAL HAZARDS

This section is used to denote special hazards. There are only three NFPA 704 approved symbols:

**OX**

This denotes an oxidizer, a chemical which can greatly increase the rate of combustion/fire.

**SA**

This denotes gases which are simple asphyxiants. The only gases for which this symbol is permitted are nitrogen, helium, neon, argon, krypton, and xenon. The use of this hazard symbol is optional.

**W**

Unusual reactivity with water. This indicates a potential hazard using water to fight a fire involving this material. When a compound is both water-reactive and an oxidizer, the W/bar symbol should go in this quadrant and the OX warning is placed immediately below the NFPA diamond.
HAZARDOUS MATERIAL TRAINING

DEFINITIONS

**HMIS** (Hazardous Material Identification System) helps satisfy HCS requirements by providing a format for hazard determinations, offering a basic written hazard communication program, and simplifying the employee training and information process. HMIS provides clear, recognizable information to employees by standardizing the presentation of chemical information. This is accomplished by the use of color codes corresponding to the hazards of a product, assigned numeric ratings indicating the degree of hazard, and alphabetical codes designating appropriate personal protective equipment (PPE) employees should wear while handling the material.
HAZARDOUS MATERIAL TRAINING

HMIS SYMBOL

Chemical Name

- HEALTH: 0
- FLAMMABILITY: 0
- PHYSICAL HAZARD: 0
- PERSONAL PROTECTION: 0
HAZARDOUS MATERIAL TRAINING

HMIS HEALTH HAZARD RATING CHART

0=MINIMAL HAZARD  No significant risk to health.
1=SLIGHT HAZARD   Irritation or minor reversible injury possible.
2=Moderate HAZARD  Temporary or minor injury may occur.
3=Serious HAZARD   Major injury likely unless prompt action is taken and medical treatment is given.
4=Severe HAZARD    Life-threatening, major or permanent damage may result from single or repeated overexposures.
HAZARDOUS MATERIAL TRAINING

HMIS FLAMMABILITY HAZARD RATING CHART

0=MINIMAL HAZARD    Materials that will not burn.
1=SLIGHT HAZARD     Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200° F. (Class IIIB)
2=Moderate Hazard  Materials which must be moderately heated or exposed to high ambient temperatures before ignition will occur. Includes liquids having a flash point at or above 100° F but below 200° F. (Classes II & IIIA)
3=Serious Hazard   Materials capable of ignition under almost all normal temperature conditions. Includes flammable liquidswith flash points below 73° F and boiling points above 100° F.as well as liquids with flash points between 73° F and 100° F. (Classes IB & IC)
4=Severe Hazard    Flammable gases, or very volatile flammable liquids with flash points below 73° F, and boiling points below 100° F. Materials may ignite spontaneously with air. (Class IA)
HMIS PHYSICAL HAZARD RATING CHART

0=MINIMAL HAZARD     Materials that are normally stable, under fire conditions and will not react to water, polymerize, decompose, condense or self react.

1=SLIGHT HAZARD       Materials that are normally stable but can become unstable at high temperature and pressures. Materials may react non-violently with water or undergo hazardous polymerization in the absence of inhibitors.

2=Moderate Hazard     Materials that are unstable and may undergo violent chemical change at normal temperature and pressure with low risk for explosion. Materials may react violently with water or form peroxides upon exposure to air.

3=SERIOUS HAZARD      Materials that may form explosive mixtures with water are capable of detonation or explosive reaction in the presence of a strong initiating source or undergo chemical change at normal temperature and pressure with moderate risk of explosion.

4=SEVERE HAZARD       Materials that are readily, capable of water reaction, detonation or explosive decomposition at normal temperatures and pressures.
HAZARDOUS MATERIAL TRAINING

White/Personal Protection
This is by far the largest area of difference between the NFPA and HMIS systems. In the NFPA system, the white area is used to convey special hazards whereas HMIS uses the white section to indicate what personal protective equipment (PPE) should be used when working with the material.

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<thead>
<tr>
<th>Chemical Name</th>
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<tbody>
<tr>
<td>HEALTH</td>
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<td>PERSONAL PROTECTION</td>
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PERSONAL PROTECTION INDEX

Consult your supervisor or S.O.P. for "SPECIAL" handling directions

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<thead>
<tr>
<th>LETTER</th>
<th>Goggles</th>
<th>Face Shield &amp; Eye Protection</th>
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</table>

Safety Glasses, Spinal Glasses, Face Shield & Eye Protection, Gloves, Boots, Synthetic Apron, Full Suit, Dust Respirator, Respirator, Full Face Respirator, Airline Hood or Mask, Additional Information.
HAZARDOUS MATERIAL TRAINING

Material Safety Data Sheet
May be used to comply with OSHA’s Hazard Communication Standard, 29 CFR 1910.1200

IDENTITY (As Listed on Label and List)

<table>
<thead>
<tr>
<th>BARBICIDE®</th>
<th>Validation Date: February 14, 2007</th>
</tr>
</thead>
</table>

Section I - Company Identification
Manufacturer's Name
BlueCo Brands Corporation
2730 West Silver Spring Drive
Milwaukee, WI 53209
USA

Emergency Telephone Number
Chemtec: 920-424-6120
Telephone Number for Information: 414-677-1446

Section II - Hazardous Ingredients/Identity Information

<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>CAS Number</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl Alcohol</td>
<td>67-63-0</td>
<td>N/D</td>
<td>TWA 200 ppm; STEL 400 ppm</td>
<td>13.0</td>
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<tr>
<td>Dimethyl Benzyl Ammonium Chloride</td>
<td>60424-88-1</td>
<td>N/D</td>
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<td>Sodium Nitrite</td>
<td>7757-82-0</td>
<td>N/D</td>
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</table>

Section III - Hazard Identification

Routes of Entry: Eyes, Skin, Ingestion, Inhalation
Health Hazards (Acute and Chronic): Eye: Direct contact may cause irreversible damage. Skin: Repeated contact may cause skin irritation or burns. Ingestion: Probable mucosal damage. May cause serious injury or death. Call a physician. Inhalation: May irritate or damage mucous membrane.

Medical Conditions Generally Aggravated by Exposure: None known

Section IV - First-aid Measures

Eye Contact: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes. Then continue rinsing eye. Avoid rubbing. If irritation persists, obtain medical advice.

Skin Contact: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.

Inhalation: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

Ingestion: Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person. Have the product container or label with you when calling a poison control center or doctor or going for treatment. Note to physician: Probable mucosal damage may contraindicate the use of gastric lavage.

Section V - Fire-fighting Measures

Flash Point: 330°F (166°C) (Geta Closed Cup) Flammable Limits: N/A
Extinguishing Media: Water, dry chemical, carbon dioxide, foam.

Special Firefighting Procedures: None needed
Unusual Fire and Explosion Hazards: None known

Section VI - Accidental Release Measures

If small amounts are released or spilled, wash down a drain with lots of water. For larger amounts, absorb with an inert material and take to an appropriate waste disposal facility.

Section VII - Handling and Storage

Avoid contact with skin and eyes. Do not contaminate water, food or feed. Do not reuse empty container. Keep container clean and closed. Store at room temperature. Avoid extremes heat. Keep out of reach of children.

BARBICIDE® (Continued)
ACA Standards Requirement

- Written policy and procedure govern control and use
  - Proper storage containers
  - Store in secure area
  - Proper distribution
  - Accountability
Why Control?

- Security issues
- Safety issues
- Mandatory ACA standards
- Save dollars
HAZMAT Helpful Hints

- Inventory and Control (2 or higher)
- Inventory measurements
- Storage cabinets
  - Proper ratings
  - Pans
- MSDS and labels
- Diluting
- Safety equipment and eye wash stations
- “In Use”
Helpful Hints

• Dirty Rags
  – Anything with a flashpoint or vapors
  – Place all soiled, used rags in dirty rag container.
  – Launder all soiled, used rags.
  – Once rags are spent, launder, then place clean, laundered rags in regular trash.

• Spill kit: A spill kit usually contains dry sweep and absorbent pads or socks. Know the location of your spill kit.
Common Pitfalls

- No perpetual inventory
- Not following policy and procedures
- Policy and Procedures exceed the ACA standard
- Complacency
- Not properly marking containers
- Incorrect MSDS
Questions?