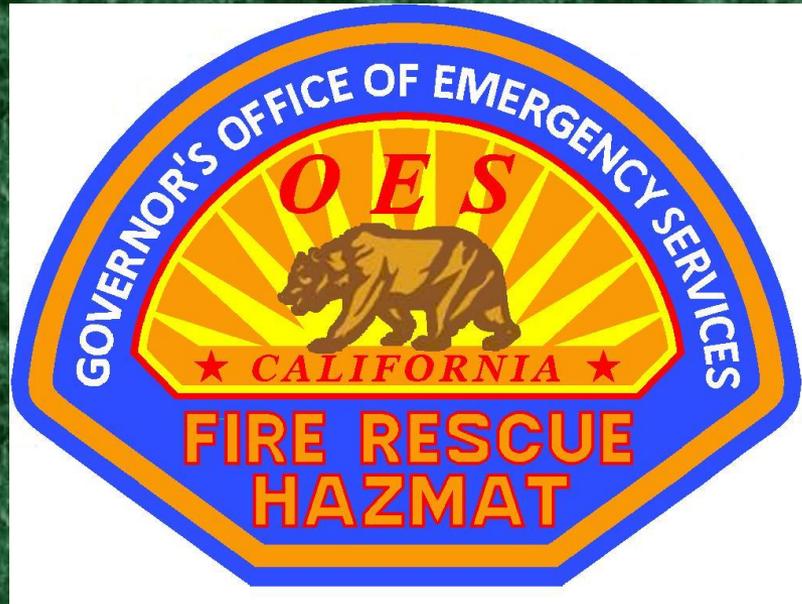


# 2016 Photo Documentation Of the SEL



Last Edited  
April - 2018

Version  
5.1.2



# **Photo and Graphic Documentation of SEL Equipment Items**

**Referenced to  
SEL Edition 2016**

**PAGES MARKED WITH A ☺ INDICATE NEW INFORMATION OR UPDATED PAGE**



# Field Testing & Detection

(Color Change Analysis – Non-Electronic)

Test Strips, pH Paper, Packets  
(pH “0” to pH “14”)

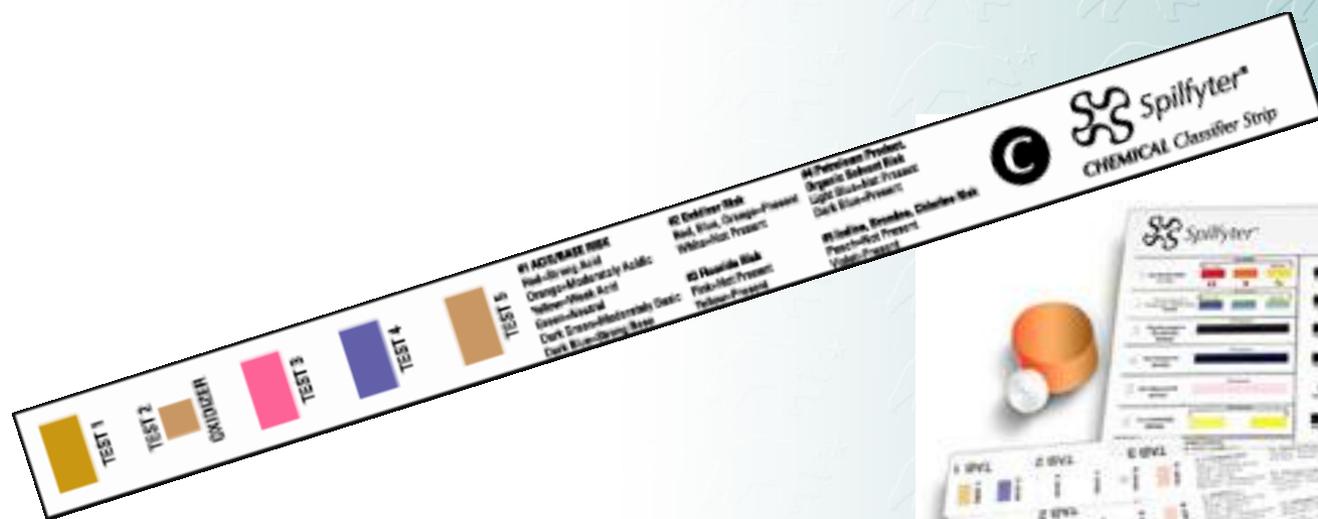


1.1.1

# Field Testing & Detection

(Color Change Analysis – Non-Electronic)

## OPTIONAL ITEM



THIS ITEM MEETS THE  
REQUIREMENTS FOR  
S.E.L. ITEM # 1.1.1

1.1.2 (Optional for Item # 1.1.1)

# Field Testing & Detection

## (Color Change Analysis – Non-Electronic)

### Test Strips, Oxidizer Test (Potassium Iodide – Starch)



1.1.3

# Field Testing & Detection

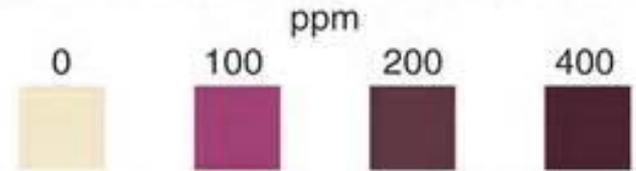
## (Color Change Analysis – Non-Electronic)

### Test Strips, Peroxide



#### High Level Peroxide Strips

1. Dip the Test strip into the solution to be tested for one second and shake off excess liquid.
2. After 30 seconds, compare with color scale.



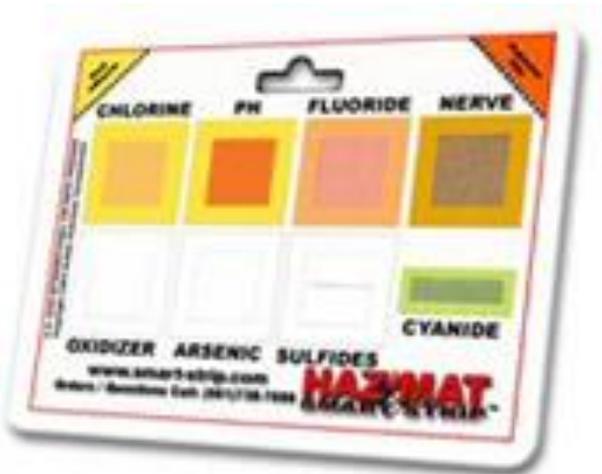
#### Precision Laboratories

415 Air Park Road  
Cottonwood, AZ 86326  
800-733-0266 Fax 928-649-2306

# Field Testing & Detection

## (Color Change Analysis – Non-Electronic)

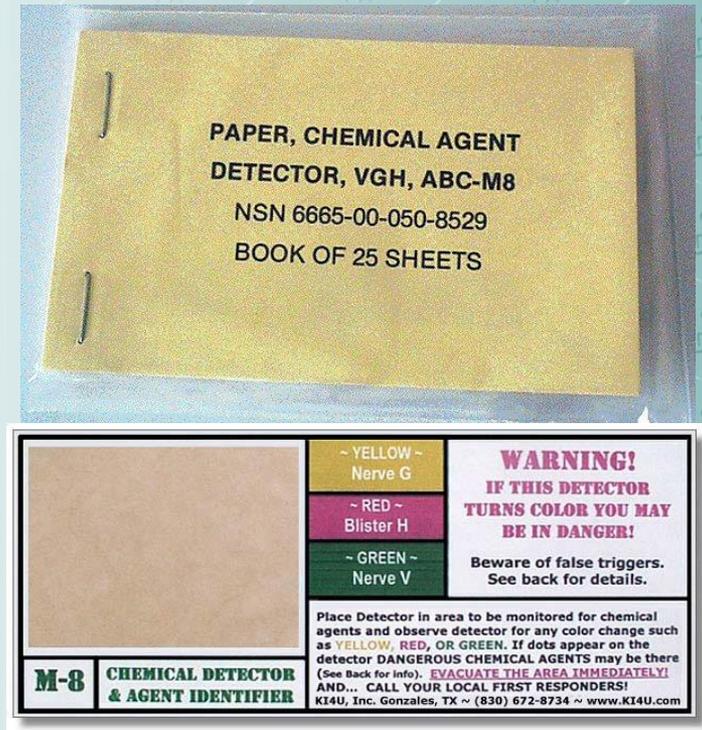
### Test Strips – WMD Chemical Kit (M-8) (For Nerve Agents)



HAZ-MAT "SMART-STRIP"



"M-8 AGENT IDENTIFIER"



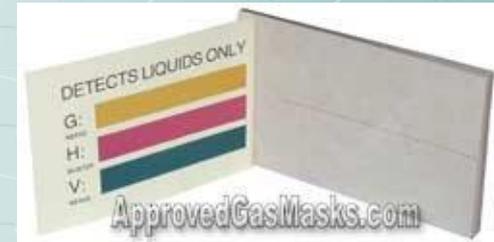
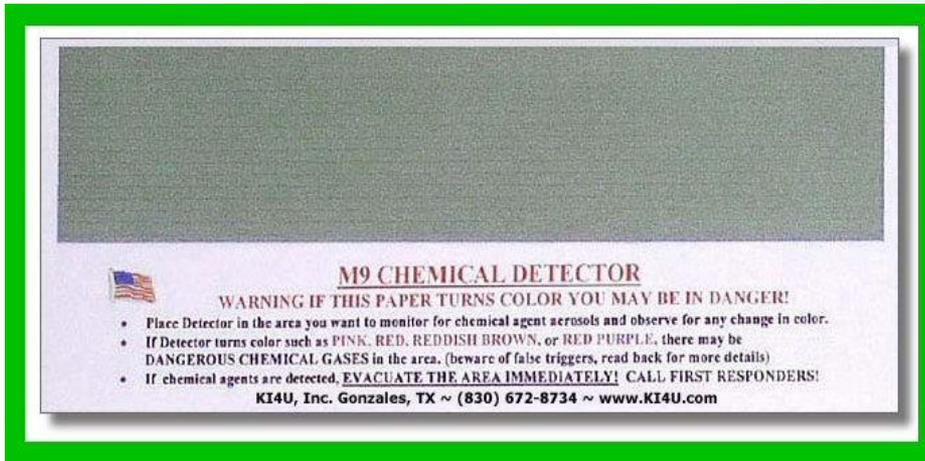
MILITARY "M-8" PACKET

# Field Testing & Detection

## (Color Change Analysis – Non-Electronic)

### Test Strips – WMD Chemical Roll (M-9)

#### (For Nerve and Blister or Lewisite)



“SMART M-8”



MILITARY “M-9”  
ROLL

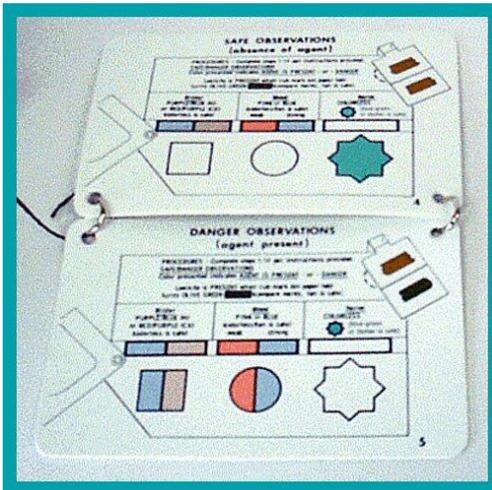


# Field Testing & Detection

## (Color Change Analysis - Non-Electronic)

### Test Strips – WMD Chemical Card (M256A-1)

#### (For Nerve, Blister, and Blood Agents)

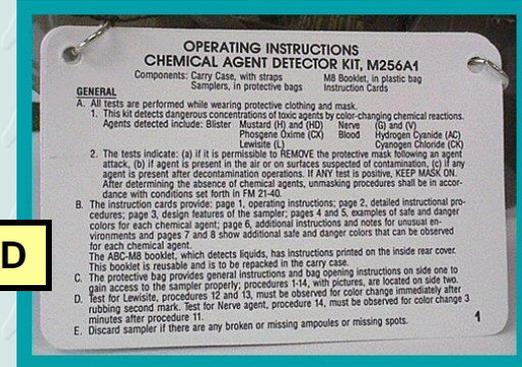


**COMPLETE KIT**



**DETECTOR CARDS**

**INSTRUCTION CARD**

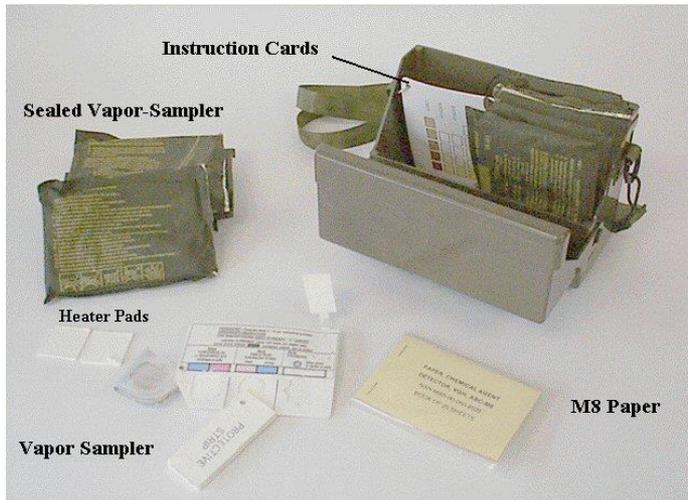
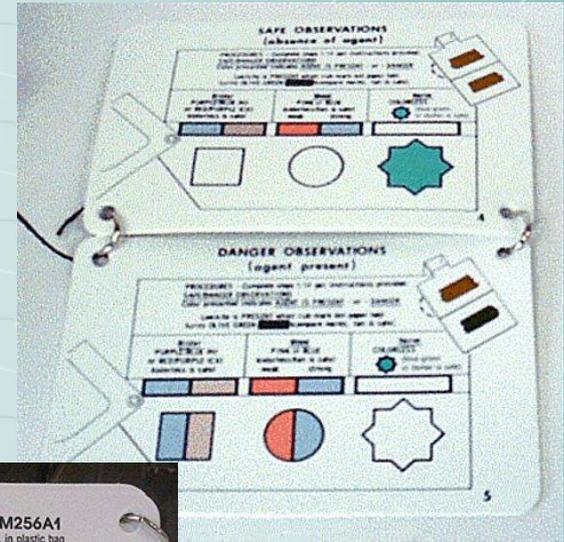


1.1.11

# Field Testing & Detection

## (Color Change Analysis – Non-Electronic)

### Test Card – Similar to M256A1 Detector Kit and Card but for Training Only



**OPERATING INSTRUCTIONS**  
**CHEMICAL AGENT DETECTOR KIT, M256A1**  
 Components: Carry Case, with straps      M8 Booklet, in plastic bag  
                   Samplers, in protective bags      Instruction Cards

**GENERAL**

A. All tests are performed while wearing protective clothing and mask.

1. This kit detects dangerous concentrations of toxic agents by color-changing chemical reactions. Agents detected include: Blister      Mustard (H) and (HD)      Nerve (G) and (V)  
    Phosgene Oxime (CX)      Blood      Hydrogen Cyanide (AC)  
    Lewisite (L)      Cyanogen Chloride (CK)

2. The tests indicate: (a) if it is permissible to REMOVE the protective mask following an agent attack, (b) if agent is present in the air or on surfaces suspected of contamination, (c) if any agent is present after decontamination operations. If ANY test is positive, KEEP MASK ON. After determining the absence of chemical agents, unmasking procedures shall be in accordance with conditions set forth in FM 21-40.

B. The instruction cards provide: page 1, operating instructions; page 2, detailed instructional procedures; page 3, design features of the samplers; pages 4 and 5, examples of safe and danger colors for each chemical agent; page 6, additional instructions and notes for unusual environments and pages 7 and 8 show additional safe and danger colors that can be observed for each chemical agent.

C. The ABC-M8 booklet, which detects liquids, has instructions printed on the inside rear cover. This booklet is reusable and is to be repacked in the carry case.

D. The protective bag provides general instructions and bag opening instructions on side one to gain access to the sampler properly; procedures 1-14, with pictures, are located on side two.

D. Test for Lewisite, procedures 12 and 13, must be observed for color change immediately after rubbing second mark. Test for Nerve agent, procedure 14, must be observed for color change 3 minutes after procedure 11.

E. Discard sampler if there are any broken or missing ampoules or missing spots.

# Field Testing & Detection

(Qualitative Analysis, Kits – Non-Electronic)

## Industrial Chemicals, Knowns and Unknowns

1.2.1

Abbreviated TEST KIT, for  
KNOWN LIQUIDS,  
POWDERS, SOLIDS,  
MIXTURES

1.2.2

Full Function TEST KIT,  
for UNKNOWN  
LIQUIDS, POWDERS,  
SOLIDS, MIXTURES



# Field Testing & Detection

(Qualitative Analysis, Kits – Non-Electronic)

## PCB CHEMICALS, Test Kits



**RANGE of DETECTION is 20 ppm to 500 ppm DEPENDING ON KIT**

**1.2.3**

# Field Testing & Detection

(Qualitative Analysis, Kits – Non-Electronic)

## WMD, Water Test Kit, Military M272



WATER TEST KIT M272 or M273

# Field Testing & Detection

(Qualitative Analysis, Kits – Non-Electronic)

**WMD, Chemical Agent, Military M18A3**



**CHEMICAL AGENT TEST KIT M18A2 or M18A3**

**1.2.9**

# Field Testing & Detection

(Qualitative Analysis, Kits - Electronic)

## **SYSTEM: Gas Chromatograph**

TYPE 1 TEAM NEEDS  
ONE COMPLETE KIT OF EITHER:

Example  
of Item  
1.3.1



1.3.1

# Field Testing & Detection

(Qualitative Analysis, Kits - Electronic)

## SYSTEM: Mass Spectrometry

TYPE 1 TEAM NEEDS  
ONE COMPLETE KIT OF EITHER:

Example  
of Item  
1.3.2



1.3.2

# Field Testing & Detection

(Qualitative Analysis, Kits - Electronic)

## SYSTEM: Infra-Red Spectroscopy

TYPE 1 TEAM NEEDS  
ONE COMPLETE KIT OF EITHER:



Example  
of Item  
1.3.3



1.3.3



# Field Testing & Detection

(Colorimetric Analysis, Non-Electronic)

## COLORIMETRIC KIT, Basic

TYPE 1 & 2 TEAMS NEED ONE COMPLETE KIT OF EITHER:  
(1.4.1; 1.4.2; or 1.4.3)



MSA "HazMat" Basic Kit



DRAGER Basic Kit



Kit 1.4.2

Or

Kit 1.4.3

Over 80 Tube Varieties



SENSIDYNE Basic Kit



MATHESON Basic Kit

1.4.1

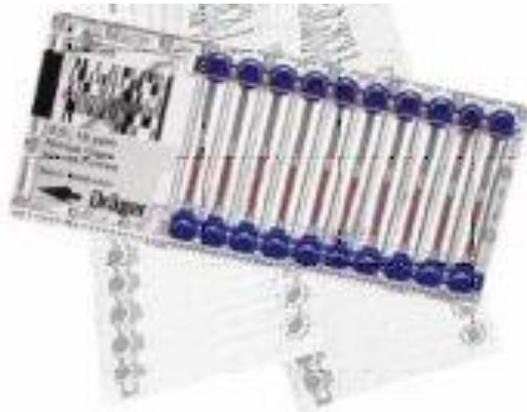


# Field Testing & Detection

## (Colorimetric Analysis, Non-Electronic)

### COLORIMETRIC KIT, Chip

TYPE 1 & 2 TEAMS NEED ONE COMPLETE KIT OF EITHER:  
(1.4.1; 1.4.2; or 1.4.3)



CMS Tube Chips



DRAGER CMS Analyzer



DRAGER CMS Chip Kit Complete

1.4.2



# Field Testing & Detection

## (Colorimetric Analysis, Non-Electronic)

### COLORIMETRIC KIT, Multi-Sensing

TYPE 1 & 2 TEAMS NEED ONE  
COMPLETE KIT OF EITHER:  
(1.4.1; 1.4.2; or 1.4.3)



Typical Multi-Tube  
Pak



DRAGER Multi-Sensing Kit

1.4.3



# Field Testing & Detection (Colorimetric Analysis, Non-Electronic)

## Colorimetric Kit, WMD Special

Matrix Card  
Dräger CDS Kit

| Chemical Warfare Agent  | Dräger Tube  |
|---|--|
| <b>Nerve Agents</b><br>Sarin (GB)<br>Tabun (GA)<br>Soman (GD)<br>DFP<br>VX<br>Methylphosphonate (GDGP)                    | Phosphoric Acid Esters   |
| <b>Blister Agents</b><br>L-Lox (HN, H, HD, S-Mustard)<br>D-Lox (HN, N, Mustard)<br>N-Lox (HN, N, Mustard)<br>Lewisite (L) | Thioether (Diphenyl Mustard)<br>Organic Sulfur Nitrogen Compounds<br>Organic Arsenic Compounds and Arsenic |
| <b>Leak Agents</b><br>Phosphine (CG)  | Phosphine  |
| <b>Boat Agents</b><br>Hydrogen Cyanide (HC)<br>Cyanogen Chloride (CK)<br>Hydrogen Arsenide                                | Hydrocyanic Acid<br>Cyanogen Chloride<br>Organic Arsenic Compounds and Arsenic                             |
| <b>Nose and Throat Irritants</b><br>Chlorine (CK)<br>Chlorine Dioxide (CD)<br>Adamsite (CA)                               | Organic Arsenic Compounds and Arsenic  |

CDS - Simultaneous Test Set V 81 03 200 Dräger

**Ambient Conditions**  
 - Temperature: 5 °C to 30 °C  
 - Humidity: 5 to 15 mg H<sub>2</sub>O / liter  
 Measurement outside the given temperature and humidity ranges may affect sensitivities. Water-aerosols can produce minus errors.

**Measurement Procedure**

- Open the tubes.
- Before beginning the test, remove the Cyanogen Chloride Tube (1) from the holder. Open the reagent ampoule by bending the tubes to approx. 45° (at the spot between the two black dots). Allow the ampoule fluid to flow onto the indicator layer until it is completely moistened. Again tightly place the tubes in the holder and adapter. Arrow should point toward the pump.
- Draw the air sample through the tube with 50 strokes.

**Reading Evaluation**  
 After 90 pump strokes, take the Phosphoric Acid Ester tube (No. 6) out of the holder. Open the reagent ampoule by bending the tube by approx. 45° (at the spot between the two black dots). Shake the liquid from the ampoule onto the first white layer until it is completely moistened. The second white layer should not be moistened in this process. Wait for 1 minute. Using the pump, carefully suck the liquid onto the second white layer up to the marking line in front of the yellow indicating layer. The yellow layer should not be moistened in this process. Wait for 1 minute. Again using the pump, draw the liquid onto the indicating layer. Measuring range: 0.025 ppm dichlorovos. Evaluation: if the indicating layer turns red and the discoloration remains stable for 1 minute, phosphoric acid ester is present.

After completing the 50 strokes, remove the Thioether tube (No. 2) from the holding device. Bend the Thioether tube at the point between the two dots so that internal reagent ampoule breaks. Shake the tube to distribute the reagent solution onto the yellow indicating layer. Evaluation: orange ring on the yellow indicating layer means Thioether is present.

| Substance                   | Color Change  | Sensitivity                         |
|-----------------------------|---|-------------------------------------|
| Cyanogen Chloride           | white → pink (at 0.25 ppm the indicating layer has the same color as companion layer) | 0.25 ppm                            |
| Thioether                   | yellow → orange   | 1 mg/m <sup>3</sup>                 |
| Phosphine                   | white → blue green  | 0.2 ppm (approx. 20 ppm pale green) |
| Chlorine (Cl <sub>2</sub> ) | white → yellow - orange   | 0.2 ppm                             |
| Phosphoric Acid Ester       | yellow → red  | 0.025 ppm Dichlorovos               |

**Unused Tube**

**Used Tube**

Dräger Safety, Inc.  
 101 Technology Drive  
 Pittsburgh, PA 15275  
 Tel: (412) 787-8363  
 Fax: (412) 787-2207  
 Customer Service:  
 1-800-922-5818  
 Fax: 1-800-922-5819  
 www.dragerusa.com



Dräger "HazMat Emergency Response" Kit #4056098

**COMPLETE KIT**

**KIT MUST INCLUDE FLOW CHART and INSTRUCTIONS**

1.4.4

# Field Testing & Detection (WMD Biological Detection)

## #1.5.1 NON-AGENT SPECIFIC

- *Anti-Body Test Strips or Card (---)*

**TYPE 1 TEAM Needs One Complete Kit of Either Type. Notation in ( ) Indicate Reliability**



(---)

## #1.5.2 AGENT SPECIFIC, With Reader

- *Protein Fluorescence (+)*
- *Immuno-Assay (++)*
- *PCR (Polymerase Chain Reaction (+++))*
- *DNA Replication (+++)*

(+)



(++)



(+++)



TYPICAL READER

# 1.5.1 & 1.5.2

# Air Monitoring

## (Confined Space Monitoring)

### Confined Space OSHA Standard (Four Gas)

Technologies:  
CGI, FID, PID



2.1.1



# Air Monitoring

## (Toxic Gas Multi - Monitoring)

### TIC and VOC Detection

**NOTE :** Some Devices Might Also Include Aromatic Hydrocarbon (Benzene Ring) and is acceptable for Item # 2.2.2



**2.2.1**

# Air Monitoring (Aromatic Hydrocarbons)

## Benzene and Cyclo-Hydrocarbons



2.2.2

# Air Monitoring (Aromatic Hydrocarbons)

**Calibration Kit(s): for Items #2.1.1 & 2.2.2  
(Toxic & Aromatic Hydrocarbon)**



**2.2.4**



# Air Monitoring

## (Specialty Gas Capabilities)

### Ammonia

**NOTE:** One device may detect two or more Specialty Gases if certified to do so. (# 2.3.1, 2.3.2, 2.3.3, 2.3.4)



2.3.1

# Air Monitoring

## (Specialty Gas Capabilities)

### Freons and Derivative Refrigerants

**NOTE:** One device may detect two or more Specialty Gases if certified to do so. (# 2.3.1, 2.3.2, 2.3.3, 2.3.4)



**2.3.2**

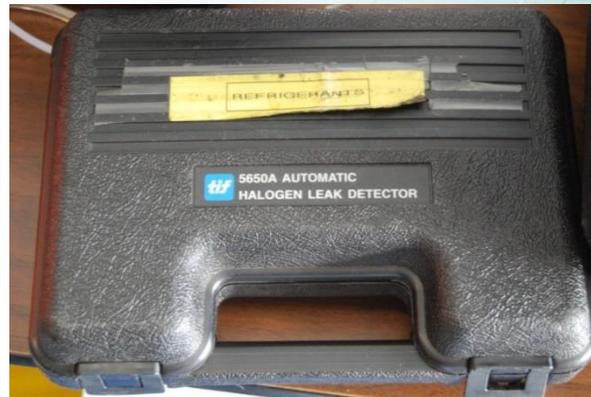
# Air Monitoring (Specialty Gas Capabilities)

## Halogen Gases

**NOTE:** One device may detect two or more Specialty Gases if certified to do so. (# 2.3.1, 2.3.2, 2.3.3, 2.3.4)



Chlorine is Required,  
other Halogen Gases  
Optional



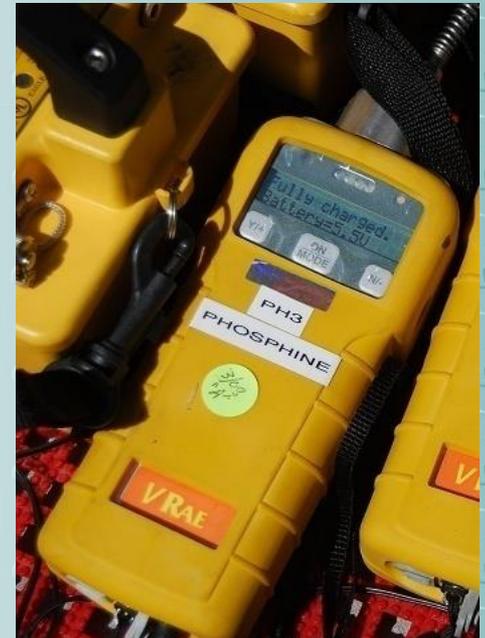
2.3.3

# Air Monitoring

## (Specialty Gas Capabilities)

### Phosphine

**NOTE:** One device may detect two or more Specialty Gases if certified to do so. (# 2.3.1, 2.3.2, 2.3.3, 2.3.4)



2.3.4

# Air Monitoring (Specialty Gas Capabilities)

**Calibration Kit: for Item #2.3.1, 2.3.2, 2.3.3, & 2.3.4  
(Specialty Gases)**



**2.3.16**



# Air Monitoring (WMD Chemical Dedicated Instruments)

## Nerve Agents Detection



|                  | NERVE AGENTS | BLISTER AGENTS | LEWISITE | BLOOD AGENTS | CHOKING AGENTS | INCAPACITATING | TIC's | VX | Vx | SO <sub>2</sub> | CL <sub>2</sub> | NH <sub>3</sub> | HNO <sub>2</sub> | HF | RDX | TNT | PETN | SEMTEX | TATP | Ammonium Nitrate | COCAINE | HEROIN | THC | METHAMPHETAMINE | GAARMA |
|------------------|--------------|----------------|----------|--------------|----------------|----------------|-------|----|----|-----------------|-----------------|-----------------|------------------|----|-----|-----|------|--------|------|------------------|---------|--------|-----|-----------------|--------|
| AP4C             | ●            | ●              | ●        | ●            | ●              | ●              | ●     | ●  | ●  | ●               | ●               | ●               |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| APD 2000         | ●            | ●              | ●        |              |                | ●              |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| CAM              | ●            | ●              |          | ●            | ●              |                |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| CAM FAM          | ●            | ●              |          | ●            | ●              |                |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| E-CAM            | ●            | ●              |          | ●            | ●              |                | ●     |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| HAZMATCAD        | ●            | ●              |          | ●            | ●              |                |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| HGVI             | ●            | ●              |          | ●            | ●              |                | ●     |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     | ●               |        |
| J-CAD ChemSentry | ●            | ●              |          | ●            |                |                |       |    | P  | O               | O               | R               | C                | H  | O   | I   | C    | E      |      |                  |         |        |     |                 |        |
| LCD 3.2E         | ●            | ●              |          | ●            | ●              |                | ●     |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| LCD FR           | ●            | ●              |          | ●            | ●              |                | ●     |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| RAE chemRAE      | ●            | ●              |          | ●            |                |                |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| RAID-M           | ●            | ●              | ●        |              | ●              | ●              |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| SABRE FR         | ●            | ●              |          | ●            |                |                |       | ●  | ●  | ●               | ●               | ●               | ●                | ●  |     |     |      |        |      |                  |         |        |     |                 |        |
| SABRE 4000       | ●            | ●              |          | ●            | ●              |                |       | ●  | ●  |                 |                 |                 |                  |    |     | ●   | ●    | ●      | ●    | ●                | ●       | ●      | ●   | ●               | ●      |
| ChemPro100i      | ●            | ●              | ●        | ●            | ●              |                |       |    |    |                 |                 | ●               | ●                |    |     |     |      |        |      |                  |         |        |     |                 |        |

2.4.1



# Air Monitoring (WMD Chemical Dedicated Instruments)

## Blister Agent, Mustards



|                  | NERVE AGENTS | BLISTER AGENTS | LEWISITE | BLOOD AGENTS | CHOKING AGENTS | INCAPACITATING | TIC's | VX | Vx | SO <sub>2</sub> | CL <sub>2</sub> | NH <sub>3</sub> | HNO <sub>2</sub> | HF | RDX | TNT | PETN | SEMTEX | TATP | Ammonium Nitrate | COCAINE | HEROIN | THC | METHAMPHETAMINE | GAARMA |
|------------------|--------------|----------------|----------|--------------|----------------|----------------|-------|----|----|-----------------|-----------------|-----------------|------------------|----|-----|-----|------|--------|------|------------------|---------|--------|-----|-----------------|--------|
| AP4C             | ●            | ●              | ●        | ●            | ●              | ●              | ●     | ●  | ●  | ●               | ●               | ●               |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| APD 2000         | ●            | ●              | ●        |              |                | ●              |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| CAM              | ●            | ●              |          | ●            | ●              |                |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| CAM FAM          | ●            | ●              |          | ●            | ●              |                |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| E-CAM            | ●            | ●              |          | ●            | ●              |                | ●     |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| HAZMATCAD        | ●            | ●              |          | ●            | ●              |                |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| HGVI             | ●            | ●              |          | ●            | ●              |                | ●     |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     | ●               |        |
| J-CAD ChemSentry | ●            | ●              |          | ●            |                |                |       |    | P  | O               | O               | R               | C                | H  | O   | I   | C    | E      |      |                  |         |        |     |                 |        |
| LCD 3.2E         | ●            | ●              |          | ●            | ●              |                | ●     |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| LCD FR           | ●            | ●              |          | ●            | ●              |                | ●     |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| RAE chemRAE      | ●            | ●              |          | ●            |                |                |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| RAID-M           | ●            | ●              | ●        |              | ●              | ●              |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| SABRE FR         |              |                |          | ●            |                |                |       | ●  | ●  | ●               | ●               | ●               | ●                | ●  |     |     |      |        |      |                  |         |        |     |                 |        |
| SABRE 4000       | ●            | ●              |          | ●            | ●              |                |       | ●  | ●  |                 |                 |                 |                  |    |     | ●   | ●    | ●      | ●    | ●                | ●       | ●      | ●   | ●               | ●      |
| ChemPro100i      | ●            | ●              | ●        | ●            | ●              |                |       |    |    |                 |                 | ●               | ●                |    |     |     |      |        |      |                  |         |        |     |                 |        |

2.4.2



# Air Monitoring (WMD Chemical Dedicated Instruments)

## Blister Agent, Lewisite



|                  | NERVE AGENTS | BLISTER AGENTS | LEWISITE | BLOOD AGENTS | CHOKING AGENTS | INCAPACITATING | TIC's | VX | Vx | SO <sub>2</sub> | CL <sub>2</sub> | NH <sub>3</sub> | HNO <sub>2</sub> | HF | RDX | TNT | PETN | SEMTEX | TATP | Ammonium Nitrate | COCAINE | HEROIN | THC | METHAMPHETAMINE | GAASIA |
|------------------|--------------|----------------|----------|--------------|----------------|----------------|-------|----|----|-----------------|-----------------|-----------------|------------------|----|-----|-----|------|--------|------|------------------|---------|--------|-----|-----------------|--------|
| AP4C             | ●            | ●              | ●        | ●            | ●              | ●              | ●     | ●  | ●  | ●               | ●               | ●               |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| APD 2000         | ●            | ●              | ●        |              |                | ●              |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| CAM              | ●            | ●              |          | ●            | ●              |                |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| CAM FAM          | ●            | ●              |          | ●            | ●              |                |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| E-CAM            | ●            | ●              |          | ●            | ●              |                | ●     |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| HAZMATCAD        | ●            | ●              |          | ●            | ●              |                |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| HGVI             | ●            | ●              |          | ●            | ●              |                | ●     |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     | ●               |        |
| J-CAD ChemSentry | ●            | ●              |          | ●            |                |                |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| LCD 3.2E         | ●            | ●              |          | ●            | ●              |                | ●     |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| LCD FR           | ●            | ●              |          | ●            | ●              |                | ●     |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| RAE chemRAE      | ●            | ●              |          | ●            |                |                |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| RAID-M           | ●            | ●              | ●        |              | ●              | ●              |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| SABRE FR         | ●            | ●              |          | ●            |                |                |       | ●  | ●  | ●               | ●               | ●               | ●                | ●  |     |     |      |        |      |                  |         |        |     |                 |        |
| SABRE 4000       | ●            | ●              |          | ●            | ●              |                |       | ●  | ●  |                 |                 |                 |                  |    |     | ●   | ●    | ●      | ●    | ●                | ●       | ●      | ●   | ●               | ●      |
| ChemPro100i      | ●            | ●              | ●        | ●            | ●              |                |       |    |    |                 |                 | ●               | ●                |    |     |     |      |        |      |                  |         |        |     |                 |        |

2.4.3



# Air Monitoring (WMD Chemical Dedicated Instruments)

## Blood Agents



2.4.4

↓

|                  | NERVE AGENTS | BLISTER AGENTS | LEWISITE | BLOOD AGENTS | CHOKING AGENTS | INCAPACITATING | TIC's | VX | Vx | SO <sub>2</sub> | CL <sub>2</sub> | NH <sub>3</sub> | HNO <sub>2</sub> | HF | RDX | TNT | PETN | SEMTEX | TATP | Ammonium Nitrate | COCAINE | HEROIN | THC | METHAMPHETAMINE | GAARMA |   |
|------------------|--------------|----------------|----------|--------------|----------------|----------------|-------|----|----|-----------------|-----------------|-----------------|------------------|----|-----|-----|------|--------|------|------------------|---------|--------|-----|-----------------|--------|---|
| AP4C             | ●            | ●              | ●        | ●            | ●              | ●              | ●     | ●  | ●  | ●               | ●               | ●               |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |   |
| APD 2000         | ●            | ●              | ●        |              |                | ●              |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |   |
| CAM              | ●            | ●              | ●        | ●            | ●              |                |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |   |
| CAM FAM          | ●            | ●              | ●        | ●            | ●              |                |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |   |
| E-CAM            | ●            | ●              | ●        | ●            | ●              |                | ●     |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |   |
| HAZMATCAD        | ●            | ●              | ●        | ●            | ●              |                |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |   |
| HGVI             | ●            | ●              | ●        | ●            | ●              |                | ●     |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 | ●      |   |
| J-CAD ChemSentry | ●            | ●              | ●        | ●            | ●              |                |       |    | P  | O               | O               | R               | C                | H  | O   | I   | C    | E      |      |                  |         |        |     |                 |        |   |
| LCD 3.2E         | ●            | ●              | ●        | ●            | ●              |                | ●     |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |   |
| LCD FR           | ●            | ●              | ●        | ●            | ●              |                | ●     |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |   |
| RAE chemRAE      | ●            | ●              | ●        | ●            | ●              |                |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |   |
| RAID-M           | ●            | ●              | ●        | ●            | ●              |                |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |   |
| SABRE FR         | ●            | ●              | ●        | ●            | ●              |                |       | ●  | ●  | ●               | ●               | ●               | ●                | ●  |     |     |      |        |      |                  |         |        |     |                 |        |   |
| SABRE 4000       | ●            | ●              | ●        | ●            | ●              |                |       | ●  | ●  |                 |                 |                 |                  |    |     | ●   | ●    | ●      | ●    | ●                | ●       | ●      | ●   | ●               | ●      | ● |
| ChemPro100i      | ●            | ●              | ●        | ●            | ●              |                |       |    |    |                 |                 | ●               | ●                |    |     |     |      |        |      |                  |         |        |     |                 |        |   |



# Air Monitoring (WMD Chemical Dedicated Instruments)

## Choking/Vomiting Agents



|                  | NERVE AGENTS | BLISTER AGENTS | LEWISITE | BLOOD AGENTS | CHOKING AGENTS | INCAPACITATING | TIC's | VX | Vx | SO <sub>2</sub> | CL <sub>2</sub> | NH <sub>3</sub> | HNO <sub>2</sub> | HF | RDX | TNT | PETN | SEMTEX | TATP | Ammonium Nitrate | COCAINE | HEROIN | THC | METHAMPHETAMINE | GAARMA |
|------------------|--------------|----------------|----------|--------------|----------------|----------------|-------|----|----|-----------------|-----------------|-----------------|------------------|----|-----|-----|------|--------|------|------------------|---------|--------|-----|-----------------|--------|
| AP4C             | ●            | ●              | ●        | ●            | ●              | ●              | ●     | ●  | ●  | ●               | ●               | ●               |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| APD 2000         | ●            | ●              | ●        |              |                | ●              |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| CAM              | ●            | ●              | ●        | ●            | ●              |                |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| CAM FAM          | ●            | ●              | ●        | ●            | ●              |                |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| E-CAM            | ●            | ●              | ●        | ●            | ●              |                | ●     |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| HAZMATCAD        | ●            | ●              | ●        | ●            | ●              |                |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| HGVI             | ●            | ●              | ●        | ●            | ●              |                | ●     |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     | ●               |        |
| J-CAD ChemSentry | ●            | ●              | ●        | ●            | ●              |                |       |    | P  | O               | O               | R               | C                | H  | O   | I   | C    | E      |      |                  |         |        |     |                 |        |
| LCD 3.2E         | ●            | ●              | ●        | ●            | ●              |                | ●     |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| LCD FR           | ●            | ●              | ●        | ●            | ●              |                | ●     |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| RAE chemRAE      | ●            | ●              | ●        | ●            | ●              |                |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| RAID-M           | ●            | ●              | ●        | ●            | ●              | ●              |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |
| SABRE FR         | ●            | ●              | ●        | ●            | ●              |                |       | ●  | ●  | ●               | ●               | ●               | ●                | ●  | ●   |     |      |        |      |                  |         |        |     |                 |        |
| SABRE 4000       | ●            | ●              | ●        | ●            | ●              |                |       | ●  | ●  |                 |                 |                 |                  |    |     | ●   | ●    | ●      | ●    | ●                | ●       | ●      | ●   | ●               | ●      |
| ChemPro100i      | ●            | ●              | ●        | ●            | ●              |                |       |    |    |                 |                 | ●               | ●                |    |     |     |      |        |      |                  |         |        |     |                 |        |

2.4.5



# Air Monitoring (WMD Chemical Dedicated Instruments)

## Incapacitating Agents



|                  | NERVE AGENTS | BLISTER AGENTS | LEWISITE | BLOOD AGENTS | CHOKING AGENTS | INCAPACITATING | TIC's | VX | Vx | SO <sub>2</sub> | CL <sub>2</sub> | NH <sub>3</sub> | HNO <sub>2</sub> | HF | RDX | TNT | PETN | SEMTEX | TATP | Ammonium Nitrate | COCAINE | HEROIN | THC | METHAMPHETAMINE | GAASIA |   |
|------------------|--------------|----------------|----------|--------------|----------------|----------------|-------|----|----|-----------------|-----------------|-----------------|------------------|----|-----|-----|------|--------|------|------------------|---------|--------|-----|-----------------|--------|---|
| AP4C             | ●            | ●              | ●        | ●            | ●              | ●              | ●     | ●  | ●  | ●               | ●               | ●               |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |   |
| APD 2000         | ●            | ●              | ●        |              |                | ●              |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |   |
| CAM              | ●            | ●              |          | ●            | ●              |                |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |   |
| CAM FAM          | ●            | ●              |          | ●            | ●              |                |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |   |
| E-CAM            | ●            | ●              |          | ●            | ●              |                | ●     |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |   |
| HAZMATCAD        | ●            | ●              |          | ●            | ●              |                |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |   |
| HGVI             | ●            | ●              |          | ●            | ●              |                |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 | ●      |   |
| J-CAD ChemSentry | ●            | ●              |          | ●            |                |                |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |   |
| LCD 3.2E         | ●            | ●              |          | ●            | ●              |                | ●     |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |   |
| LCD FR           | ●            | ●              |          | ●            | ●              |                | ●     |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |   |
| RAE chemRAE      | ●            | ●              |          | ●            |                |                |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |   |
| RAID-M           | ●            | ●              | ●        |              | ●              | ●              |       |    |    |                 |                 |                 |                  |    |     |     |      |        |      |                  |         |        |     |                 |        |   |
| SABRE FR         | ●            | ●              |          | ●            |                |                |       | ●  | ●  | ●               | ●               | ●               | ●                | ●  |     |     |      |        |      |                  |         |        |     |                 |        |   |
| SABRE 4000       | ●            | ●              |          | ●            | ●              |                |       | ●  | ●  |                 |                 |                 |                  |    |     | ●   | ●    | ●      | ●    | ●                | ●       | ●      | ●   | ●               | ●      | ● |
| ChemPro100i      | ●            | ●              | ●        | ●            | ●              |                |       |    |    |                 |                 | ●               | ●                |    |     |     |      |        |      |                  |         |        |     |                 |        |   |

2.4.6



# Air Monitoring

## (WMD Chemical Dedicated Instruments)

### Calibration Kit(s):

(Items 2.4.1, 2.4.2, 2.4.3, 2.4.4, 2.4.5 & 2.4.6)

(WMD Chemical Dedicated Instruments)



2.4.7

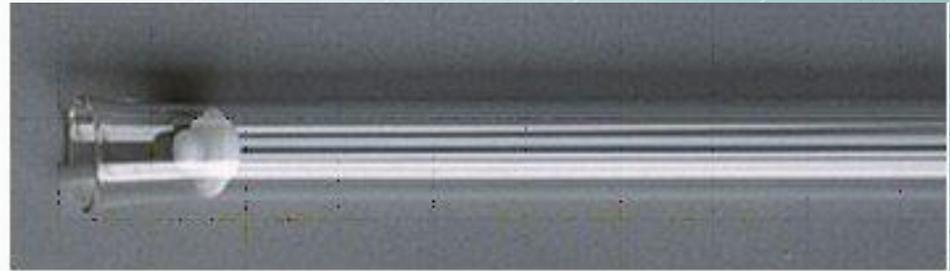


# Sampling

## (Substance Capture and Bulk Transfer)

### COLIWASA TUBES

(Disposable)



COLIWASA TUBES, 39" to 43" long  
Disposable Glass or Clear Plastic, Single Use



PLASTIC

3.1.1

# Sampling

## (Substance Capture and Bulk Transfer)

### COLIWASA TUBES

(Re-Usable)

Can Be Selected In Lieu of  
Item # 3.1.1



COLIWASA TUBES, 39" to 43" long  
Teflon, Multi-Use



3.1.2

# Sampling

(Substance Capture and Bulk Transfer)

**PIPETTES, Transfer**  
(Plastic, Small 5 to 8 ml)



**OR**

**PIPETTE, Transfer**  
(Plastic, Large up to 22 ml)



**100 total – mix or match**

**3.1.5**

# Sampling

(Substance Capture and Bulk Transfer)

## OPTIONAL ITEM

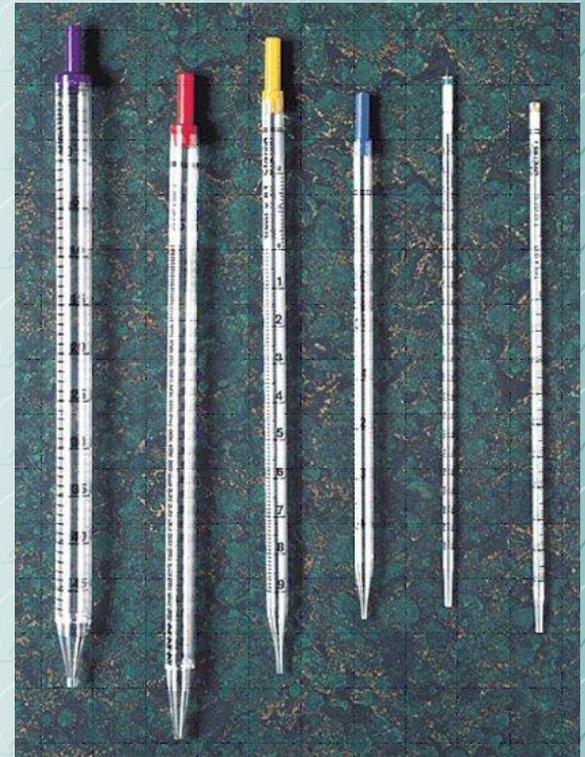
### PIPETTE, Transfer, Graduated (With Bulb)



Pipette Squeeze Bulbs or Fillers



Safety Pipet



Graduated Pipettes, Nominal 12" long, Glass or Plastic

3.1.7

# Sampling

(Substance Capture and Bulk Transfer)

**OPTIONAL ITEM**

**PIPETTE, Transfer, Graduated**

(Plunger Style)



**3.1.9 (Optional for Item # 3.1.6)**

# Sampling

(Substance Capture and Bulk Transfer)

## TEST TUBES, Disposable



**3.1.10**

# Sampling

## (Substance Capture and Bulk Transfer)

### SWAB, Sterile, Single Use

Single dry culture swab with polyester tip (not cotton) in polystyrene protective shaft.



Need Minimum of 6

**NOTE:** This “new” item took the place of the fibreglass cloth (rev. 2012)

3.1.11

# Sampling

(Substance Capture and Bulk Transfer)

**SPONGES, Sealed for surface swipe sample**

Need Minimum of 2



**3.1.12**



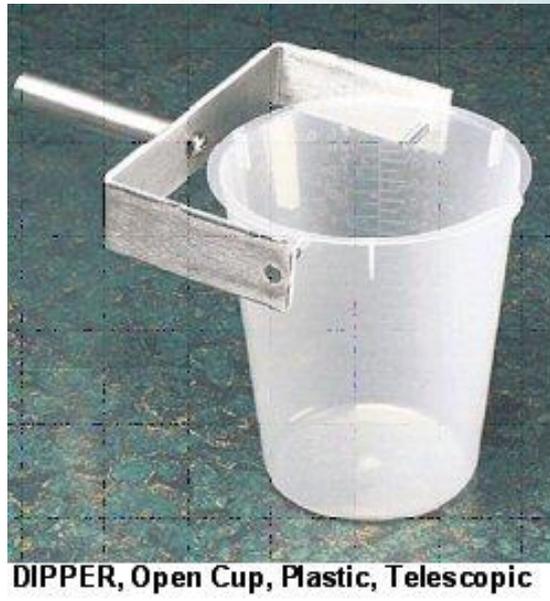
# Sampling

## (Substance Capture and Bulk Transfer)

### ENVIRONMENTAL DIPPER (Telescopic)



DIPPER, Grab-Sampler, Glass, Telescopic



DIPPER, Open Cup, Plastic, Telescopic



DIPPER, Telescopic to nominal 20' to 24'

3.1.15

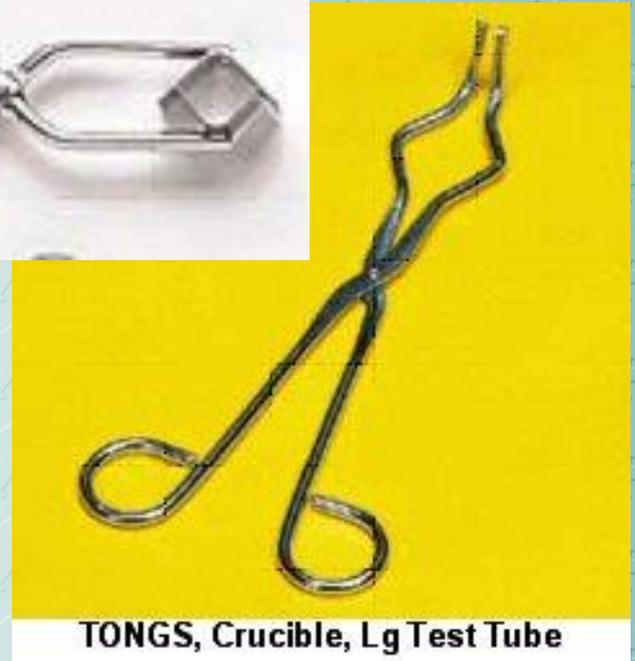
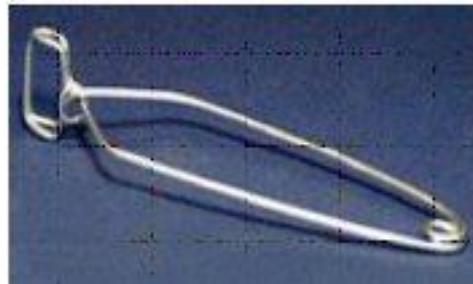
# Sampling

(Substance Capture and Bulk Transfer)

**TONGS, Beaker, or Crucible – Metal, PTFE Coated**



**TONGS, Test Tube**



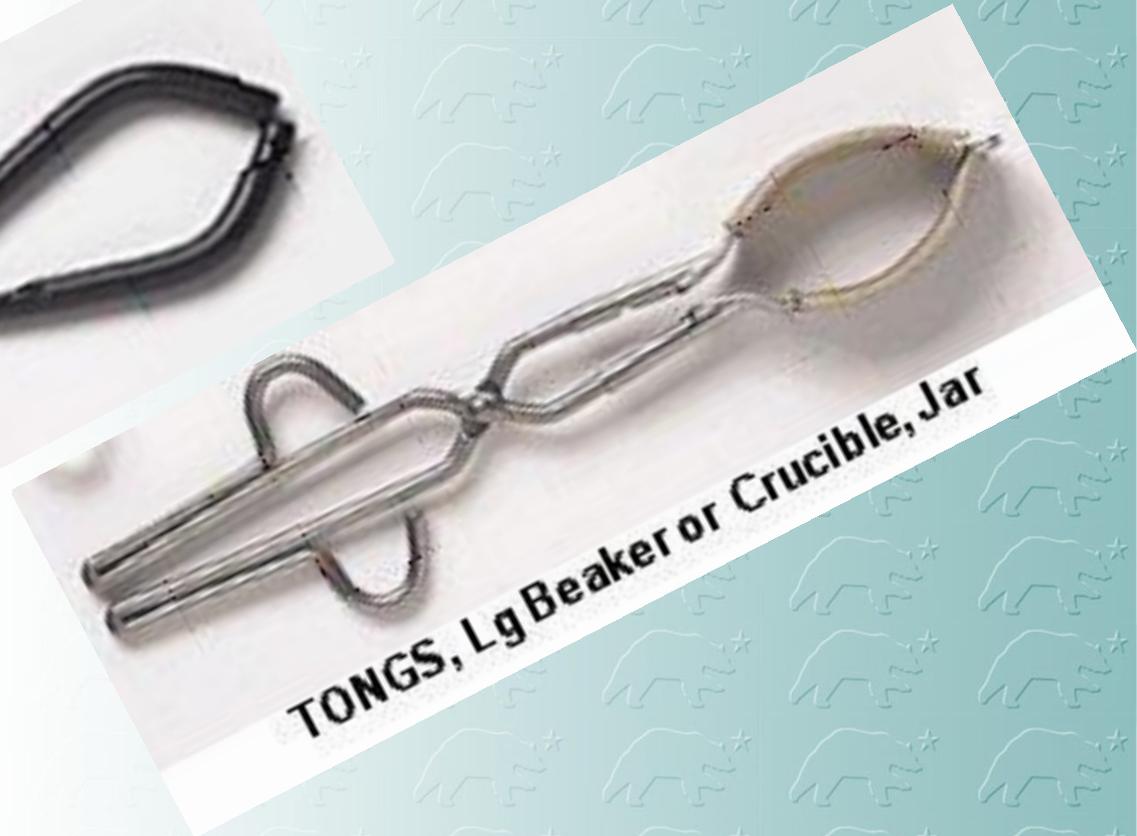
**TONGS, Crucible, Lg Test Tube**

**3.1.16**

# Sampling

(Substance Capture and Bulk Transfer)

**TONGS, Beaker, or Crucible – Metal, Plastic or Rubber Coated**



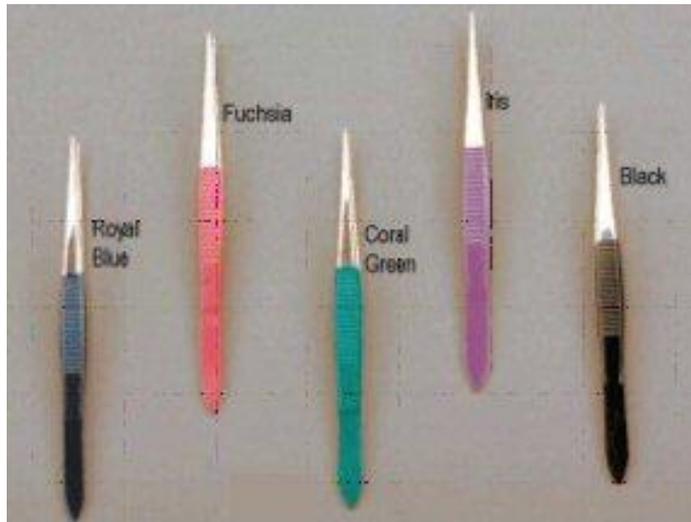
**TONGS, Lg Beaker or Crucible, Jar**

**3.1.17**

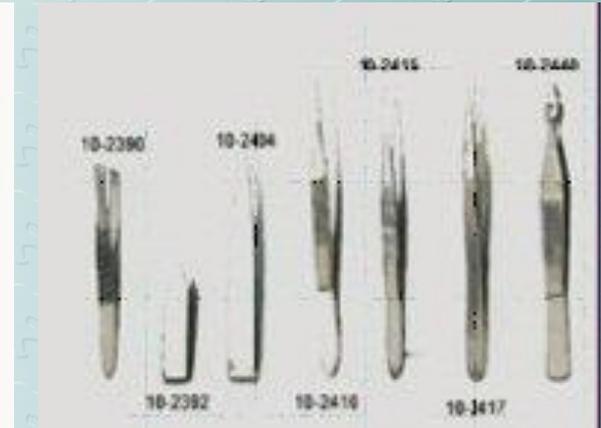
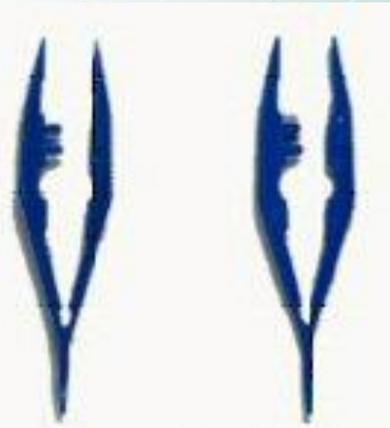
# Sampling

(Substance Capture and Bulk Transfer)

## FORCEPS



FORCEPS, Teflon Coated



3.1.19

# Sampling

(Substance Capture and Bulk Transfer)

## FUNNEL, Disposable or Reusable (Glass, Plastic, or Metal)



FUNNEL, DISPOSABLE, Glass



FUNNEL, DISPOSABLE, Plastic



FUNNELS, Chrome or Stainless Steel

3.1.20

# Sampling

(Substance Capture and Bulk Transfer)

## SPATULA, Sampling ("V" Shape)



3.1.24

## SPATULA, Sampling (Micro Sampling)



SPATULA, Micro, Sampling

3.1.25

# Sampling

(Substance Capture and Bulk Transfer)

**SPOONS, Plastic, disposable, long handle**

Must have total  
of 12

Representing all  
Four sizes

1/4 Teaspoon

1/2 Teaspoon

1 Teaspoon

1 Tablespoon



**3.1.26**



# Sampling

(Substance Capture and Bulk Transfer)

**SCOOPS: Need Only One of the Following Sizes**



**Small 2 oz. – Item 3.1.27**



**Medium 4 oz. – Item 3.1.28**



**Large 8 oz – Item 3.1.29**



**3.1.27 & 3.1.28 & 3.1.29**

# Sampling

## (Bulk Liquid Transfer - Mechanical)

**PUMP, Siphon, Drum**  
(Heavy Duty – Stainless Steel)

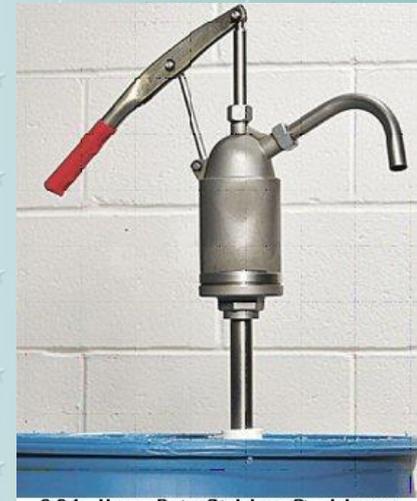
(Need – Only One of 3.2.1;  
3.2.2; or 3.2.3)



3.2.1 - Heavy Duty, Steel, Diaphragm

If electrically  
powered - - -  
**MUST** be UL  
Intrinsically Safe

Label **MUST**  
be attached



3.2.1 - Heavy Duty, Stainless Steel, Lever

**3.2.1**



# Sampling

## (Bulk Liquid Transfer - Mechanical)

### PUMP, Siphon, Drum

(Heavy Duty - PVC)

(Need – Only One of 3.2.1;  
3.2.2; or 3.2.3)



3.2.2 - Heavy Duty PVC and STEEL, Lever Action



3.2.2 - Heavy Duty, PVC, Piston

If electrically  
powered - - -  
**MUST** be UL  
Intrinsically Safe

Label **MUST**  
be attached

# 3.2.2



# Sampling

## (Bulk Liquid Transfer - Mechanical)

### **PUMP, Rotary, Transfer** (Metal)

(Need – Only One of 3.2.1;  
3.2.2; or 3.2.3)

If electrically  
powered - - -  
**MUST** be UL  
Intrinsically Safe

Label **MUST**  
be attached



3.2.3 - Heavy Duty, Metal, Rotary - for Petroleum Products

# 3.2.3



# Sampling

## (Bulk Liquid Transfer - Mechanical)

### Pump, Diaphragm (Hand or Foot Operated)



Diaphragm Pump, 15 GPM



3.2.7

# Sampling

## (Containerization, Labeling, Documentation)

**MUST MEET EPA CLEAN PROTOCOL "B"** (Also known as Class 2000)

I-CHEM Protocol "B" jars have blue or aqua blue Teflon lids

Thermo-Scientific "B" jars have white Teflon lids

**SAMPLE JARS, Sterile**  
**(Clear, 4 to 8 oz)**



Should **only be stored** in their original shipping box, as there is a quality-assurance lot number on the box. Each box also includes a **CERTIFICATE**, which **SHOULD NOT BE THROWN AWAY**

**SAMPLE JARS, Sterile**  
**(Amber, 4 to 8 oz)**



**3.3.2 & 3.3.4**

# Sampling

(Containerization, Labeling, Documentation)

**OPTIONAL ITEM (2016 SEL)**

**MUST MEET EPA CLEAN PROTOCOL "B"** (Also known as Class 2000)

I-CHEM Protocol "B" jars have blue or aqua blue Teflon lids

Thermo-Scientific "B" jars have white Teflon lids

**SAMPLE VIALS, Sterile**  
**(Clear)**



Should **only be stored** in their original shipping box, as there is a quality-assurance lot number on the box. Each box also includes a **CERTIFICATE**, which **SHOULD NOT BE THROWN AWAY**



VIAL, 1.3 oz



VIAL, 2.0 oz

**3.3.7**



# Sampling

(Containerization, Labeling, Documentation)

## STOPPERS, Conical

(Rubber, Neoprene, or Silicone)



3.3.8

# Sampling

(Containerization, Labeling, Documentation)

## BAGS, Plastic

(Zipper-Loc Type – Kit of 24 total of at least 3 different sizes)



SMALL – Nominal 3" x 3"



MEDIUM – Nominal 6" x 6"



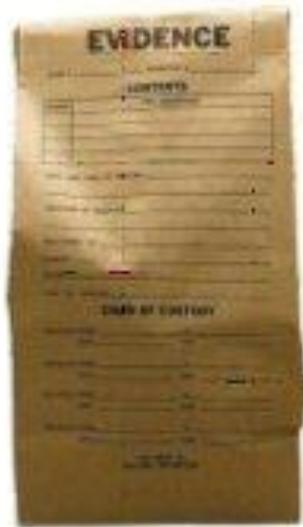
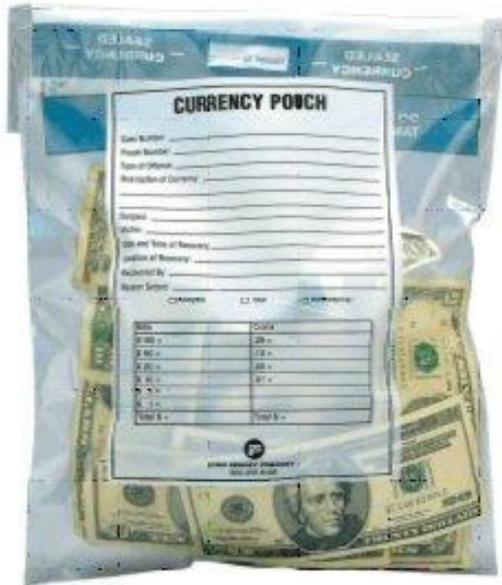
LARGE – Nominal 8" x 8"

3.3.9

# Sampling

(Containerization, Labeling, Documentation)

## BAGS, Evidence (Tamper-Proof)



3.3.10

# Sampling

## (Containerization, Labeling, Documentation)

### LABELS, Ordinary, Blank



AVERY Mailing Labels



FILE Labels



I-CHEM Labels

# Sampling

(Containerization, Labeling, Documentation)

**OPTIONAL ITEM**

**LABELS, NFPA Data, Blank**

PRODUCT IDENTIFIER



Substance Name \_\_\_\_\_  
MSDS # \_\_\_\_\_  
Remarks \_\_\_\_\_

REFER TO MATERIAL SAFETY DATA SHEET



CHEMICAL \_\_\_\_\_  
OWNER \_\_\_\_\_ DATE \_\_\_\_\_



Chemical Name \_\_\_\_\_  
Custom Text \_\_\_\_\_  
CAS# - \_\_\_\_\_

**THIS ITEM MEETS THE  
REQUIREMENTS FOR  
S.E.L. ITEM # 3.3.11**

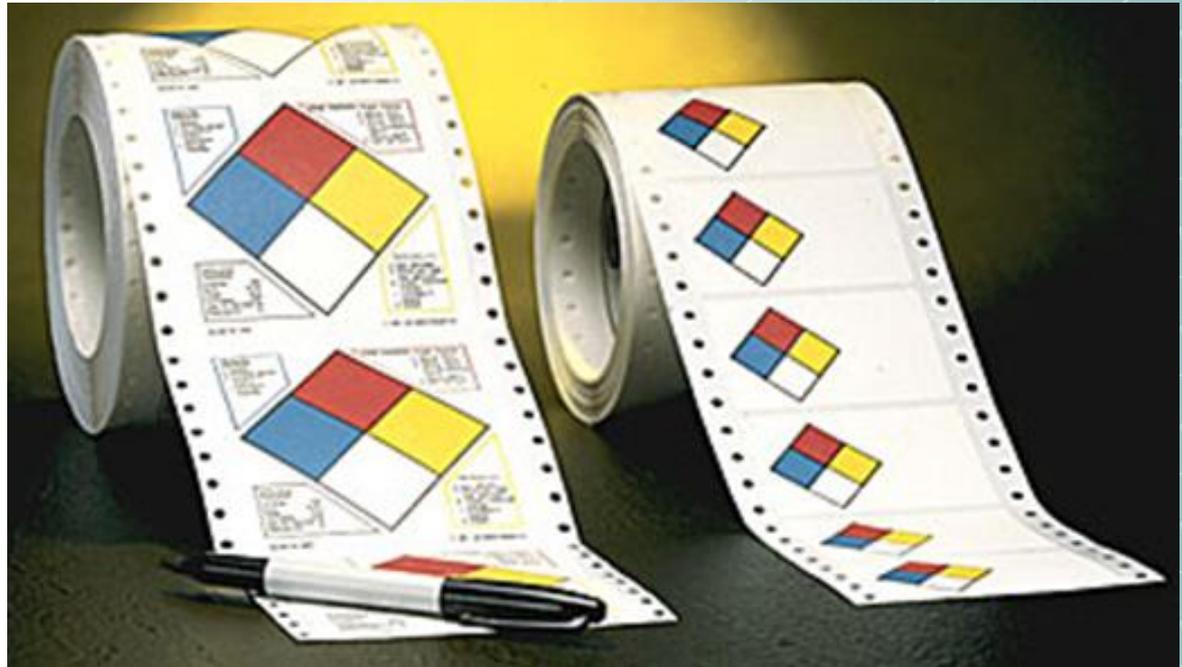
**3.3.12 (Optional for Item # 3.3.11)**

# Sampling

(Containerization, Labeling, Documentation)

**OPTIONAL ITEM**

**LABELS, NFPA Data, Rolls**



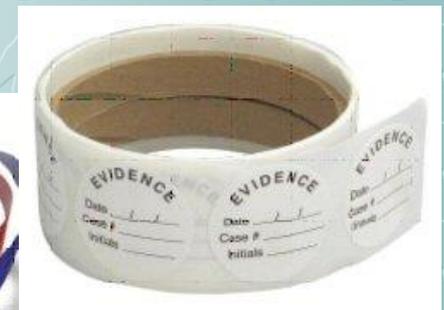
**THIS ITEM MEETS THE  
REQUIREMENTS FOR  
S.E.L. ITEM # 3.3.11**

**3.3.14 (Optional for Item # 3.3.11)**

# Sampling

(Containerization, Labeling, Documentation)

## LABELS, Evidence Seals



3.3.15

# Sampling

## (Containerization, Labeling, Documentation)

### PENS, Marking (Paint)



PENS, Paint, Permanent

3.3.16

# Sampling

(Containerization, Labeling, Documentation)

## PENS, Marking (Indelible)

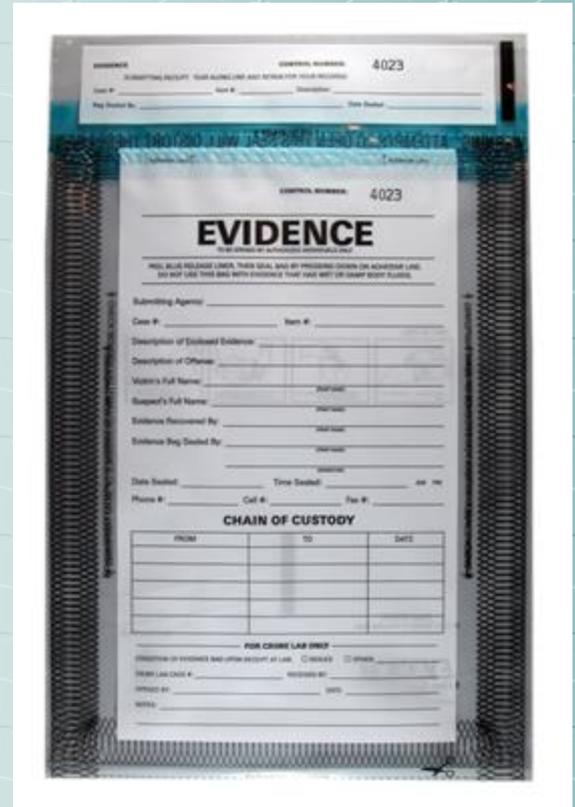
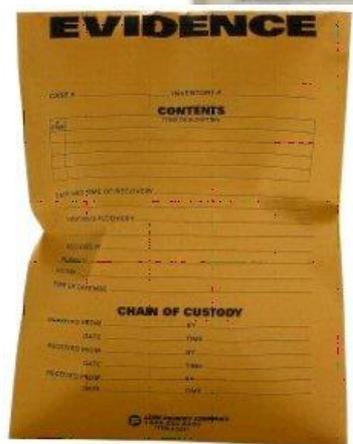


3.3.17

# Sampling

## (Containerization, Labeling, Documentation)

### FORMS, Chain of Evidence



3.3.18

# Sampling

(Photo, Assessment & Reconnaissance)

**CAMERA**, Instant Print Images, or  
Digital Technology Transferable to Computer To Be Printed



High End



Low End

**3.3.19 or 3.3.20**



# Sampling (Transportation)

## CONTAINER, Biological (Plastic)



### Infectious Substance Shipper

Saf-T-Pak STP-100 is a Packaging system which is suitable for safe, legal transport of any Infectious Substance by any mode.

The package bears certification markings for national and international shipment.

Conforms to ICAO Packing Instruction 602, Infectious Substances.

Conforms to United Nations Recommendations.

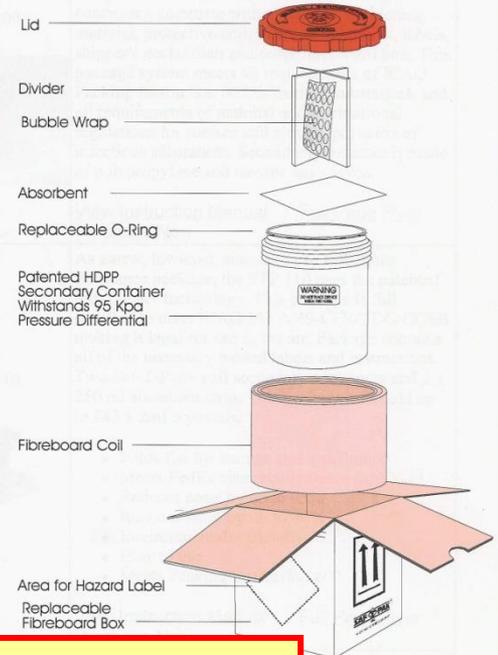
Conforms to CFR 49.

Conforms to Transport Canada TC-125-1A

The secondary container is made of polypropylene and may be autoclaved.

TC-125-1A/8-2

U 4G CLASS 6.2/97  
CAN/B-2 SAF-T-PAK



**Models STP 100 & 310**

3.4.1



# Radiation Monitoring / Detection

## (Gamma, Beta, and Alpha Detection & Survey)

### Item 4.1.1

Gamma Survey Capability

### Item 4.1.2

Beta Survey Capability

### Item 4.1.3

Alpha Survey Capability



4.1.1 & 4.1.2 & 4.1.3

# Radiation Monitoring/Detection

(Gamma, Beta, and Alpha Detection & Survey)

## OPTIONAL ITEM

### Combination Survey, All-In-One

(Alpha, Beta, Gamma)



THIS ITEM MEETS THE  
REQUIREMENTS FOR  
S.E.L. ITEMS  
# 4.1.1, 4.1.2, & 4.1.3

**4.1.5 (Optional for Items # 4.1.1, 4.1.2, & 4.1.3)**

# Radiation Monitoring / Detection

## (Radionuclide Detection)

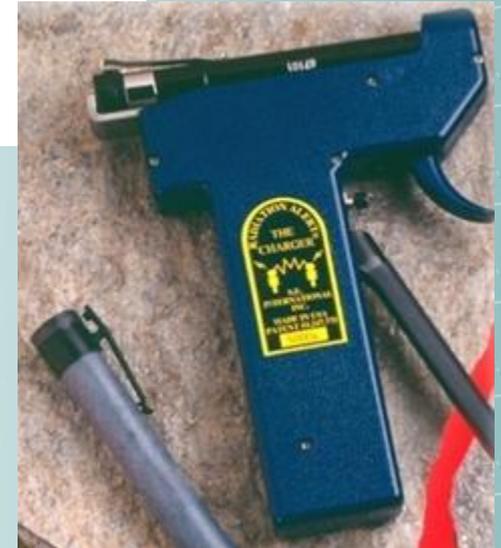
### RADIO-NUCLIDE Detection



4.2.1

# Radiation Monitoring / Detection (Dosimeters)

## DOSIMETER, Direct Reading



4.3.1

# Radiation Monitoring/Detection (Dosimeters)

## DOSIMETER, Electronic with Alarm



THIS ITEM MEETS THE  
REQUIREMENTS FOR  
S.E.L. ITEM # 4.3.1

**4.3.3 (Optional for Item # 4.3.1)**

# Chemical Protective Clothing (Vapor Protective)

## VAPOR PROTECTIVE, Ensemble (NFPA 1991 Industrial Chemicals)

Type 1 & 2 Teams



5.1.1

NFPA 1991 CERTIFIED VAPOR PROTECTIVE SUIT

SEI Cert. Mod. (NFPA)

MODEL # TRELLCHEM® VPS Size XXL.

SERIAL # 408861.

DATE OF COMPLIANCE TESTING TO ASTM F 1052 /  
DATE OF MANUFACTURE 2007-06-07.

GARMENT MATERIAL: TRELLCHEM® VPS  
VISOR MATERIAL: 2 MM HIGH IMPACT PVC  
GLOVE: KEVLAR OUTER GLOVE / RUBBER GLOVE / MULTILAYER  
INNER GLOVE  
FOOTWEAR ITEM: TRELLCHEM® VPS SOCK

THIS VAPOR PROTECTIVE ENSEMBLE MEETS THE BASIC REQUIREMENTS OF NFPA 1991, STANDARD ON VAPOR-PROTECTIVE ENSEMBLES FOR HAZARDOUS MATERIALS EMERGENCIES, 2005 EDITION, AND ANY ADDITIONAL REQUIREMENTS AS NOTED BELOW.  
THE TECHNICAL DATA PACKAGE CONTAINS INFORMATION ON CHEMICALS AND SPECIFIC CHEMICAL MIXTURES FOR WHICH THIS ENSEMBLE IS CERTIFIED. CONSULT TECHNICAL DATA PACKAGE AND MANUFACTURER'S INSTRUCTIONS BEFORE USE.

DO NOT REMOVE THIS LABEL.

# Chemical Protective Clothing (Vapor Protective)

## VAPOR PROTECTIVE, Ensemble (NFPA 1991 WMD Chem/Bio Protection)

Type 1 Team Only



Effective with the 2005 Edition of Standard # 1991, NFPA now has included the WMD test battery of chemicals and permeation tests, in addition to the Industrial test battery of chemicals and permeation tests.

This makes any NFPA Standard 1991 (after year 2005) automatically compliant with the SEL Item # 5.1.4.

(Previous to year 2005, the WMD certification was a separate “upgrade” requiring a specific request during purchase)

# 5.1.4

# Chemical Protective Clothing (Vapor Protective)

## VAPOR PROTECTIVE, Ensemble (NFPA 1994 WMD Chem/Bio Protection, Class 1 or Class 2)

 **LION APPAREL**  
Protective Systems Group

Questions, write or call immediately:  
Lion Apparel, Protective Systems Group,  
P.O. Box 13576 Dayton OH 45413. 1-800-421-2926

6102 004



THIS LIQUID SPLASH-PROTECTIVE GARMENT MEETS THE BASIC REQUIREMENTS OF NFPA 1992, STANDARD ON LIQUID SPLASH- PROTECTIVE ENSEMBLES AND CLOTHING FOR HAZARDOUS MATERIALS EMERGENCIES, 2005 EDITION, AND FOR THE ADDITIONAL REQUIREMENTS IF INDICATED BELOW.

| ADDITIONAL REQUIREMENT   | YES | NO                                  |
|--|-----|-------------------------------------|
| LIMITED FLASH FIRE PROTECTION FOR <i>ESCAPE ONLY</i> IN THE EVENT OF A CHEMICAL FLASH FIRE |     | <input checked="" type="checkbox"/> |

THE TECHNICAL DATA PACKAGE CONTAINS INFORMATION ON CHEMICALS AND SPECIFIC CHEMICAL MIXTURES FOR WHICH THIS GARMENT IS CERTIFIED. CONSULT THE TECHNICAL DATA PACKAGE AND MANUFACTURER'S INSTRUCTIONS BEFORE USE. DO NOT REMOVE THIS LABEL.

**THIS CLASS 2 NON-ENCAPSULATING CHEMICAL/BIOLOGICAL PROTECTIVE ENSEMBLE MEETS THE REQUIREMENTS OF NFPA 1994, STANDARD ON PROTECTIVE ENSEMBLES FOR CHEMICAL/BIOLOGICAL TERRORISM INCIDENTS, 2001 EDITION, FOR THE ABOVE-NOTED CLASS.**

This Class 2 ensemble is designed for use at incidents where it is necessary to provide sufficient vapor protection for the intended operation, where direct contact of liquid droplets is probable; and where victims are symptomatic and nonambulatory.

The technical data package contains information on chemical/biological agents for which this garment is certified. Consult the technical data package and manufacturer's instructions before use.

FOR COMPLIANCE WITH NFPA 1992, THE FOLLOWING ADDITIONAL COMPONENTS MUST BE WORN IN CONJUNCTION WITH THIS LIQUID SPLASH-PROTECTIVE GARMENT: LION WARHORSE I OR II AND GORE 69492 OVERGLOVE.

TO BE COMPLIANT WITH NFPA 1994, THE FOLLOWING ADDITIONAL COMPONENTS MUST BE WORN IN CONJUNCTION WITH THIS CHEMICAL OR BIOLOGICAL INCIDENT ENSEMBLE:  
LION WARHORSE I OR II AND GORE G9492 OVERGLOVE.

To reduce the risk of injury or death, you must assemble and wear together ALL of the above items. Always make sure that all ensemble layers have the proper overlap and that all items fit properly. Reference the User Instruction, Safety and Training Guide for proper donning and wearing instructions.

**DO NOT REMOVE THIS LABEL.**



# Chemical Protective Clothing (Vapor Protective)

## **PRESSURE TEST, Kit** (NFPA 1991; ASTM F-1052)



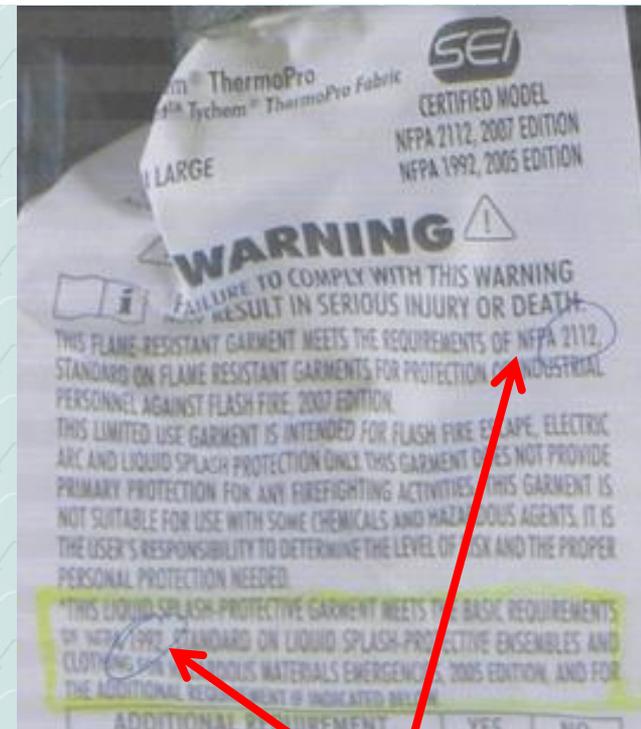
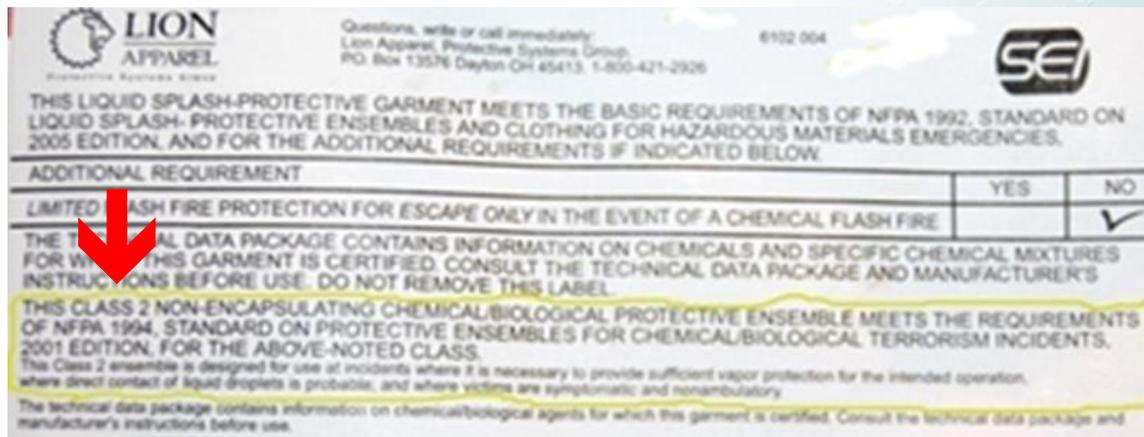
**5.1.6**

# Chemical Protective Clothing (Liquid Splash Protective)

**LIQUID-SPLASH PROTECTIVE,  
(NFPA 1992 Industrial Chemicals)**

**- OR -**

**LIQUID SPLASH-PROTECTIVE,  
(NFPA 1994 Class 3 WMD Chem/Bio Protection)**



**Some CPC Garments Might  
Earn TWO NPFA Certifications**

**5.2.1 or 5.2.2**

# Chemical Protective Clothing (Liquid Splash Protective)

**LIMITED or SINGLE USE, Splash Protective**  
(Disposable)

**Can be Jumpsuit Style,  
Apron type, or Two  
Piece Ensemble**



**5.3.1**



# Ancillary Protective Equipment (Hand Protection)

## **GLOVES, Replacement** (for Vapor Protective NFPA 1991 Ensembles)

Replacement outer glove **MUST BE THAT** as recommended or provided by the manufacturer of the 1991 garment ensemble.

**GENERIC NOT ACCEPTABLE**



FOR COMPLIANCE WITH NFPA 1991, THE FOLLOWING COMPONENTS MUST BE WORN IN CONJUNCTION WITH THIS VAPOR-PROTECTIVE ENSEMBLE:  
PERFECT FIT KV18AJTC KEVLAR® OVER GLOVE  
TINGLEY HAZPROOF BOOT #82330 OR #82331

TRELLEBORG PROTECTIVE PRODUCTS AB  
JOHAN KOCKSGATAN 10, SE-231 51 TRELLEBORG, SWEDEN  
MADE IN LITHUANIA  
© TRELLEBORG PROTECTIVE PRODUCTS AB 0806

**DO NOT REMOVE THIS LABEL**

**6.1.1**

# Ancillary Protective Equipment (Hand Protection)

## **GLOVES, Replacement** (for Liquid Splash-Protective NFPA 1992 Garments)

Replacement outer glove **MUST**  
**BE THAT** as recommended or  
provided by the manufacturer of  
the garment ensemble

**OR**

A glove that has been tested and  
has been certified to NFPA  
Standard # 1992.

Generic not acceptable



BEST # 727 – Un-flocked  
BEST # 730 – Flocked

6.1.2

# Ancillary Protective Equipment (Hand Protection)

## GLOVES, Under-Glove (for Vapor Protective NFPA 1991 Ensembles)



6.1.3



# Ancillary Protective Equipment (Hand Protection)

**GLOVES, High Temperature**  
(1,000° F Protection)  
(Need 2 Pair)



800 to 1000° F Direct  
Contact for 1  
Minute

6.1.4



# Ancillary Protective Equipment

## (Hand Protection)

### **OPTIONAL ITEM**

## **GLOVES, High Temperature** (2,000° F Protection)



**THIS ITEM MEETS THE  
REQUIREMENTS FOR  
S.E.L. ITEM # 6.1.4**



**1500 to 2000° F Direct  
Contact for 1  
Minute**



## **6.1.5 (Optional for Item # 6.1.4)**

# Ancillary Protective Equipment (Hand Protection)

## GLOVES, Cryogenic, Long Gauntlet

(Ultra-Cold to  $-260^{\circ}\text{F}$  – 16" Minimum)  
(Need 2 pair)



**NOT ACCEPTABLE**



12" to 14" **MARGINAL**



Elbo Gauntlet - Acceptable



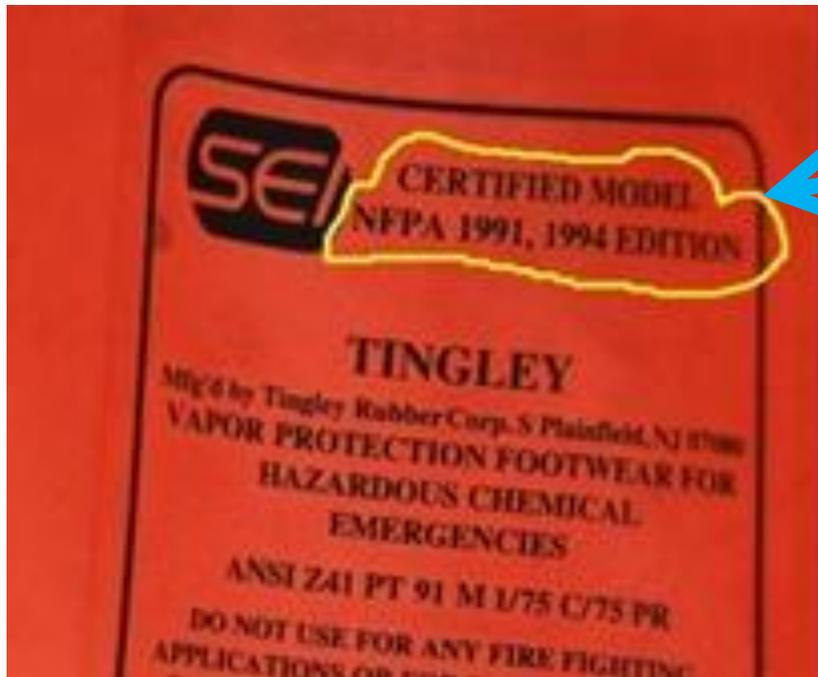
**BEST**

**6.1.6**



# Ancillary Protective Equipment (Foot Protection)

**BOOTS, Over-Boot, Chemical Resistant**  
(Compliant to NFPA Standard 1991)



**6.2.1**

# Ancillary Protective Equipment (Foot Protection) **OPTIONAL ITEM**

**BOOTIE, Outer-Protective**  
(Disposable)



Changed from “R” to “Opt” 2012

**6.2.2**

# Ancillary Protective Equipment (Head and Eye Protection)

## HEAD PROTECTION, Helmet

**Must Be ANSI  
Helmet Standard Z-89.1  
Compliant  
(Construction Standard)**



HC32BL



**6.3.1**

# Ancillary Protective Equipment (Head and Eye Protection)

## EYE PROTECTION, Goggles

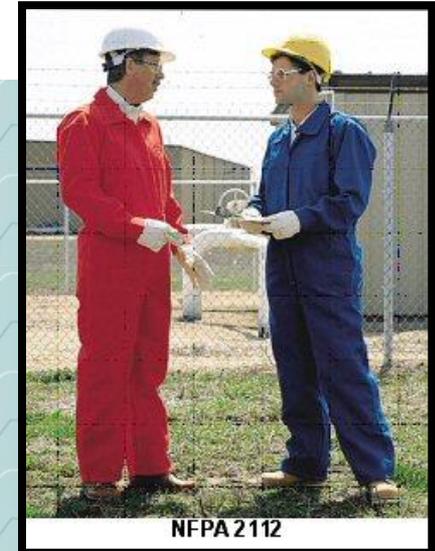
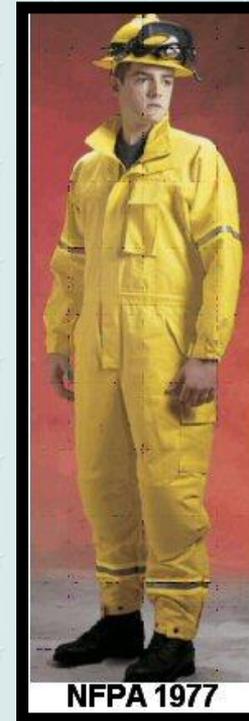
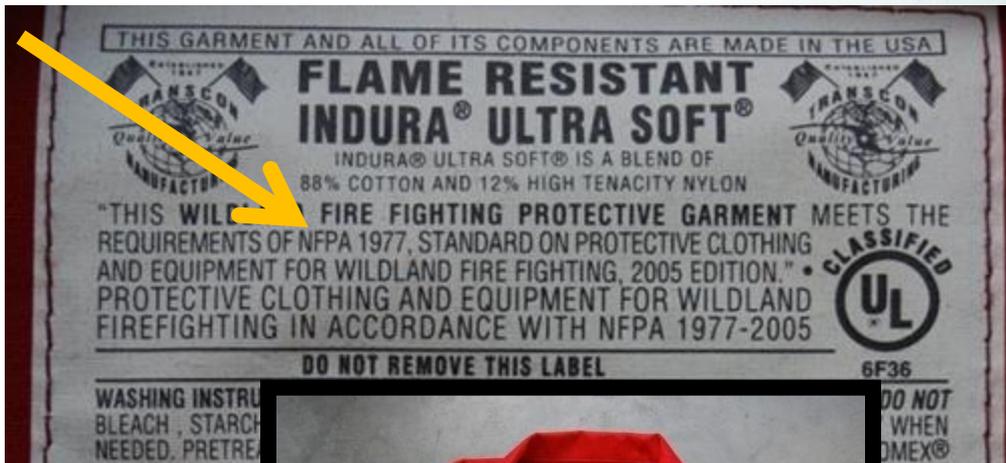
Compliant to ANSI  
Goggle Standard Z-87.1



6.3.2

# Ancillary Protective Equipment (Support Systems)

## UNDERGARMENT, Fire Resistant (NFPA 2112, or 1975, or 1977)



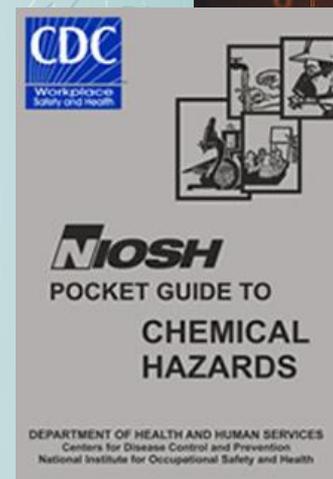
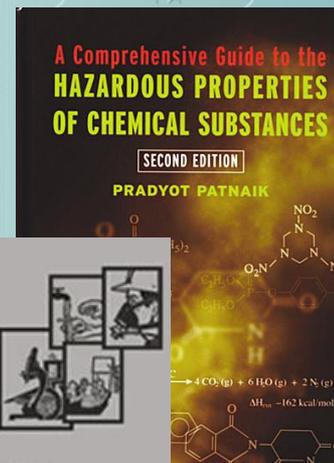
# Technical Reference

## (Printed References, Industrial and WMD Chemicals)

### PRINTED, Database Type

Need 3  
Different Types

- CHRIS Manual
- Hawley's Condensed Chemical Dictionary
- SAX, Dangerous Properties of Industrial Materials
- Hazardous Materials Field Guide
- Toxic and Hazardous Chemicals Safety Manual
- MERCK Index
- Hazardous Materials Handbook
- Etc.



United States Department of Transportation

Chemical Hazards Response Information System (CHRIS)

# 7.1.1



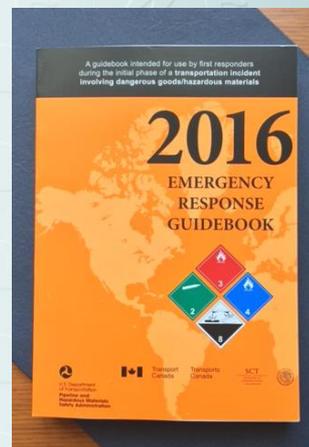
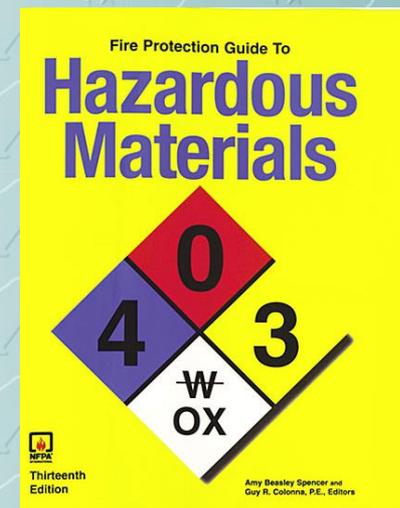
# Technical Reference

## (Printed References, Industrial and WMD Chemicals)

### PRINTED, Guidebook Type

Need 2  
Different Types

- Emergency Action Guides (AAR)
- Emergency Care for Hazardous Materials Exposure
- Fire Protection Guide to Hazardous Materials (NFPA)
- HazMat Quick Guide
- Safety Data Sheets
- DOT Guidebook



7.1.2

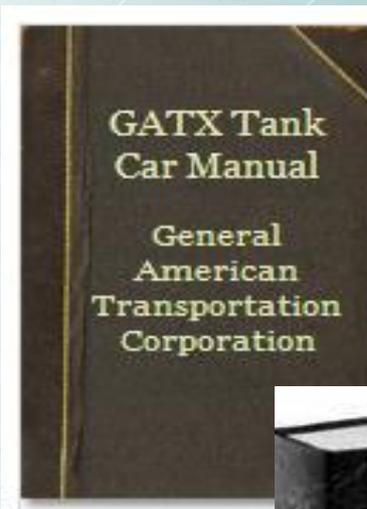
# Technical Reference

## (Printed References, Industrial and WMD Chemicals)

### PRINTED, Specialty Type

Need 2  
Different Types

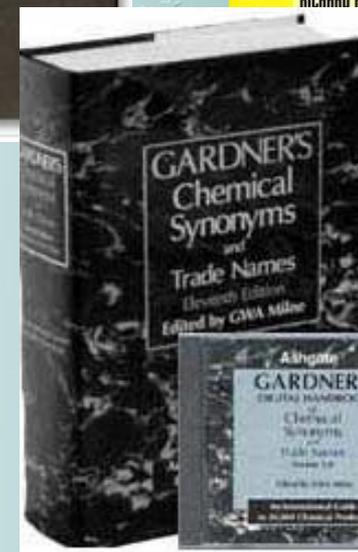
- Farm Chemicals Handbook
- Hazardous Chemical Spill Cleanup
- Specialty Chemicals Source Book
- Tank Car Manual
- Gardner's Chemical Synonyms
- Guide to Occupational Exposure Values
- Rapid Guide to Chemical Incompatibilities
- Wiley's Guide to Chemical Incompatibilities



*Rapid Guide to*  
**Chemical  
Incompatibilities**



RICHARD P. POHANISH  
GREENE



7.1.3



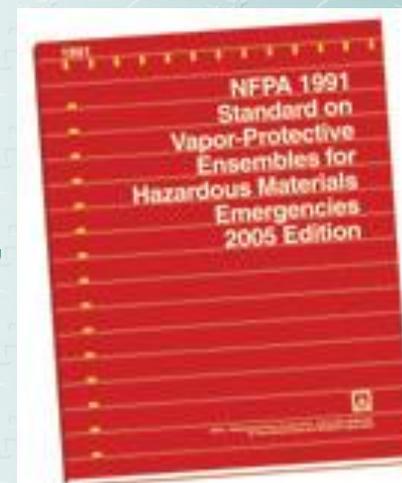
# Technical Reference

## (Printed References, Industrial and WMD Chemicals)

**PRINTED or ELECTRONIC, Regulatory Type**  
(Government Codes, Standards)

**Need:**

- Title 29, Code of Federal Regulations (Labor/OSHA)
- Title 49, Code of Federal Regulations (Transportation)
- NFPA Standards #472, 2112, 1991, 1992, 1994



# Technical Reference

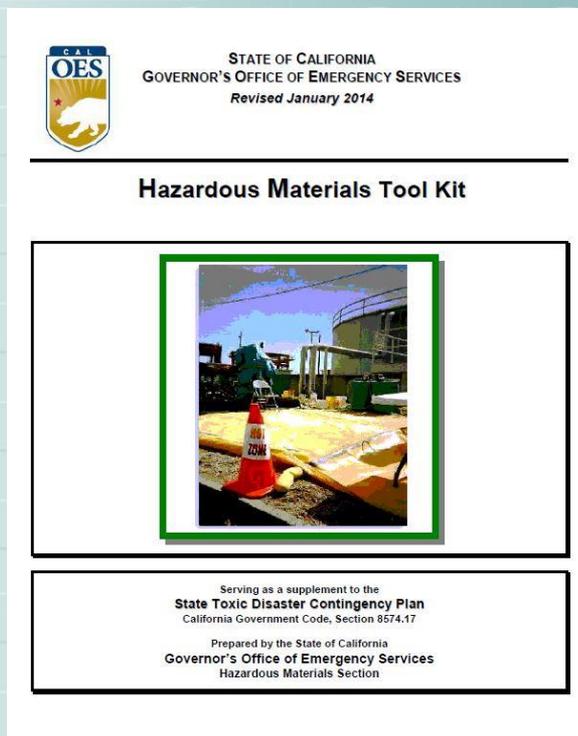
## (Printed References, Industrial and WMD Chemicals)

**PRINTED or ELECTRONIC, Regulatory Type**  
(Response Plans, Guides)

**Need:**

- Hazardous Materials Emergency Response Plan (Local)
- Operational Area Response Plan (City/County)
- Hazardous Materials Incident Contingency Plan (State)

7.1.5



# Technical Reference

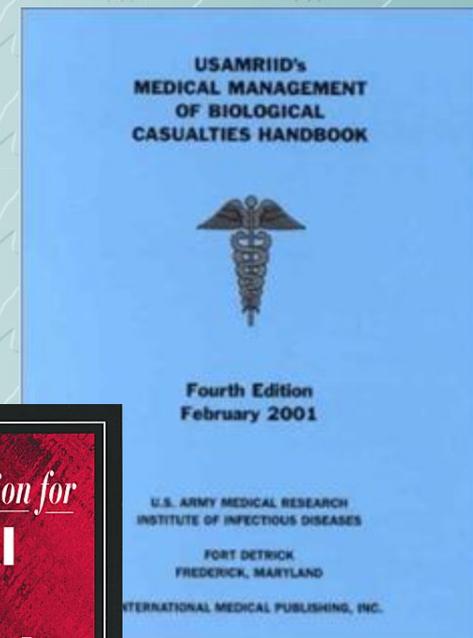
## (Printed References, Industrial and WMD Chemicals)

### **PRINTED, Chem/Bio Type** (WMD Substances)

**Electronic Version  
Will Be Acceptable**

**Need**  
1 – Chemical  
2 – Biological

- Bacteriological Warfare
- Chem-Bio Handbook (Janes)
- Chemical & Biological Warfare Agents
- Guide to Germ Warfare
- Infectious Disease Handbook
- Management of Chemical Casualties
- Etc.



*Emergency Action for*  
**Chemical  
and  
Biological  
Warfare  
Agents**

D. Hank Ellison

# 7.1.6

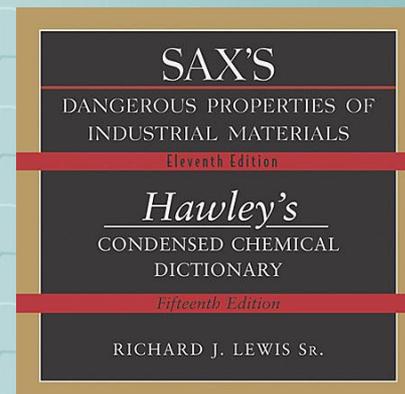


# Technical Reference

(Electronic References, Industrial and WMD Chemicals)

## **ELECTRONIC, Database Type**

- CHRIS Manual
- Hawley's Condensed Chemical Dictionary
- SAX, Dangerous Properties of Industrial Materials
- Hazardous Materials Field Guide
- Toxic and Hazardous Chemicals Safety Manual
- MERCK Index
- Hazardous Materials Handbook
- Etc.



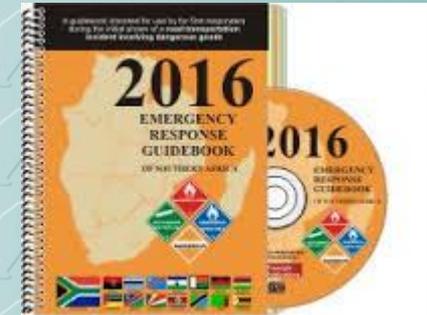
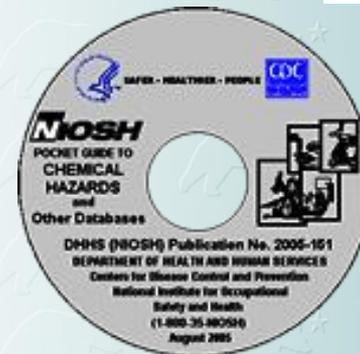
7.2.1

# Technical Reference

(Electronic References, Industrial and WMD Chemicals)

## **ELECTRONIC, Guidebook Type**

- Emergency Action Guides (AAR)
- Emergency Care for Hazardous Materials Exposure
- Fire Protection Guide to Hazardous Materials (NFPA)
- HazMat Quick Guide
- SDS
- DOT Guidebook



7.2.2

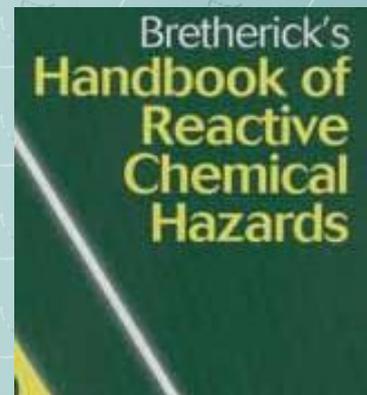
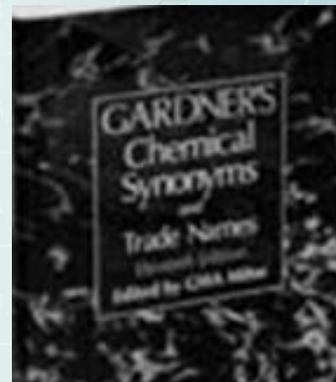
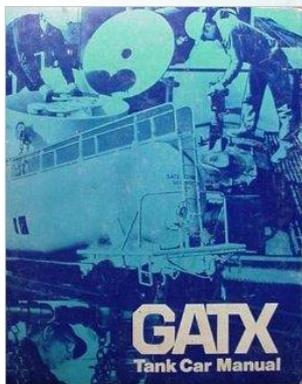
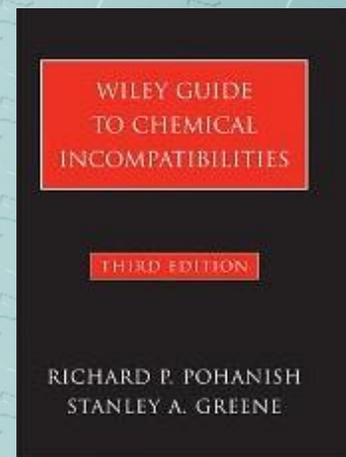


# Technical Reference

(Electronic References, Industrial and WMD Chemicals)

## **ELECTRONIC, Specialty Type**

- Farm Chemicals Handbook
- Hazardous Chemical Spill Cleanup
- Specialty Chemicals Source Book
- Tank Car Manual
- Gardner's Chemical Synonyms
- Guide to Occupational Exposure Values
- Rapid Guide to Chemical Incompatibilities
- Etc.



# Technical Reference

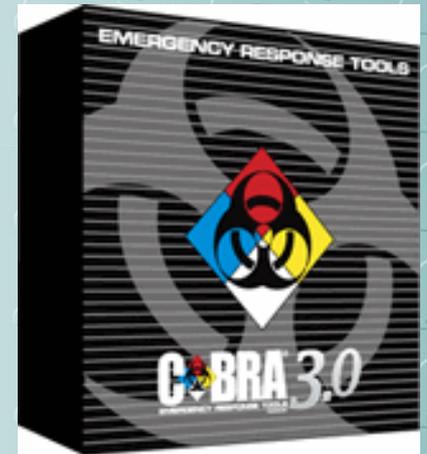
(Electronic References, Industrial and WMD Chemicals)

## **ELECTRONIC, Chem/Bio Type** **(WMD Substances)**

**Must Have At Least One Electronic Version**

### EXAMPLES:

- Bacteriological Warfare
- Chem-Bio Handbook (Janes)
- Chemical & Biological Warfare Agents
- Guide to Germ Warfare
- Infectious Disease Handbook
- Management of Chemical Casualties
- CoBRA



**7.2.4**

# Technical Reference

## (Plume Air Modeling, Program Support)

### AIR MODELING, Database Software



CAMEO  
Chemicals

**Chemicals in Inventory** Let Me Help! 8002090

Facility/Route:  Report Year:   
Dist:  City:  State:

CAD #:    
Chemical Name:

In Inventory  In Transit  EHS Substance  Trade Secret

Location:  Physical State & Quantity:  Components:  Dates:  State Fields:  Notes:

| Physical State  | Hazards                                      | Health Effects                              |
|---|--|---|
| <input type="checkbox"/> Pure <input type="checkbox"/> Solid                | <input checked="" type="checkbox"/> Fire     | <input checked="" type="checkbox"/> Acute   |
| <input type="checkbox"/> Mixture <input checked="" type="checkbox"/> Liquid | <input type="checkbox"/> Pressure            | <input checked="" type="checkbox"/> Chronic |
| <input checked="" type="checkbox"/> Gas                                     | <input checked="" type="checkbox"/> Reactive |   |

**Weight**

Max Daily Amount:  pounds  pounds  
Average Daily Amount:  pounds  pounds  
Max amount in largest container:  pounds

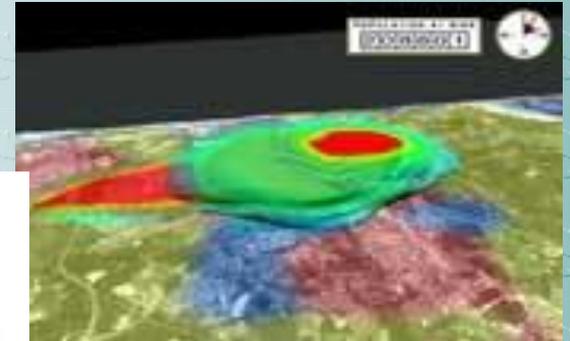
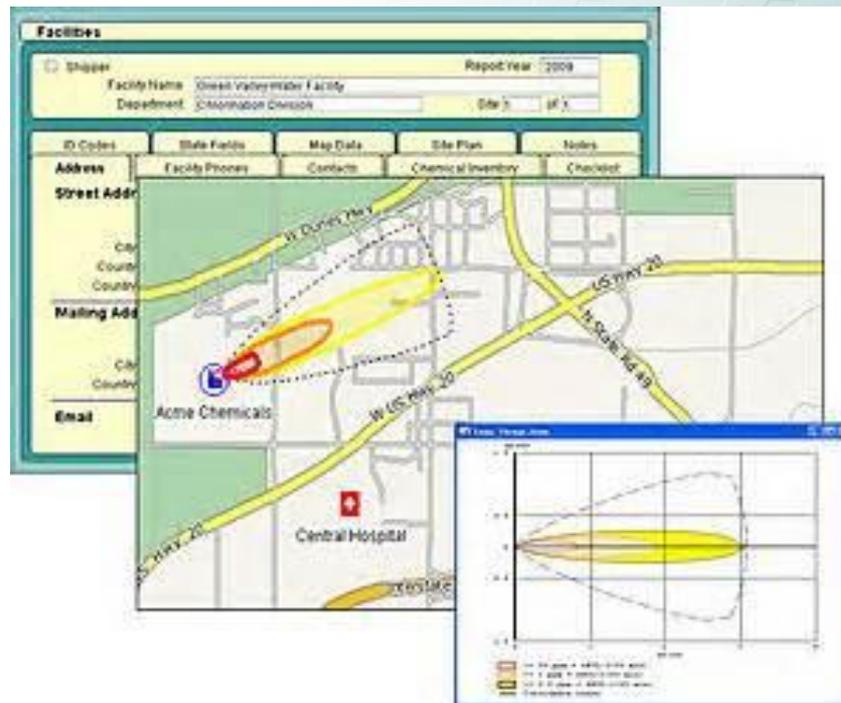
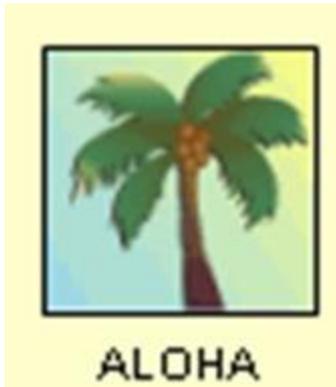
NOAA



# Technical Reference

## (Plume Air Modeling, Program Support)

### AIR MODELING, Plume Software (Overlay / Plume Display)



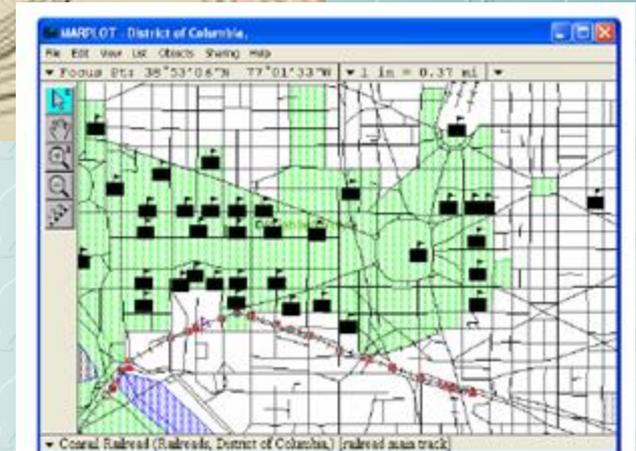
- ALOHA
- CHARM
- EIS
- EPI CODE
- SAFER
- Etc.

7.3.2

# Technical Reference

## (Plume Air Modeling, Program Support)

### AIR MODELING, Mapping Software



- MarPlot
- GIS
- Etc.

7.3.3

# Technical Reference (Computer)

## COMPUTER (Laptop or PC)



7.4.1



# Technical Reference

## (Computer)

### **PRINTER, Color Capability**

**(Item 7.4.2)**

### **PRINTER, Scan Capability**

**(Item 7.4.3)**

### **PRINTER, Duplication Capability**

**(Item 7.4.4)**



-- OR --

### **PRINTER, 4-In-One Unit**

**(Item 7.4.5 Combination Unit)**

**7.4.2 – 7.4.4**

**7.4.5**

# Technical Reference

## (Computer)

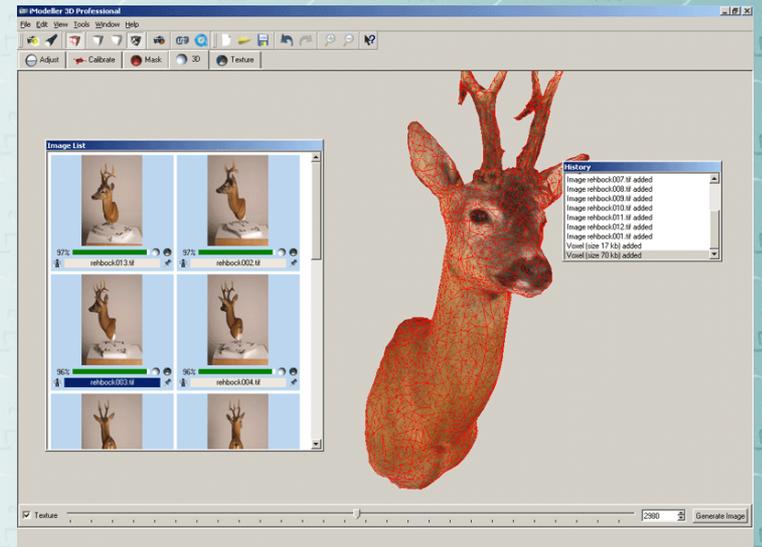
### ACCESS TO INTERNET, Wireless



7.4.6

# Technical Reference (Computer, Support Hardware)

## HARDWARE, Computer Graphics Card



7.4.8

# Technical Reference

## (Computer, Support Hardware)

### **HARDWARE, CD Rom or DVD Drive**



**7.4.11**

# Technical Reference (Computer, Support Hardware)

## HARDWARE, USB Drive Compatible



**USB**

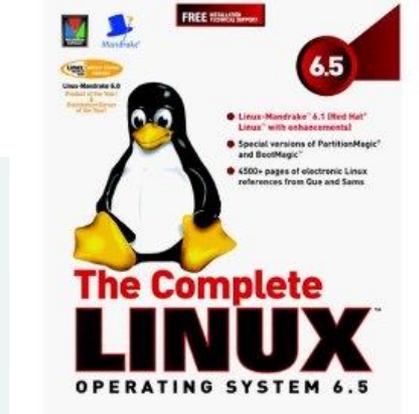
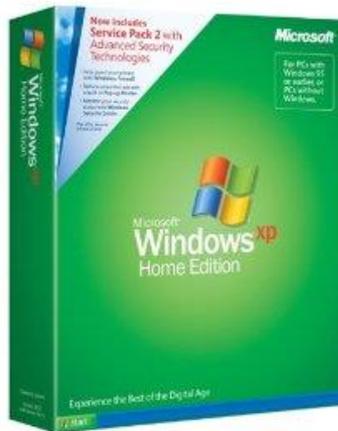
SERIES INDICATOR

- USB = Universal Serial Bus
- MUSB = Mini USB
- FWC = IEEE 1394 Firewire
- MFW = Mini IEEE 1394, Firewire



# Technical Reference (Computer, Support Software)

## SOFTWARE, Operating System

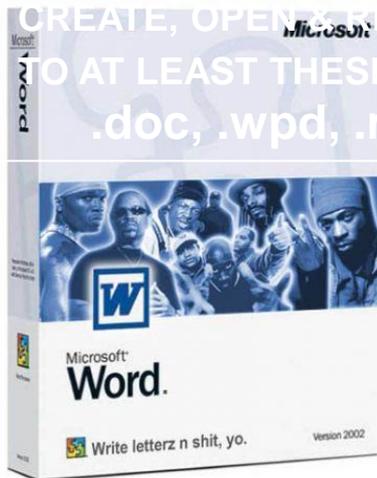


7.4.13

# Technical Reference

## (Computer, Support Software)

### SOFTWARE, Document (Processing)

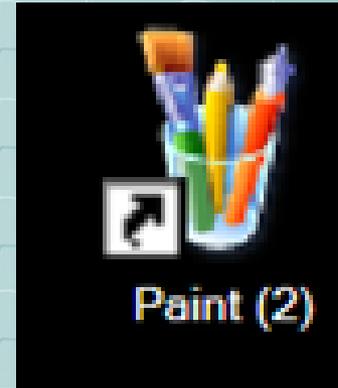


AND

### SOFTWARE, Graphics (Processing)

RECEIVE, OPEN, & DISPLAY GRAPHICS  
DOCUMENTS TO AT LEAST:

.jpg, .tif., bmp, .wmp, and others



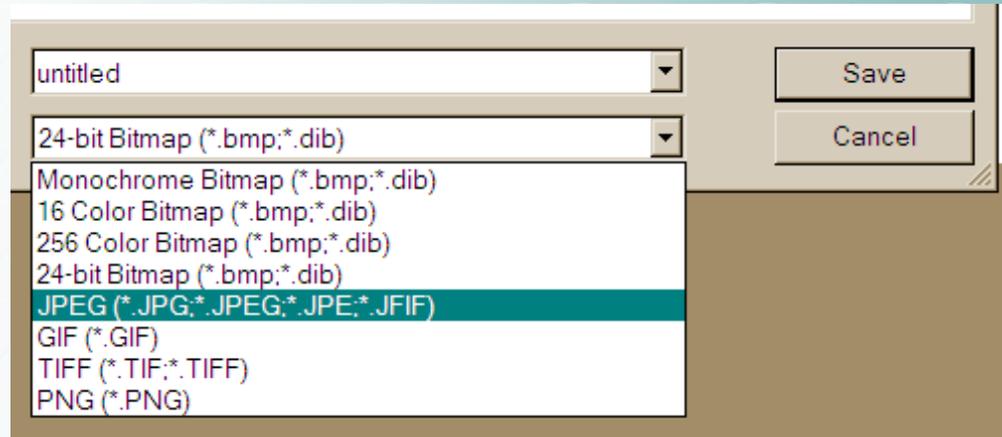
7.4.14

# Technical Reference (Computer, Support Software)

## SOFTWARE, Document, (Conversion)

ABILITY TO CONVERT & SAVE  
GRAPHICS TO AT LEAST:

.jpg



ABILITY TO CONVERT & SAVE ANY  
DOCUMENT OR GRAPHIC TO:

.pdf



Adobe



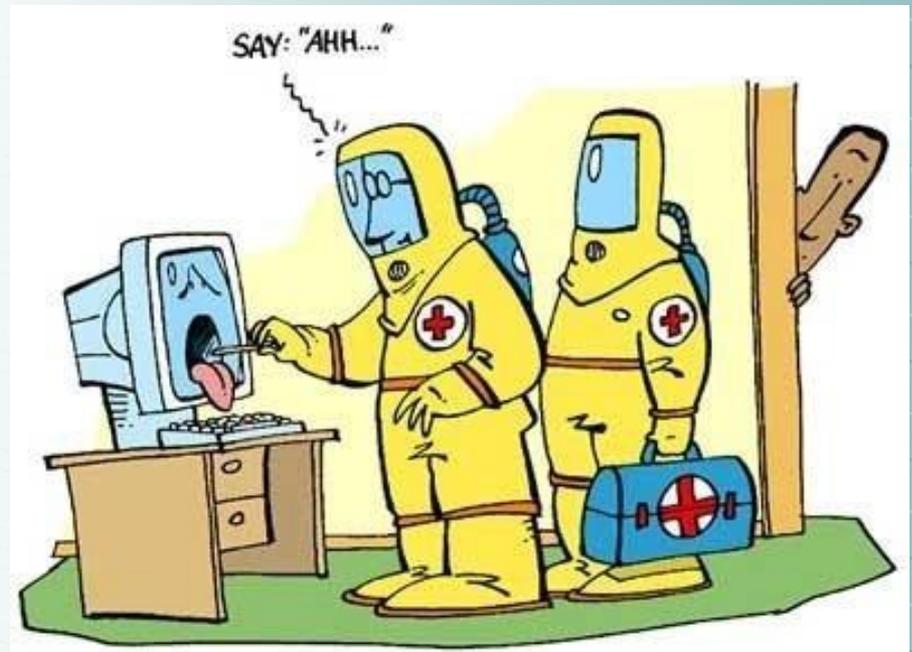
Image2PDF v3.2

nitroPDF

7.4.15

# Technical Reference (Computer, Support Software)

## SOFTWARE, System Protection



# Special Capabilities

(Advanced Technologies, Vision, Heat, Sound)

**SCOPE, Light Amplification, Basic**  
(MUST be Generation II or better)



ATN CGT



ATN MO4-3



YUKON NVRS 1.5x42



VOYAGER 4.5x mag



ATN Night Storm



YUKON Viking Pro 2x25

8.1.1



# Special Capabilities

(Advanced Technologies, Vision, Heat, Sound)

**SCOPE, Infra-Red, (Temperature Sensing Only)**  
Approximate Temperature Range -25 to +1000° F



MARTROWST670, ST672  
(-25 to 3000 +F)



OMEGA OS523 E  
(-18 to 2500 +F)

8.1.8

# Special Capabilities

(Advanced Technologies, Vision, Heat, Sound)

## SOUND SENSING, Ultra-Sonic



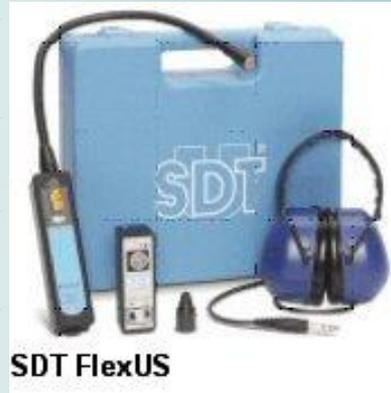
SKF CMIN400-k



AMPROBE TMULD 300



WHISPER DTK711-202



SDT FlexUS

8.1.15

# Special Capabilities

(Advanced Technologies, Vision, Heat, Sound)

## CAMERA, Video, Digital



**NOTE:** This is currently under review by the **FIRESCOPE HazMat Committee**



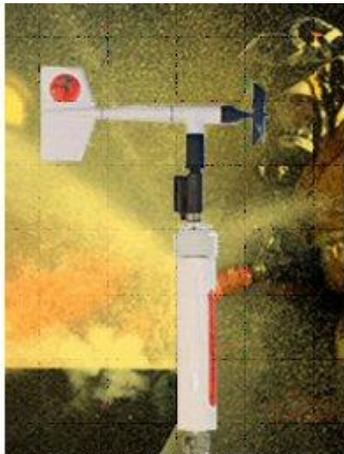
8.1.16



# Special Capabilities

(Advanced Technologies, Weather, GPS)

## WEATHER STATION:

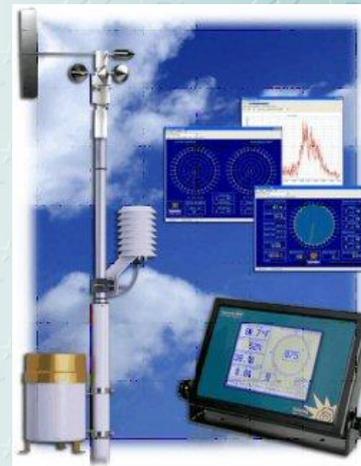


COASTAL ENVIRONMENTAL  
WeatherPak TRX

Basic Hardwire  
(Item # 8.2.1)



ORION Nomad LX



ORION Capricorn 2000EX



COASTAL ENVIRONMENTAL  
C-5-SAM

- OR -

Wireless  
(Item # 8.2.2)

8.2.1

8.2.2

# Intervention (Chemical Intervention)

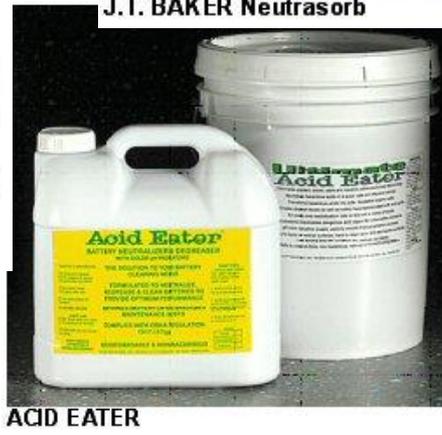
## NEUTRALIZATION, Acids



X-SORB for ACIDS



J.T. BAKER Neutrasorb



ACID EATER



Sodium Sesquicarbonate



Spill - X - A (Acid Neutralizer)

# Intervention (Chemical Intervention)

## NEUTRALIZATION, Alkali (Bases)



X-SORB Caustic by IMPACT TECHNOLOGIES



X-SORB by Impact Technologies



CITRIC ACID (For Alkali)



Spill-X-C (Alkalie Neutralizer)



Spill-X-C Spill Gun (Alkali)



BASE EATER by IMPACT TECH

# Intervention (Chemical Intervention)

## ENCAPSULATING, Spreadable Powder (Pesticides and General Purpose)



X-SORB "Edge"™ or  
X-SORB "Super Encapsulator"



EXSORB "Super Encapsulator"  
(General Purpose for Pesticides)



WYK Safety Universal Sorbent  
(Meets EPA, OSHA)



Amerizorb Throw & Go  
Professional



EAGLE Picher "Solid-A-Sorb" (Meets  
EPA and OSHA, good for Pesticides)



SRI PETRO Oil Sponge Premium  
(For Pesticide Spills)



WYK Super Sorbent (for Pesticides)

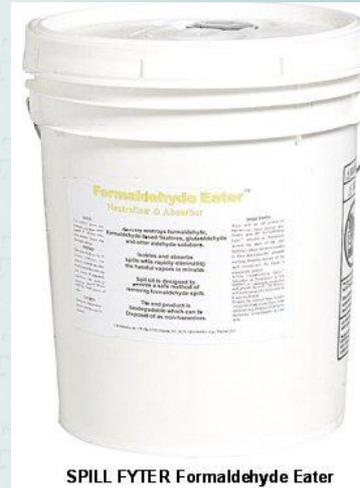
9.1.3

# Intervention (Chemical Intervention)

## ENCAPSULATING, Spreadable Powder (Formaldehyde)



SPILL FYTER Formaldehyde Solidifier



SPILL FYTER Formaldehyde Eater



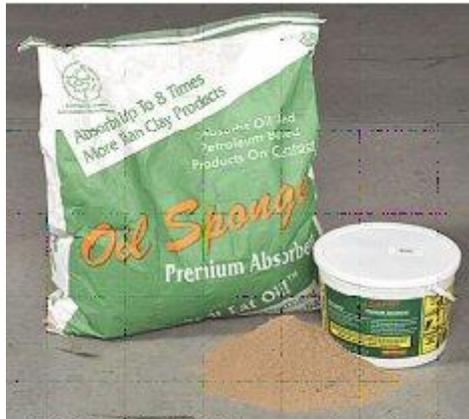
LAB SAFETY "Universal Gel"



SPILL-X-FP for Formaldehyde

# Intervention (Chemical Intervention)

## ENCAPSULATING, Spreadable Powder (Non-Polar Solvents)



SRI PETRO "Oil Sponge Premium"  
Polar Solvent Only (Hydrocarbons)



Spill-X-S  
(For Non-Polar Solvents)



WEST COAST "Oil Sponge  
G.P.



X-SORB "Super Absorbent" or  
X-SORB "Oil Select"



# Intervention

## (Chemical Intervention)

**EXTINGUISHER, Fire,**  
**Class “D”**  
**(Sodium Chloride)**  
**(Item # 9.1.6)**



MFS L-2



ANSUL Met-L-X

OR

**EXTINGUISHER, Fire,**  
**Class “D”**  
**(Copper Compound)**  
**(Item # 9.1.7)**



AMEREX Class “D”, 30 LB

**Must Have at  
Least One**

**9.1.6 or 9.1.7**



# Intervention

## (Environmental Intervention)

### **ABSORBENT: Non-Polar Solvent** **(Repels Polar (Water etc.) – Pads or Rolls)**



**SELLARS "V-Bond" Oil Only  
Pads 17" x 19", Rolls 38" x 144'**



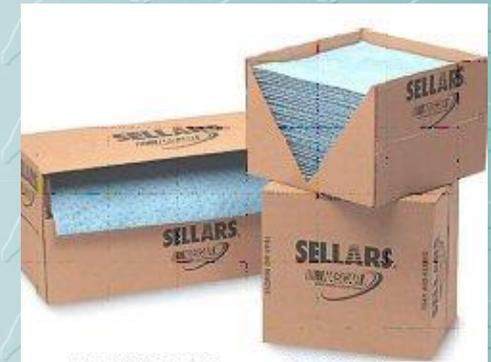
**IMPACT "Fiber-Duck" Non-  
Polar Rolls 30" x 150'**



**SPILFYTER "Oil Sweep", foating  
16" x 100'**



**SPILL911 AR-1035 Non-Polar  
Pads 30" x 30"**



**SELLARS "Nascar" Oil Only  
Pads 18" x 18", Roll 12" x 150'**



**SPC "SXT", Repels water**

**9.2.1**



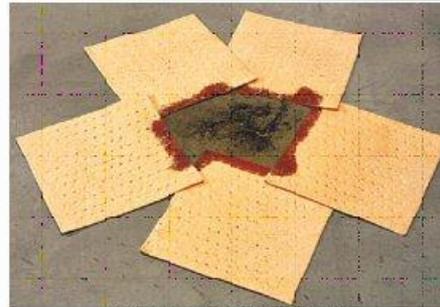
# Intervention

## (Environmental Intervention)

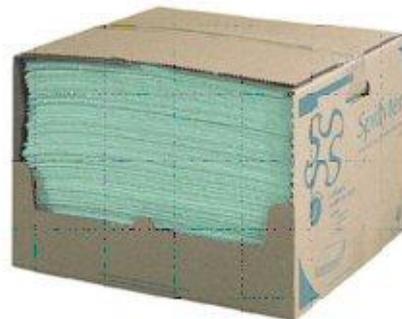
### **ABSORBENT: General Purpose OR Polar Solvent** **(Absorbs (Polar) – Pads or Rolls)**



SPILFYTER "Sorbex", in Pads or Rolls



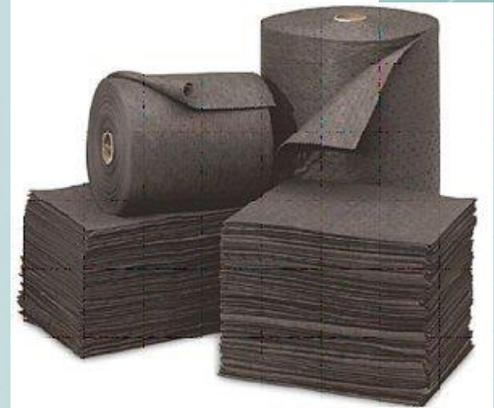
ENPAC "Orange Power"



SPILFYTER "General Purpose"



STREETFYTER General Purpose



SPC "UXT Sorbent Pads", for coolants, acids, bases, antifreeze; Pads 15" x 19"

# Intervention

## (Environmental Intervention)

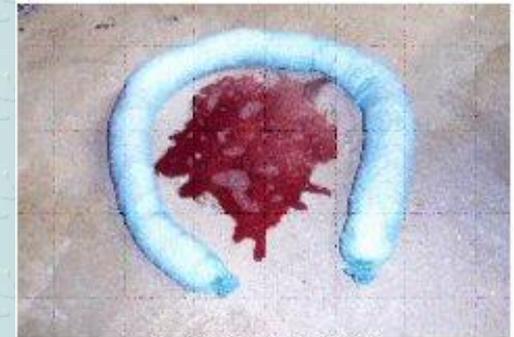
### **ABSORBENT: Non-Polar Polar Solvent** **(Pigs, Socks, Mini-Booms)**



3M Solvent or Oil Only Socks



SPILL 911



HIPPO "SOC-34L"



OILUP "21092"



XSORB "FiberDuck"



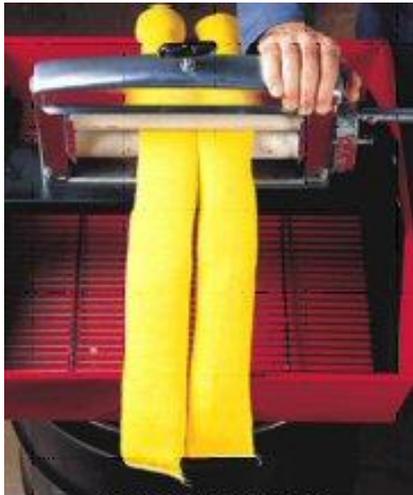
SPC "Oil Only Soc"

9.2.3

# Intervention

## (Environmental Intervention)

### **ABSORBENT: General Purpose OR Polar Solvent** **(Pigs, Socks, Mini-Booms)**



**SPILL DEFENSE  
"Universal"**



**SPILL DEFENSE "Drum Collar"**



**MAGIC SORB "Super"**



**EVERSOAK "Industrial"**

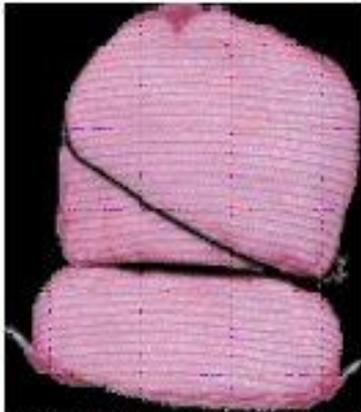


**CHEMSORB "Universal"**

# Intervention

## (Environmental Intervention)

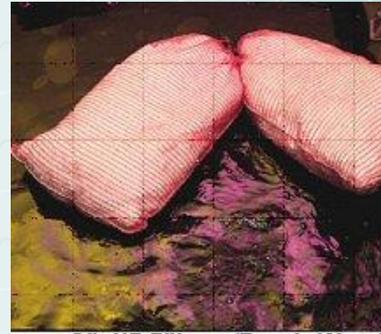
### **ABSORBENT: Non- Polar Solvent** **(Pillows)**



INTERSTATE "SEPP"



SPC "PiLow"



OIL-UP Pillows (Repels Water)



HIPPO "Oil Only"



IMPACT "FiberDuck" Oil Only



SPILFYTER "Premium"

# Intervention

## (Environmental Intervention)

### **ABSORBENT: General Purpose OR Polar Solvent** **(Pillows)**



LAB SAFETY "Hazorb"



3-M Sorbent Pillows



IMPACT "Fiber-Link" Universal



INTERSTATE  
"Universal"



XSORB "Universal" Pillow

# Intervention

## (Environmental Intervention)

### MERCURY KIT; Cleanup

Must include 500 gram container of Mercury Absorbing Powder



LAB SAFETY Mercury Sponges  
(Purchased separately to go with Mercury Eater)



MERCURY EATER  
(Sponges needs to be purchased separately)



LAB SAFETY



ECONO Mercury Spill Kit

# Intervention

## (Environmental Intervention)

### **PIPE, Plastic** (for “Underflow” and “Overflow” dam construction)

- 3 lengths – Minimum 8’ Each
- Representing 3 Different Diameters Sizes 4” to 12”



**Schedule 40 (Strong) or Schedule 80 (Stronger)  
Recommended**

**9.2.11**

# Intervention

## (Mechanical Intervention)

### **KIT: Chlorine, "A"**



CHLORINE INSTITUTE Kit "A"



CHLORINE SPECIALTIES Kit "A"

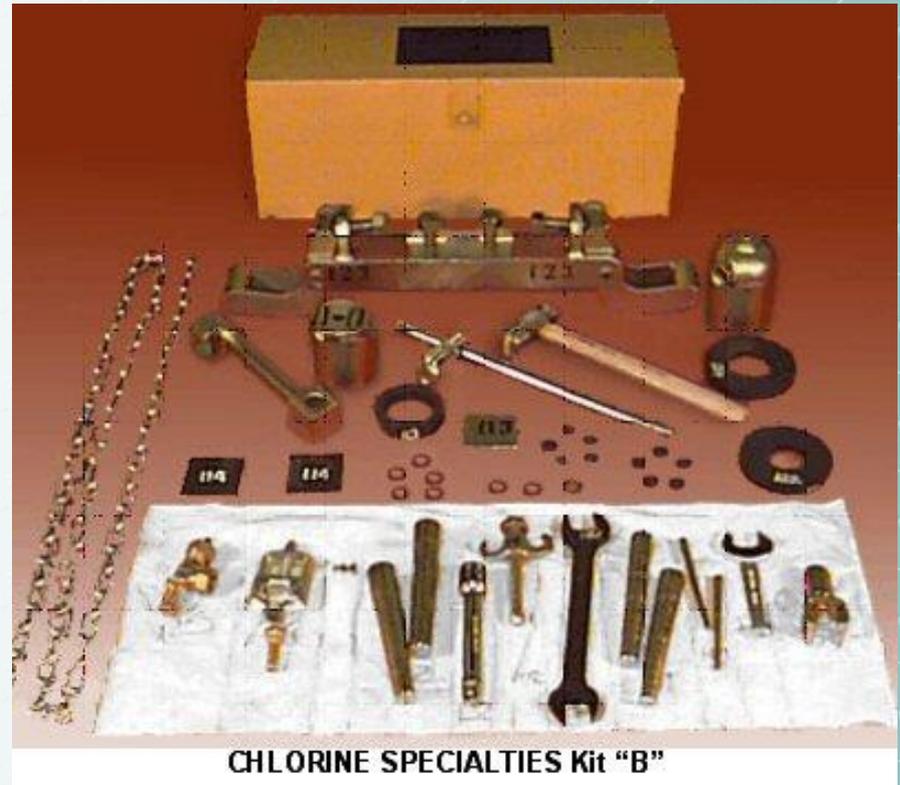
# Intervention

## (Mechanical Intervention)

### **KIT: Chlorine, "B"**



INDIAN SPRINGS Kit "B"



CHLORINE SPECIALTIES Kit "B"

9.3.2

# Intervention

## (Mechanical Intervention)

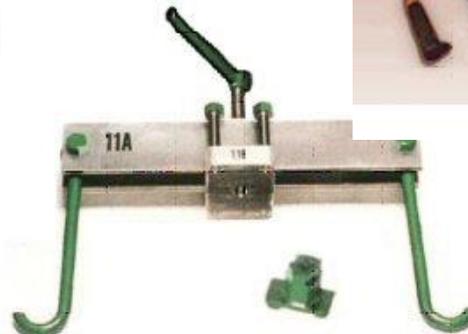
### **KIT: Chlorine, "C"**



INDIAN SPRINGS Kit "C"



CHLORINE SPECIALTIES Kit "C"



CHLORINE INSTITUTE Kit "C" Conversion

9.3.3

# Intervention

## (Mechanical Intervention)

**KIT: Upgrade, Sulfur Dioxide, "A"**

"SA" KIT - 100 & 150 lb. CYLINDERS  
INDIAN SPRINGS Gasket Upgrade "SA" Kit for  
Upright "H" Cylinder Chlorine "A" Kit



**9.3.5**

# Intervention

## (Mechanical Intervention)

**KIT: Upgrade, Sulfur Dioxide, "B"**



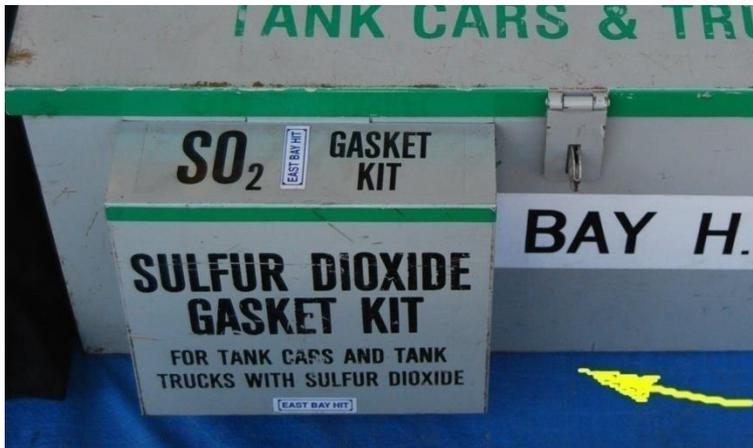
"SB" KIT - ONE (1) TON  
SO2 CONTAINERS

**9.3.6**

# Intervention

## (Mechanical Intervention)

### **KIT: Upgrade, Sulfur Dioxide, "C"**



INDIAN SPRINGS Gasket Upgrade "SC" Kit  
for Rail Tank Car Chlorine "C" Kit

OR



# Intervention (Mechanical Intervention)

## KIT: Pipe, Patch & Repair, Liquids (Standard Kit)



LAB SAFETY SUPPLY

Kit # 35156



Kit # C-2



221



in pipe.



LEAK CONTROL KIT FOR  
PIPES  
EXTERNAL PATCHES  
KIT "C-2"

EDWARDS AND CROMWELL, MFG., INC.  
11519 INVESTOR AVENUE • BUILDING B • BATON ROUGE, LOUISIANA 70809  
PHONE: 225-292-3332 FAX: 225-292-1363  
USA

9.3.10

# Intervention

## (Mechanical Intervention)

**KIT: Clamp, Pipe, Gas, Mechanical**  
(Domestic Low Pressure)

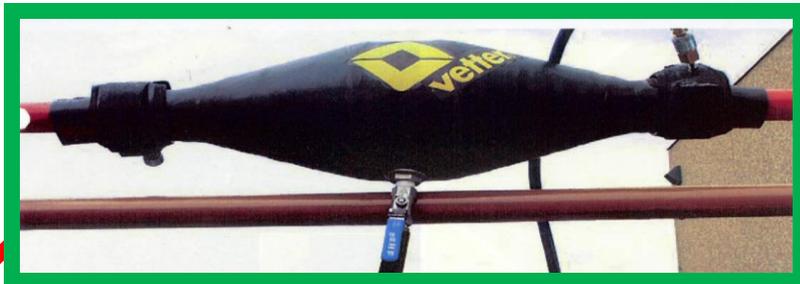


**9.3.13**

# Intervention

## (Mechanical Intervention)

**KIT: Pipe, Pneumatic, Flange Patch, Liquids**



**RECOMMENDED  
VETTER #  
1500013900 (8" x 38")  
or  
1500014000 (8" x 70")**



**OPTIONAL KITS  
FOR 9.3.15**

**9.3.15**

**OR**

**9.3.16**

# Intervention

## (Mechanical Intervention)

### **KIT: Tanker, Patch & Repair, Liquids** (Standard Kit)



Kit "AE"



Kit "F"



9.3.17

# Intervention

## (Mechanical Intervention)

### **KIT: Tanker, Patch & Repair, Liquids** (Pneumatic Kit, Standard, Item # 9.3.18)

### (Pneumatic Kit with Drainage Control, Item # 9.3.19)



VETTER #  
150005301



VETTER #  
150000102



**9.3.18 & 9.3.19**

# Intervention

## (Mechanical Intervention)

### **KIT: Drum, Patch & Repair, Liquids** (Pneumatic Kit)

VETTER #  
1500009400



REQUIRES RATCHET  
STRAP SET

9.3.24

# Intervention

## (Mechanical Intervention)

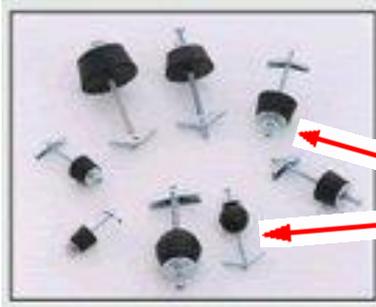
### **KIT: Drum, Patch & Repair, Liquids** (Standard Compression Kit)



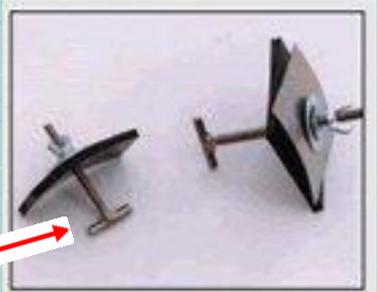
**Lab Safety Kit # 35157**



**Edwards & Cromwell Kit "D"  
Or "A-E"**



**Kits Must Contain:**  
6 Tapered Compression  
2 Ball Compression  
2 "T" Bolt Compression



# Intervention

## (Mechanical Intervention)

**KIT: Drum or Tanker, Patch & Repair, Liquids,**  
(Tapered Stopper, Compression – Extra Large)

Compliments Kit Item # 9.3.26



4" Dia.

3" Dia

Must Have One TAPERED  
Of Either Size As Shown

Edwards & Cromwell Kit "A-2"



9.3.29

# Intervention

## (Mechanical Intervention)

**KIT: Drum or Tanker, Patch & Repair, Liquids,**  
(Ball or Half-Round Stopper, Compression)  
(Extra-Large)

Compliments Kit Item # 9.3.26



Edwards & Cromwell Kit "A-2"



4" Dia.



3" Dia



Must Have One BALL or 1/2 ROUND  
Of Either Size As Shown

9.3.31

# Intervention

## (Mechanical Intervention)

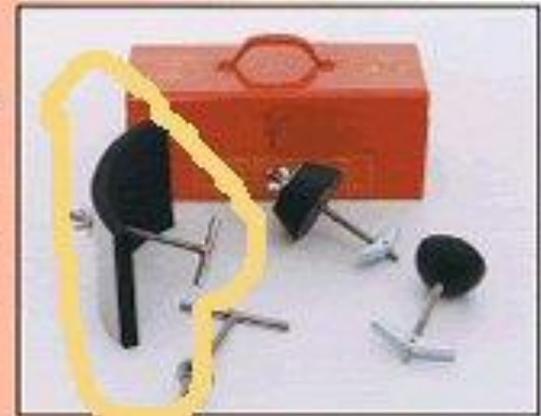
**KIT: Drum or Tanker, Patch & Repair, Liquids,  
(“T” Bolt Stopper, Compression)  
(Extra-Large)**

**Compliments Kit Item # 9.3.26**

**Edwards & Cromwell Kit “A-2”**



Series “A-2”: This kit contains three oversized surface plugs. These plugs will temporarily control puncture holes from 3” diameter to 3” x 9” tears. They can be purchased individually or as a kit in a handy carrying case as pictured.



**Must Have One Extra-Large “T” Bolt Compression**

**9.3.32**

# Intervention

## (Mechanical Intervention)

**KIT: Drain, Plug, Liquids,**  
**(Conical or Tapered, 3 Different Sizes)**



**MINIMUM REQUIREMENT:**

3 - Extra-Large conical plugs, each a different size  
(2 ½" dia to 12" dia available commercially)

**9.3.33**

# Intervention

## (Mechanical Intervention)

**KIT: Drain or Cuts, Plug, Liquids,**  
**(Pneumatic)**

**VETTER #**  
**1500019500 or 1500009600**



**9.3.34**

# Intervention

## (Mechanical Intervention)

**KIT: Pipe or Hole, Plug, Liquids,**  
(Expansion, “Plumbers Test Plugs”)  
(Total of 7 Representing 7 Different Sizes)



**9.3.35**

# Intervention

## (Mechanical Intervention)

**KIT: Pipe or Hole, Plug, Liquids,**  
(Expansion, “Plumbers Test Plugs”,  
Vented or Drain Control)



**Edwards & Cromwell Kit “C-1”**



**9.3.36**

# Intervention

## (Mechanical Intervention)

**KIT: Open End, Cap, Liquids,**  
(Contraction End Cap, “Jim Cap”)



**KIT: Open End, Cap, Liquids,**  
(Contraction End Cap, Drain Control)



Selection of 7 Representing 7 Different  
Sizes, from 1” to 8” Nominal, of either  
type as shown



9.3.42

# Intervention

## (Mechanical Intervention)

**KIT: Dowels, Liquids,**  
(Tapered Wood or Plastic)  
(Assortment from 1" dia to 5" dia)



**9.3.44**

# Intervention

## (Mechanical Intervention)

**KIT: Dome Lid Lock,  
Screw Clamp**



**Spring Loaded Clamp**



**Squeeze Clamp**



**9.3.48 & 9.3.49**

**(Total of 4, Mix or Match)**

# Decontamination (Ground Protection)

**TARPS, Plastic** (Ground Cover – Nominal 12' x 12'; Need 2)



**10.1.1**



# Decontamination (Ground Protection)

**TARPS, Plastic or Canvas, “Carry-All”**  
(Nominal 6' x 6')



**10.1.2**

# Decontamination (Ground Protection)

**SHEETING, Plastic, Roll** (Heavy Duty – 5' x 100')



**10.1.3**

# Decontamination (Ground Protection)

## CATCH BASIN



10.1.4

# Decontamination (Personal Protection)

## SHOWER, Gross Decontamination



10.1.5

# Decontamination (Personal Protection)

## EYE WASH, Station

Must Be Labeled  
Verifying It Meets  
ANSI Standard  
Z-358.1



10.1.6

# Decontamination (Personal Protection)

**POOLS, Portable, Large**  
(60 to 80 Gallon Capacity – Minimum of 3)



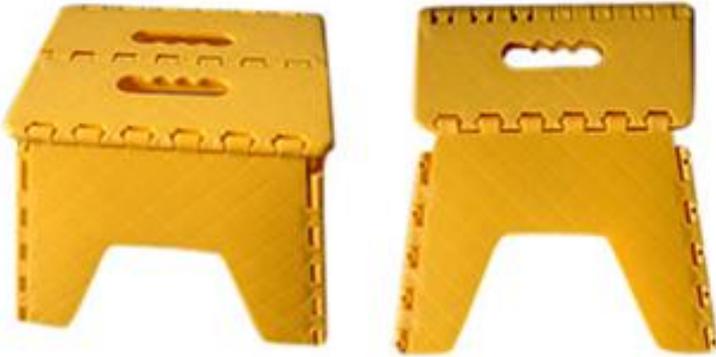
10.1.7



# Decontamination

## (Support Tools for Decontamination)

### STOOLS, Portable (Need 4)



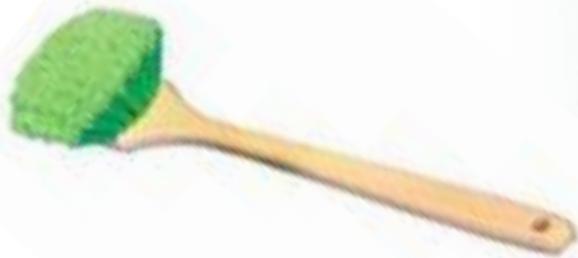
10.2.1



# Decontamination

## (Support Tools for Decontamination)

**BRUSHES, Long Handle, Soft Bristle**  
**(Need 4)**



**10.2.2**



# Decontamination

## (Support Tools for Decontamination)

**BRUSHES, Short Handle, Soft Bristle,  
“Rat Tail” (Need 2)**



**10.2.4**



# Decontamination

## (Support Tools for Decontamination)

### BRUSHES, Long Handle, Car Wash Type (Need 2)

30", fixed or adjustable  
handle



10.2.5



# Decontamination

## (Support Tools for Decontamination)

### SPONGES, Set (Need 4)



10.2.6



# Decontamination

## (Support Tools for Decontamination)

**TOWELS, Absorbent, Drying (Laundry Type)**



**10.2.7**

# Decontamination

## (Support Tools for Decontamination)

**TOWELS, Absorbent, Disposable  
(Paper Towels)**



**10.2.8**

# Decontamination

## (Support Tools for Decontamination)

**BLANKETS, Disposable (Need 4)**



**10.2.9**



# Decontamination

## (Support Tools for Decontamination)

### **CLOTHING, Modesty (Minimum 12)**



10.2.11



# Decontamination

## (Support Tools for Decontamination)

**TRAFFIC CONES or  
DELINEATORS**  
(Ordinary, Item # 10.2.12)



**TRAFFIC CONES or  
DELINEATORS**  
(Reflective, Item # 10.2.13)



**10.2.12 & 10.2.13**

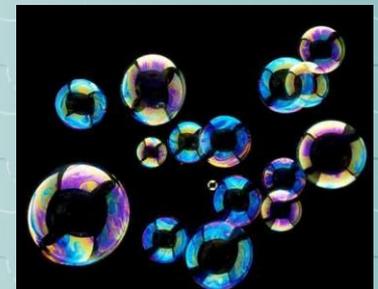
Total of 6  
Mix and Match

# Decontamination

## (Support Tools for Decontamination)

**SOAP, Soft HYPO-ALLERGENIC, Liquid**

**LIQUID DETERGENT  
NOT ACCEPTABLE**



**10.2.15**

# Decontamination

## (Support Tools for Decontamination)

### **CHEM-TAPE, Chemical Resistant** (Two Rolls)



**10.2.16**

# Decontamination

## (Support Tools for Decontamination)

### CLOTHING REMOVAL TOOLS

(Scissors)



10.2.17



# Decontamination

## (Water Supply, Distribution Tools)

**ADAPTOR, 1 1/2" to Garden Hose Reducer (Need 2)**



Garden Hose



F.D. 1 1/2"

10.3.1



# Decontamination

## (Water Supply, Distribution Tools)

### MANIFOLD, Heavy Duty



10.3.2

# Decontamination (Water Supply, Distribution Tools)

## MANIFOLD, Light Duty



← Acceptable →



NOT Acceptable →



ITEM # 10.3.3 CAN BE SELECTED  
IN PLACE OF ITEM # 10.3.2  
(Either – Or)

# 10.3.3

# Decontamination

## (Water Supply, Distribution Tools)

**HOSE, Garden, 1/2" Dia.**  
**(12' to 24' Lengths – Three Sections)**



12' to 25' Approx

10.3.4



# Decontamination

## (Water Supply, Distribution Tools)

### HOSE, Garden, Shut-Off (In Line)

Total of 3 of Any Type



10.3.5

# Decontamination

## (Water Supply, Distribution Tools)

### WRENCH, Hydrant, Universal



10.3.6

# Decontamination

## (Water Supply, Distribution Tools)

**APPLICATOR, Nozzle, Garden Hose,**  
**(Adjustable – 2 of Any Type)**



**10.3.7**



# Decontamination

(Water Supply, Distribution Tools)

## APPLICATOR, Garden Sprayer, Pressure



10.3.8

# Decontamination (Collection)

## BUCKETS, Ordinary

5-Gallon Capacity (Minimum 4)



↑  
**YES**

↑  
**NO**



**10.4.1**



# Decontamination (Collection)

## **BAGS, Heavy Duty, 3 mil**

**(42 Gallon Capacity Contractor's Type – Minimum 10)**



**10.4.2**



# Decontamination (Collection)

## BAGS, Medium Duty Yard (33 Gallon Capacity – Minimum 10)



10.4.3



# Decontamination (Collection)

**COLLECTION UNIT, Debris**  
(35 to 65 Gallon Capacity – Need 1)



**10.4.4**

**NEED AT LEAST ONE of this type**



# Decontamination (Collection)

## COLLECTION UNIT, Containment Drum (85 to 95 Gallon Capacity)

**NEED 2 Total – AT  
LEAST ONE of  
either  
10.4.5 or 10.4.6**



**10.4.5**

**Must Meet 49 CFR 173.3(c) Requirements**



# Decontamination (Collection)

## COLLECTION UNIT, Over-Pack Drum (110 Gallon Capacity)

**NEED 2 Total – AT  
LEAST ONE of  
either  
10.4.5 or 10.4.6**



**10.4.6**

**Must Meet 49 CFR 173.3(c) Requirements**



# Decontamination (Collection)

## LINERS, Drum

(85 to 95 Gallon Capacity – Minimum 10)



10.4.7



# Communications (Radio)

## RADIO, Portable, Unit (Intrinsically Safe)

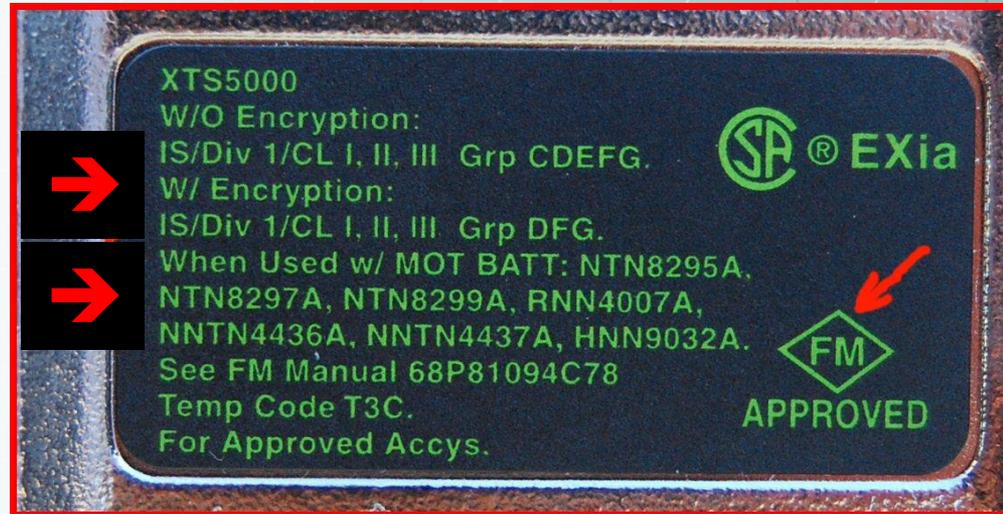


← Back of Portable Radio

Close-Up of a Typical I.S. Label

List of Compatible I.S. Battery Numbers

← I.S. Label



11.1.1

Certifying Testing Labs →



# Communications (Radio)

## **RADIO, Portable, In-Suit Communications**

4 for Type 3 and 2 Teams

6 for Type 1 Team



11.1.4

# Communications (Radio)

## RADIO, Portable, Battery (Interchangeable and I.S.)



Back of Batteries



Battery Numbers  
Must Match  
Those On Radio  
I.S. Label



Close-Up of  
Battery Label

# Communications (Cellular Phone)

## PHONE, Cellular



11.2.1

# Respiratory Protection (Self-Contained)

## **SCBA, Complete Unit, (1 Hour Rating)**

**NIOSH & NFPA Certified for  
Structural Use  
(TYPE 2 & 3 TEAMS)**



**12.1.1**



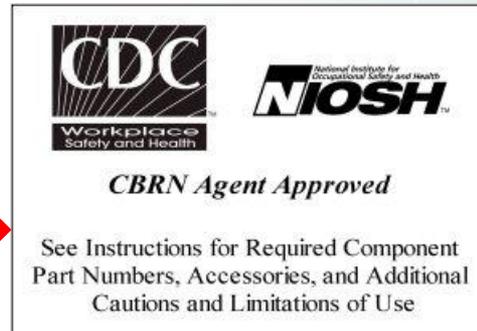
# Respiratory Protection (Self-Contained)

## SCBA, WMD CBRN, Complete Unit, (1 Hour Rating)

NIOSH CBRN  
requirement is for  
TYPE 1 TEAM

Unit MUST Have This  
NIOSH Certifying Label  
Affixed Somewhere,  
Usually on Frame.

Including Retro-Fit!



12.1.2

NFPA and NIOSH - CBRN Rated



# Respiratory Protection (Self-Contained)

## SCBA, Full Mask

NIOSH & NFPA Certified for  
Structural Use  
(TYPE 2 & 3 TEAMS)



**12.1.3**



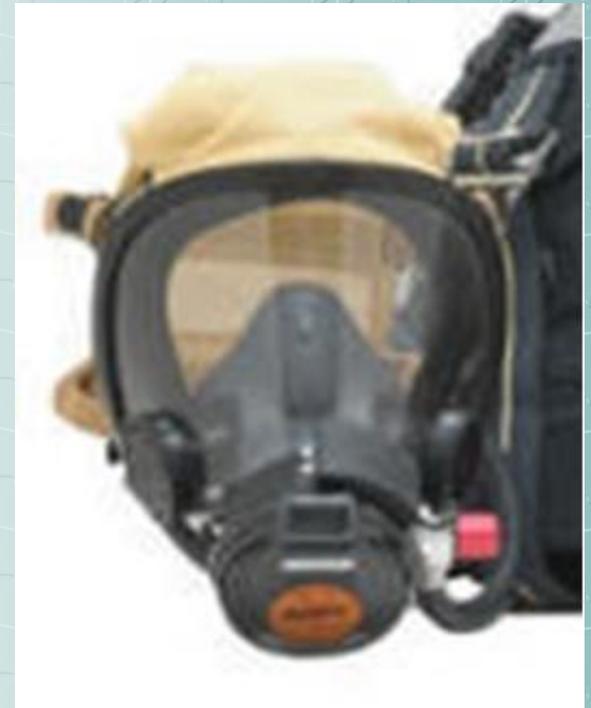
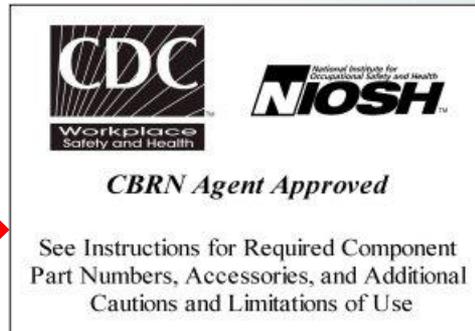
# Respiratory Protection (Self-Contained)

## SCBA, WMD CBRN, Full Mask

NIOSH CBRN  
requirement is for  
TYPE 1 TEAM

Unit MUST Have This  
NIOSH Certifying Label  
Affixed Somewhere,  
Usually on Frame.

Including Retro-Fit!



12.1.4

NFPA and NIOSH - CBRN Rated



# Respiratory Protection (Self-Contained)

**Bottle, Spare – Replacement**  
**(1 Spare Bottle for Each Assigned SCBA)**



**12.1.7**



# Respiratory Protection

## (Air Purifying Respirator)

**APR, Unit and Full Mask, Industrial Chemicals**



**12.2.1**

# Respiratory Protection

## (Air Purifying Respirator)

**APR, Unit and Full Mask, CBRN Chemicals**



**12.2.2**

# Respiratory Protection

(Powered Air Purifying Respirator)

## **OPTIONAL ITEM**

**PAPR, Unit and Full Mask, Industrial Chemicals**



**12.2.3 (Optional for Item # 12.2.1)**

# Respiratory Protection

## (Air Purifying Respirator)

### **CARTRIDGES, APR or PAPR, Industrial Chemicals** (Must have 7)

CARTRIDGES ARE COLOR-CODED TO INDICATE SPECIFIC TYPES OF INDUSTRIAL CHEMICAL PROTECTION



See BULLETIN # 17  
“Canister Color Code”  
Which Has A “Cartridge  
Color Code” Chart.

12.2.5



# Respiratory Protection (Air Purifying Respirator)

## **CARTRIDGES, APR or PAPR, CBRN Chemicals**

**(Must have 7)**

THE CBRN UNIT **MUST** HAVE  
THIS NIOSH CERTIFYING  
LABEL



# 12.2.6



# Tools / Other

(General Purpose, Hand Tools, Large)

**SHOVEL, Round Point**  
(Metal – Need 1)



13.1.1



# Tools / Other

(General Purpose, Hand Tools, Large)

## **SHOVEL, Square Point**

(Metal – Need 1)



**13.1.3**



# Tools / Other

(General Purpose, Hand Tools, Large)

**SHOVEL, Square Point**  
(Plastic – Need 1)



13.1.4



# Tools / Other

(General Purpose, Hand Tools, Large)

## **SHOVEL, Scoop**

(Plastic – Need 1)



**13.1.5**



# Tools / Other

(General Purpose, Hand Tools, Large)

**BROOM, Street, Stiff Bristle**

(Need 1)



13.1.6



# Tools / Other

(General Purpose, Hand Tools, Large)

## LIFTING TOOL, Drum, Up-ENDER

(Need 1)



13.1.7



# Tools / Other

(General Purpose, Hand Tools, Large)

## HAMMER, Sledge

(Need 1 – 7 to 10 lbs)



13.1.8



# Tools / Other

(General Purpose, Hand Tools, Large)

**BAR, Wrecking or Pry,**  
(Need 1 – 36” or Larger)



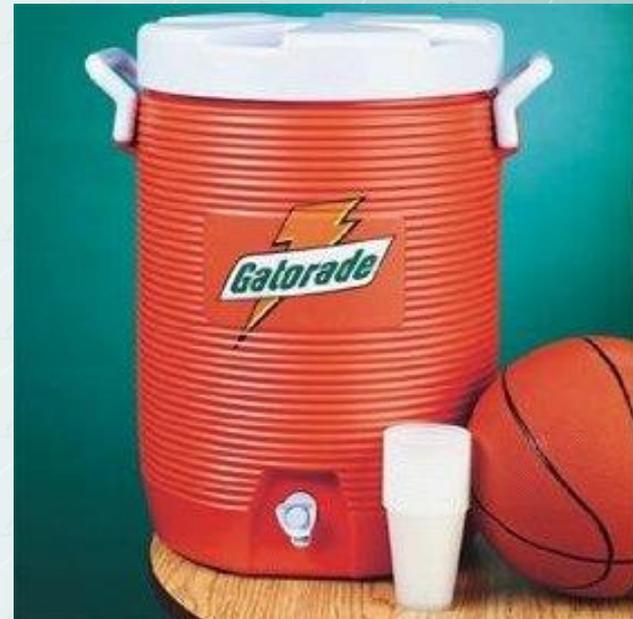
**13.1.9**



# Tools / Other

(General Purpose, Hand Tools, Large)

**COOLER, Rehydration,**  
(Need 1 – 5 to 10 Gallons)



**13.1.10**



# Tools / Other

(General Purpose, Hand Tools, Large)

## MEGAPHONE, Battery Operated

DOES NOT HAVE TO BE  
INTRINSICALLY SAFE



13.1.11



# Tools / Other

(General Purpose, Hand Tools, Large)

## TRAUMA, Kit, Complete



13.1.13

MUST MEET ANSI Z-308.1

# Tools / Other

## (General Purpose, Hand Tools, Large)

### MEDICAL MONITORING, Kit

(Can be included in Trauma Kit)

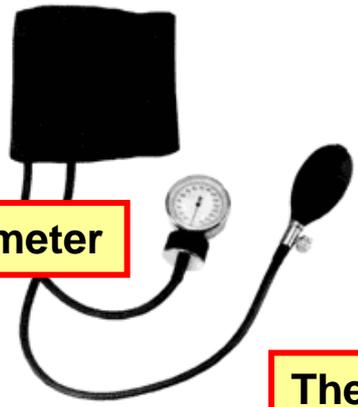
### Baseline Monitoring Forms



Scale



Stethoscope



Sphygmomanometer



Thermometer Unit

(Include significant observations such as time in suit, inappropriate behaviors, intuitive feelings, etc.)  
 Figure S11-6 Entry team safety form.  
 Medical Evaluation Form — Entry Team No. \_\_\_\_\_

Pre-entry Evaluation

| Name | B/P | Pulse | Resp. | Temp. | Weight | EKG |
|------|-----|-------|-------|-------|--------|-----|
|      |     |       |       |       |        |     |
|      |     |       |       |       |        |     |
|      |     |       |       |       |        |     |

Post-entry Evaluation

| Name | B/P | Pulse | Resp. | Temp. | Weight | EKG |
|------|-----|-------|-------|-------|--------|-----|
|      |     |       |       |       |        |     |
|      |     |       |       |       |        |     |
|      |     |       |       |       |        |     |

5 Minutes Post-entry

| Name | B/P | Pulse | Resp. | Temp. | Weight | EKG |
|------|-----|-------|-------|-------|--------|-----|
|      |     |       |       |       |        |     |
|      |     |       |       |       |        |     |
|      |     |       |       |       |        |     |

Figure S11-7 Medical evaluation form.

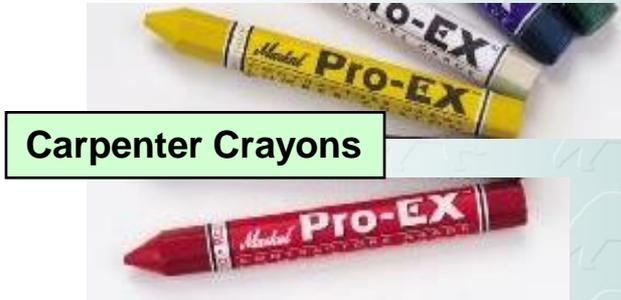
# Tools / Other

(General Purpose, Hand Tools, Large)

## ZONE MARKING, Kit



Barricade Tapes



Carpenter Crayons



Chalk Sticks



Spray Chalk



Powder Chalk

# Tools / Other

(General Purpose, Hand Tools, Large)

**SCOPE or BINOCULARS,  
Spotting**



**13.1.18**

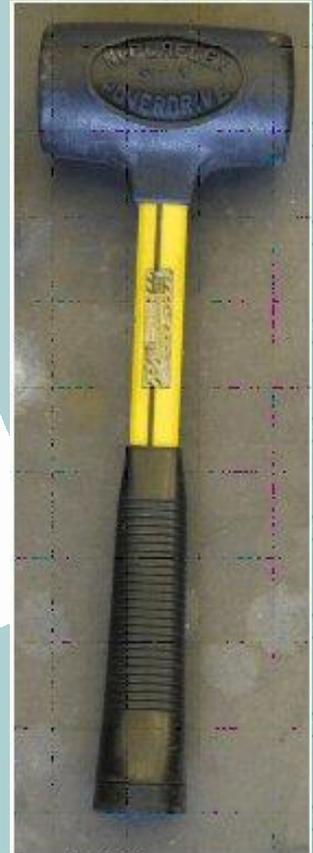
# Tools / Other

(General Purpose, Hand Tools, Small)

## HAMMER, Dead Blow



Won't Bounce  
Upon Impact



13.21  
DEAD BLOW

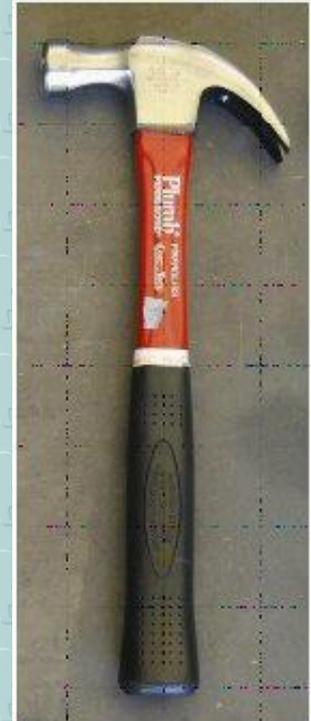
13.2.1

# Tools / Other

(General Purpose, Hand Tools, Small)

## HAMMER, Claw

20 to 24 oz



13.22  
CLAW

13.2.2

Non-Sparking Item # 13.3.7 Acceptable In Lieu Of



# Tools / Other

(General Purpose, Hand Tools, Small)

## **HAMMER, Engineer**

(“Mechanics’ Hammer” – 36 to 40 oz.)



13.2.3  
ENGINEER

**13.2.3**

Non-Sparking Item # 13.3.8 Acceptable In Lieu Of

# Tools / Other

(General Purpose, Hand Tools, Small)

## **HAMMER, Ball Peen**

16 to 40 oz.



**13.2.4**

Non-Sparking Item # 13.3.9 Acceptable In Lieu Of

# Tools / Other

(General Purpose, Hand Tools, Small)

## SCREWDRIVER SET, Chisel Point

Three Different Sizes



13.2.5

Non-Sparking Item # 13.3.10 Acceptable In Lieu Of

# Tools / Other

(General Purpose, Hand Tools, Small)

## **SCREWDRIVER SET, Phillips Point**

Three Different Sizes



**13.2.6**

Non-Sparking Item # 13.3.11 Acceptable In Lieu Of

# Tools / Other

(General Purpose, Hand Tools, Small)

## **PLIERS, Ordinary**

(General Utility – Nominal 6” to 10”)



**13.2.7**

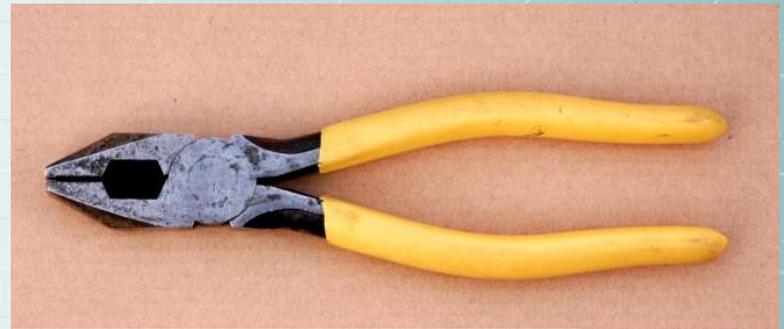
Non-Sparking Item # 13.3.12 Acceptable In Lieu Of



# Tools / Other

(General Purpose, Hand Tools, Small)

## PLIERS, Wire, Side Cutting



**13.2.8**

Non-Sparking Item # 13.3.13 Acceptable In Lieu Of

# Tools / Other

(General Purpose, Hand Tools, Small)

## **PLIERS, Long-Nose** (Needle Nose 7" to 10")



**13.2.9**

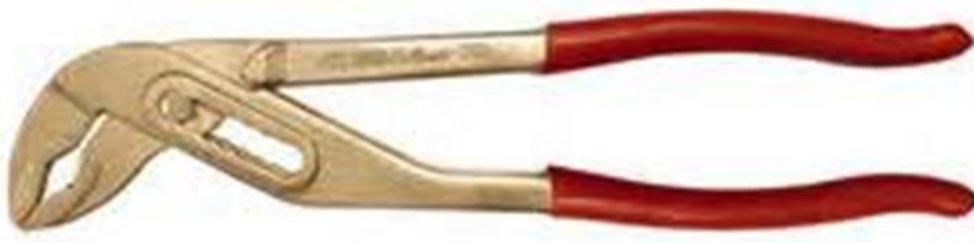
Non-Sparking Item # 13.3.14 Acceptable In Lieu Of

# Tools / Other

(General Purpose, Hand Tools, *Small*)

## **PLIERS, Combination (Kit of 3)**

(Slip-Joint, Channel Lock, Grove Joint)



**13.2.10**

Non-Sparking Item # 13.3.15 Acceptable In Lieu Of

# Tools / Other

(General Purpose, Hand Tools, Small)

**PLIERS, Locking**, Set of 4 Different Types and / or Sizes (Vice Grip Type)



**13.2.11**

Non-Sparking Item # 13.3.11 Acceptable In Lieu Of

# Tools / Other

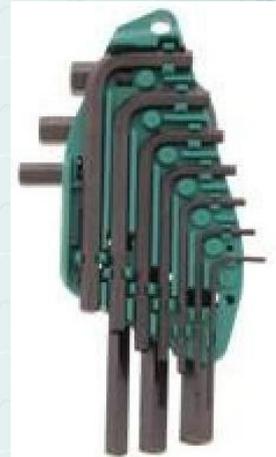
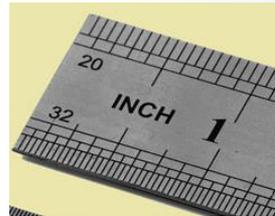
(General Purpose, Hand Tools, Small)

## WRENCH, Allen, English

(9 Piece Set)

Item 13.2.12

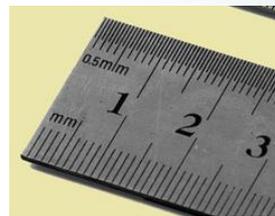
- AND -



## WRENCH, Allen, Metric

(9 Piece Set – Metric)

Item 13.2.13



13.2.12 & 1.3.2.13

# Tools / Other

(General Purpose, Hand Tools, *Small*)

**WRENCH, Crescent, Adjustable**  
(2 Different Sizes – 12” and Larger)



**13.2.14**

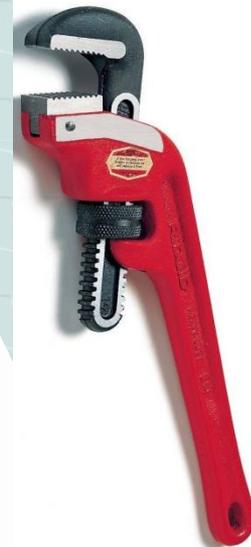
Non-Sparking Item # 13.3.18 Acceptable In Lieu Of

# Tools / Other

(General Purpose, Hand Tools, Small)

## WRENCH, Pipe, Adjustable

(2 Different Sizes – 16” and Larger)



13.2.16

Non-Sparking Item # 13.3.20 Acceptable In Lieu Of

# Tools / Other

(General Purpose, Hand Tools, Small)

## WRENCH, Bung Cap, Universal



13.2.18

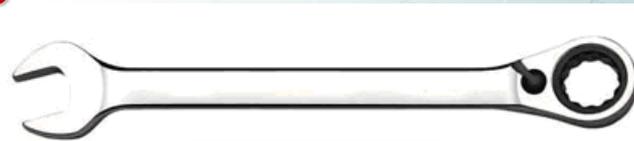
Non-Sparking Item # 13.3.17 Acceptable In Lieu Of

# Tools / Other

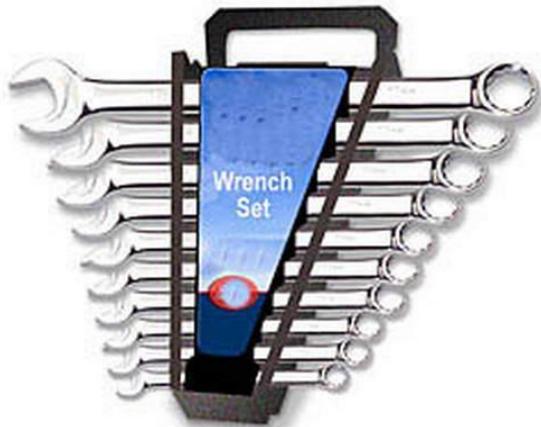
(General Purpose, Hand Tools, Small)

## **WRENCH, Combination Set**

**10 Sizes from 3/8" to 1 3/8"**



Reversible Ratchets



**13.2.19**

**Non-Sparking Item # 13.3.22 Acceptable In Lieu Of**

# Tools / Other

(General Purpose, Hand Tools, Small)

## **CHISEL, Cold**

One – ¾" x 9" to 1" x 12"



**13.2.23**

# Tools / Other

(General Purpose, Hand Tools, Small)

## PUNCH, Pin, Spring Loaded



13.2.26

# Tools / Other

(General Purpose, Hand Tools, Small)

**TAPE, Measuring, Retractable**  
(24' Minimum)



13.2.27

# Tools / Other

(General Purpose, Hand Tools, Small)

**TAPE, Measuring, Re-Wind, non-Metal**  
(Cloth, Tyvek, Plastic - 50' Minimum)



13.2.28

# Tools / Other

(General Purpose, Hand Tools, Small)

## KNIFE, Putty, Scraping

2" Wide



13.2.29

Non-Sparking Item # 13.3.26 Acceptable In Lieu Of

# Tools / Other

(General Purpose, Hand Tools, Small)

## KNIFE, General Utility, Cutting



13.2.30

# Tools / Other

(General Purpose, Hand Tools, Small)

## **SHEARS, Cutting**



**13.2.31**

**Non-Sparking Item # 13.3.27 Acceptable In Lieu Of**

# Tools / Other

(General Purpose, Hand Tools, Small)

**STRAPS, Ratchet, Tie Down**

**Nominal 1" wide x 20', and 1,000 Lbs Rating**



**13.2.32**



# Tools / Other

(General Purpose, Hand Tools, Small)

## STOP WATCH



13.2.33



# Tools / Other (Special Purpose)

## **GROUNDING, Cable and Clamps**

3/16 Carbon Steel, 75' minimum total required,  
No Shorter than 25' Lengths



13.3.1

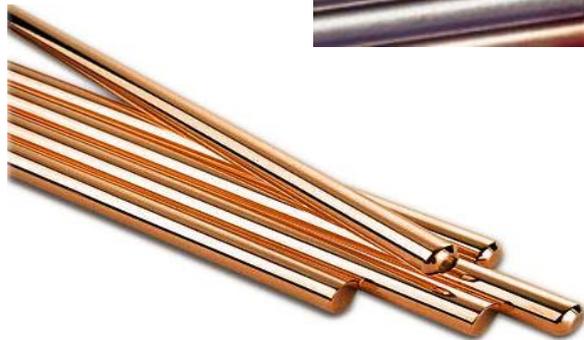


# Tools / Other

## (Special Purpose)

### **GROUNDING, Rod**

3/8" dia. and 4 to 6 feet Long



**13.3.2**



# Tools / Other (Special Purpose)

## **VESTS, ICS, HazMat Group**

**For ALL Haz-Mat Group  
Positions**

- **HM Group Supervisor**
- **Entry Team Leader**
- **Site Access Control Leader**
- **Decon Leader**
- **Safe Refuge Manager**
- **Tech / Spec**
- **Assistant Safety Officer**

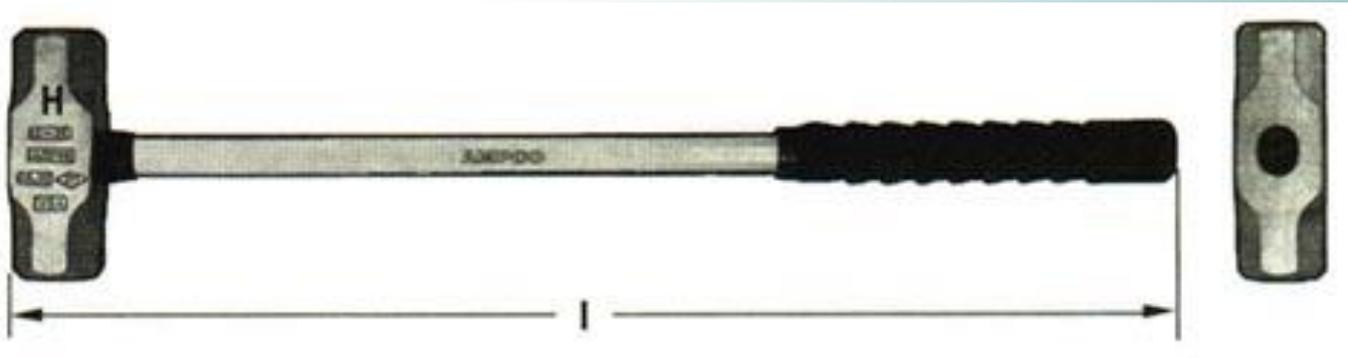


**13.3.3**

# Tools / Other

(Special Purpose – Non-Sparking)

**HAMMER, Non-Sparking, Sledge**  
(7 to 10 lbs)



**13.3.6**

# Tools / Other

(Special Purpose – Non-Sparking)

## HAMMER, Non-Sparking, Claw

20 to 24 oz.



13.3.7

# Tools / Other

(Special Purpose – Non-Sparking)

## **SCREWDRIVER, Non-Sparking, Chisel Point** (3 Sizes)



**13.3.10**

# Tools / Other

(Special Purpose – Non-Sparking)

**SCREWDRIVER, Non-Sparking, Phillips Point**  
**(3 Sizes)**

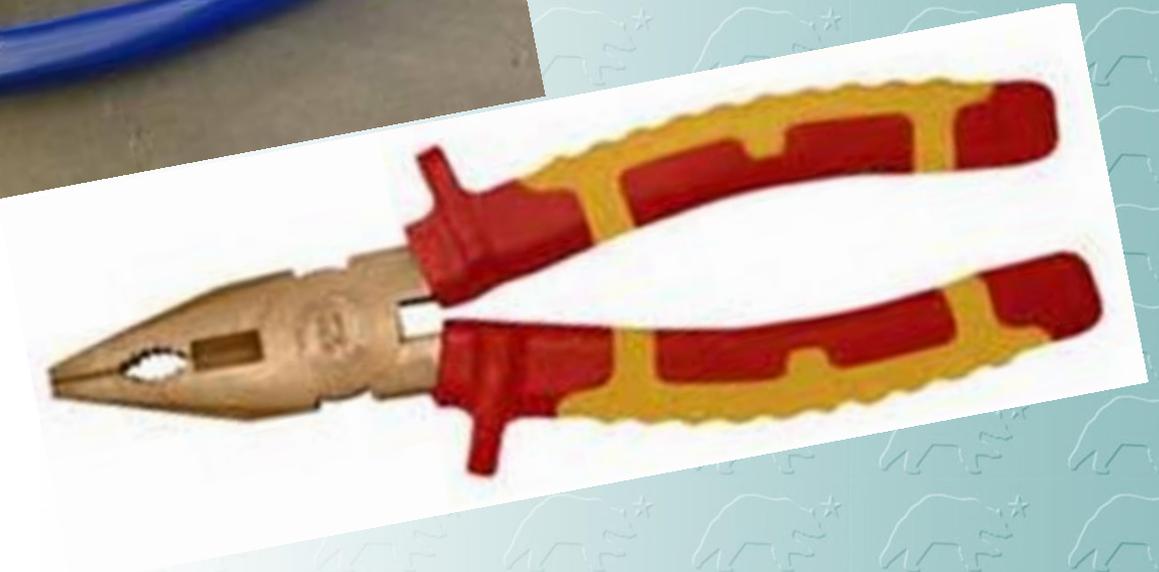


**13.3.11**

# Tools / Other

(Special Purpose – Non-Sparking)

**PLIERS, Non-Sparking, Ordinary**  
(1 – from 6” to 8”)



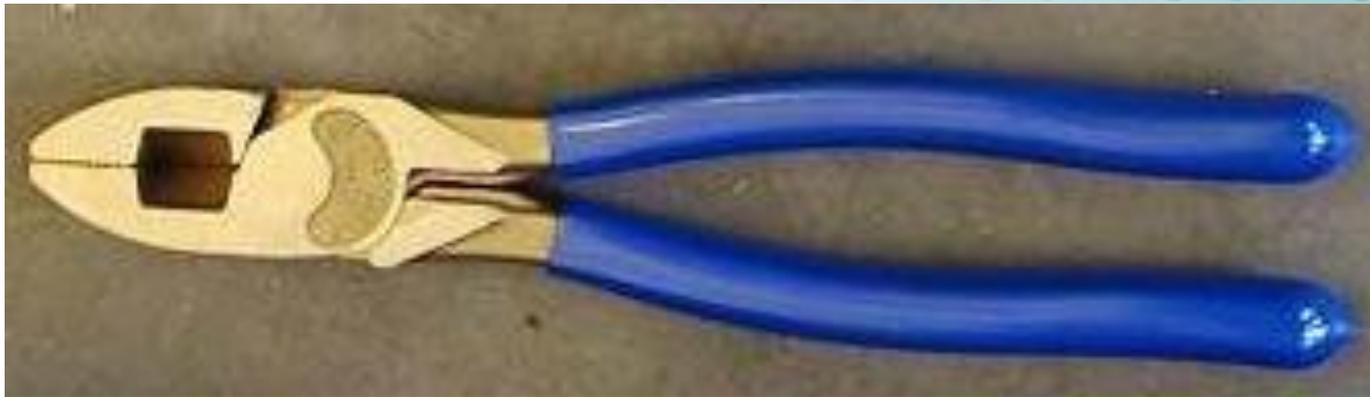
**13.3.12**

# Tools / Other

(Special Purpose – Non-Sparking)

## PLIERS, Non-Sparking, Wire Cutter

(1)



13.3.13



# Tools / Other

(Special Purpose – Non-Sparking)

## PLIERS, Non-Sparking, Long-Nose (Needle Nose - 1)



**13.3.14**

# Tools / Other

(Special Purpose – Non-Sparking)

**WRENCH, Non-Sparking, Bung (Universal)**



**13.3.17**

# Tools / Other

(Special Purpose – Non-Sparking)

**WRENCH, Non-Sparking, Crescent**  
(2 Different Sizes – Minimum 12”)

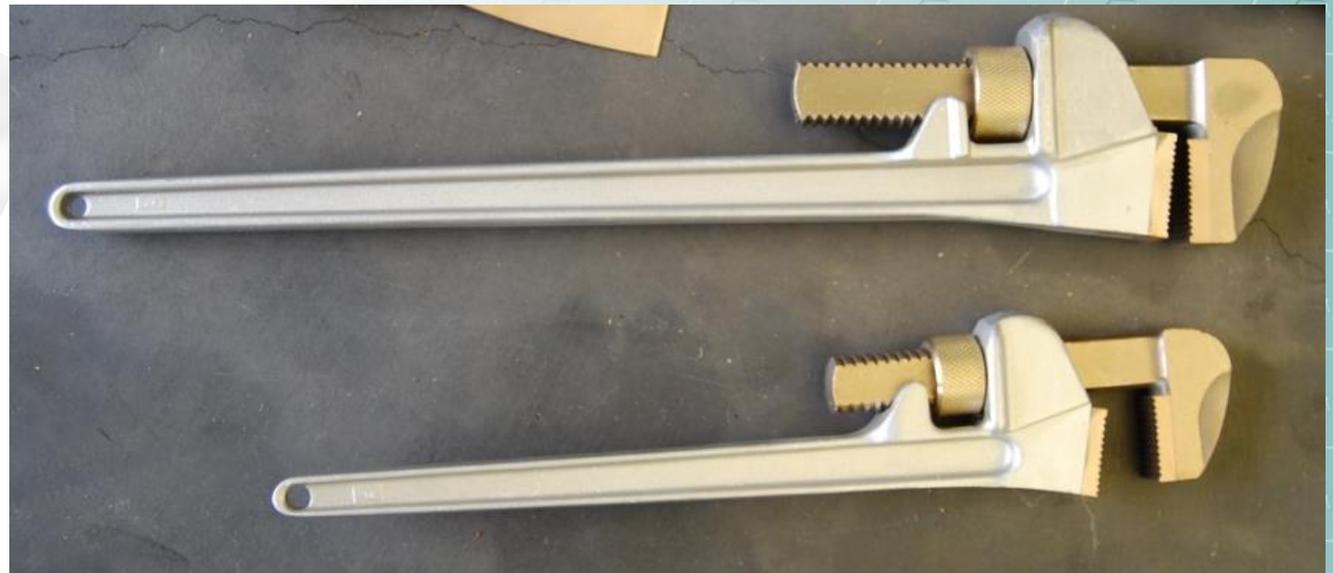


**13.3.18**

# Tools / Other

(Special Purpose – Non-Sparking)

**WRENCH, Non-Sparking, Pipe, Adjustable**  
(2 Different Sizes – Minimum 16")



**13.3.20**

# Tools / Other

(Special Purpose – Non-Sparking)

## KNIFE, Non-Sparking, Putty (2" Wide)



13.3.26



# Tools / Other

(Special Purpose – Non-Sparking)

## **SHEARS, Non-Sparking, Cutting**



**13.3.27**

# Tools / Other

## (Special Purpose)

### REFRIGERATOR, Utility, Mini



**13.3.30**