

CALIFORNIA OFFICE OF EMERGENCY SERVICES
FIRE & RESCUE DIVISION

**HAZARDOUS MATERIALS COMPANY TYPING
INITIAL INSPECTION RECORD ON-SITE**

(CIRCLE ONE)
**MASTER
COPY**

Version 4.1
--- Supports 2012 SEL Edition ---

(Latest Revision May 29, 2014)

Department 3 Letter Identifier (MACS):	XSM BEL	Department Name:	Belmont Fire Department	Company Designation:	HM - 14
Lead Point Of Contact:	Michael Gaffney, Deputy Chief	Date of Inspection:	June 10, 2014	Location of Inspection: (Address)	911 Granada Street Belmont, 94002
Inspection Team:	Campbell, Anderson, Mehr	Inspection TYPE: (Enter 1, 2, or 3)	2	Inspection Result: (Circle)	PASS FAIL
Request #:	63	Orig. Insp. #: (i.e. OR-yyyy-01)	OR-2014-70	Orig. Pass #:	(- -)

UNIT RESPONDS FROM:	<small>(VERIFY – Address with proper zip)</small>
----------------------------	---

----- OFFICIAL USE ONLY -----				
UPDATE:	<input type="checkbox"/> TeamTypeReqList	<input type="checkbox"/> TeamListComplete	<input type="checkbox"/> TeamTypeCompletion (P/F)	<input type="checkbox"/> Certificate
MAIL:	<input type="checkbox"/> InspRecord Duplicate	<input type="checkbox"/> TrngInspRecord Dup	<input type="checkbox"/> TeamTypeUpdate Chart	<input checked="" type="checkbox"/> + To M. Mail List
FILE:	<input type="checkbox"/> Master	<input type="checkbox"/> F & R	<input type="checkbox"/> Client	<input type="checkbox"/> MutualAidTable

NOTE: Please refer to the latest Edition of FIRESCOPE Standardized Hazardous Materials Equipment List, PART TWO, "LIST OF EQUIPMENT", for a complete description of each tool or equipment item, required sizes, and listing of components for kits.

(Latest Revision May 29, 2014)

1. FIELD TESTING and DETECTION						
1.1 Color Change Analysis – Non-Electronic						
Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
1.1.1	TEST STRIPS, pH PAPER, Packets (i.e. ColorpHast, pHydriion, Whatman, LabSafety)	1 Pkt				
1.1.3	TEST STRIPS, OXIDIZER, Packets (Physical or chemical property sensitive; Color change; i.e. Emquant, Sensafe)	1 Pkt				
1.1.4	TEST STRIPS, PEROXIDE, Packets (Presence is based upon a color change; i.e. Emquant, Sensafe)	1 Pkt				
1.1.9	TEST STRIPS, WMD CHEMICAL, Kit: (M-8 booklet of 25 sheets - Or - "3-WAY" booklet) NOTE: SOMETIMES THESE TEST PACKETS ARE A PART OF M256A1 KIT)	1 Pkt of either one	Must detect nerve agents and blister agents			
1.1.10	TEST PAPER, WMD CHEMICAL, Roll: (M-9 paper rolls or equal)	1 Pkt	Single color change for nerve or blister			
1.1.11	TEST PAPER, WMD CHEMICAL, Card: Military M256A1 plastic card test kit; (i.e. Fisher, Tradeways)	1 Kit	(Usually contains about 12)			

1.1.12	TEST CARD, TRAINING ONLY, WMD CHEMICAL; (Same as M256A1 but for training only)	1 Kit	Training Only			
1.2 Qualitative Analysis, Kits – Non-Electronic						
Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
1.2.1	INDUSTRIALCHEMICALS, KNOWN, Qualitative: Test Kit (i.e. abbreviated or limited HazCat or 5-Step or equal)		Testing of Knowns			
1.2.2	INDUSTRIALCHEMICALS, UNKNOWN, Qualitative: Test Kit (i.e. Full function HazCat or 5-Step) (Also satisfies #1.2.1)	1 Kit	Testing of Unknowns			
1.2.3	PCB CHEMICALS, Test Kit; May be part of #1.2.1 or #1.2.2 Inventory; (i.e. Dexsil PCB, Chlor-A-Soil PCB)	4 Kits UNDER REVIEW	Detects PCB's in water or oil			
1.2.8	WMD, WATER TEST, MILITARY, Kit # M272 or M273; (i.e. LabSafety, Fisher Scientific, Utech, Tradeways)	1 Kit	Nerve agents and Lewisite			
1.2.9	WMD CHEMICALS, MILITARY, Test Kit # M18A2 or M18A3 or CAD C-2; (i.e. LabSafety, Fisher Scientific, EAI, Tradeways)	1 Kit	Nerve agents <input type="checkbox"/> Lister agents <input type="checkbox"/> Blood agents <input type="checkbox"/> Choking agents <input type="checkbox"/>			
1.3 Qualitative Analysis, Kits – Electronic						
Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
1.3.1	CHROMATOGRAPHY, GAS	One Kit Complete of any one of the three technologies Described				
1.3.2	SPECTROMETRY, MASS or equal					
1.3.3	SPECTROSCOPY, INFRA-RED or equal					
1.4 Colorimetric Analysis – Non-Electronic						
Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
1.4.1	COLORIMETRIC Kit, BASIC; (i.e. Draeger, MSA, Sensidyne, Matheson, GasTec)	1 Kit, Complete, of any one type listed	Spot analysis for Industrial Chemicals			
1.4.2	COLORIMETRIC Kit, CHIP; Miniaturized tubes in a plastic chip; (i.e. Draeger CMS, or equal)					
1.4.3	COLORIMETRIC Kit, MULTI-SENSING; Reads 5 or more tubes simultaneously (i.e. Draeger CDS or equal)					
1.4.4	COLORIMETRIC Kit, WMD Special; Special selection of industrial tubes for some WMD chemicals detection with flow chart or instruction book (i.e. Draeger, MSA CWA, or equal)	1 Kit, Complete	Spot analysis for WMD chemicals			
1.5 WMD Biological Detection – Electronic						
Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
1.5.1	NON-AGENT SPECIFIC Biological Detection: Simple “yes” – “no” detection tabs or strips, highly prone to false positives.	Either One --- Stand-alone kit	REVISED 2012			
1.5.2	AGENT SPECIFIC Biological Detection: Listed in increasing order of reliability and accuracy: a. Protein fluorescence technologies (i.e. Guardian, Tetracore, Advent BADD) - Or - b. Immuno-Chromatography (IC) or Immuno-assay fluorescence technology (IAF) (i.e. RAMP Systems) - Or - c. DNA replication technology (i.e. Smith Bio-Seqq), Polymerase Chain Reaction (PCR) (Idaho Tech) - Or - Other equal or better system		One (1) kit complete, of either #1.5.1 Or # 1.5.2 Protein Presence <input type="checkbox"/> Protein Fluorescence <input type="checkbox"/> I.C. or Immuno Assay <input type="checkbox"/> DNA / PCR <input type="checkbox"/>			

2. AIR MONITORING

2.1 Confined Space Monitoring

Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
2.1.1	CONFINED SPACE OSHA STANDARD Four Gas: w/ wand, 10' tubing; For O ₂ , LEL, CO, H ₂ S (i.e. ISC, Rae, GasTech, MSA, BioSystems, AIM)	1 Unit	Continuous monitoring; Intrinsic to UL #913			
2.1.2	CALIBRATION KIT, for Item # 2.1.1	1 Kit				

2.2 Multiple Gas Monitoring, Toxic

Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
2.2.1	TOXIC VAPOR, in ppm; Volatile Organic Compound (VOC) and Toxic Industrial Compounds (TIC); (Not Benzene); Capable of identifying specific substance.	1 Unit	Continuous monitoring; Downloadable to computer			
2.2.2	AROMATIC HYDROCARBON (Benzene Ring) Monitoring. If capability included in 2.2.1, satisfies this requirement.	1 Unit	Continuous monitoring			
2.2.4	CALIBRATION KITS: For each of the above that may be in inventory.	1 Unit for each kit				

2.3 Specialty Gas Capability

Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
2.3.1	AMMONIA, nominal range 0 to 100 ppm; (i.e. Innova, Rae, Draeger)	Detection Capability for Each Gas One or More Devices Satisfy 2012	Continuous monitoring			
2.3.2	FREONS, Halogenated Hydrocarbons (Refrigerants); (i.e. AirWare, Tif, Rae)		Refrigerants continuous monitoring			
2.3.3	HALOGEN GASES; Specifically Chlorine – Bromine and others are optional (i.e. GasAlert, Draeger, AirWare, BioSystems, RKI)		At least Chlorine			
2.3.4	PHOSPHINE (i.e. BioSystems, RAE 3000, PK Safety)		Continuous monitoring			
2.3.16	CALIBRATION KITS (For each instrument, as is necessary)	1 for each type of monitoring unit on hand				

2.4 WMD Chemical Dedicated Instruments

Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
2.4.1	NERVE AGENT Detection (at least one of GA, GB, GD, GF, VX): See Appendix D, Chart #1	Must have capability to monitor and detect for at least one substance in each of these six categories. This may require one to several instruments, depending upon versatility of each instrument	Continuous Monitoring Nerve Agent			
2.4.2	BLISTER AGENT – MUSTARDS Detection (at least one of H, HD, HN, HS, HT): See Appendix D, Chart #1		Continuous Monitoring Blister Agent			
2.4.3	BLISTER AGENT – LEWISITE Detection (At least one of L, L-1, L-2, L-3): See Appendix D, Chart #1		Continuous Monitoring Lewisite Specific			
2.4.4	BLOOD AGENTS Detection (At least one of AC, HCN, CK, SA): See Appendix D, Chart #1		Continuous Monitoring Blood Agent			
2.4.5	CHOKING / VOMITING AGENTS Detection (At least one of CG, DP, Chlorine): See Appendix D, Chart #1		Continuous Monitoring Choking Agent			
2.4.6	INCAPACITATING AGENTS Detection (For Capsicum, also known as MACE, CN, CS-CN): See Appendix D, Chart #1		Continuous Monitoring Pepper Spray			
2.4.7	CALIBRATION KITS: Maintenance or Calibration Kit for each unit in inventory, as necessary.		1 for each type of monitoring unit			

3. SAMPLING

3.1 Substance Capture and Bulk Transfer

Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
3.1.1	COLIWASA TUBES, Disposable; Glass or Clear Plastic, nominal 43" length, ground glass seal, approx 225 ml capacity.	12 of either type, mix or match	EPA Protocol B			
3.1.2	COLIWASA TUBES, Re-usable; Glass: Same as above but with Teflon or Viton seal.		EPA Protocol B			
3.1.5	PIPETTE, TRANSFER, Plastic, Regular, Bulk; 5 to 8 ml capacity, nominal 15 cm length (6 1/2")	Pkg of 100 of either, or combination	Either - Or			
3.1.6	PIPETTE, TRANSFER, Plastic, Large, Bulk; 20ml capacity, nominal 30 cm length (12")					
3.1.7	PIPETTE, TRANSFER, Graduated, glass or plastic; nominal 28 cm length, with squeeze bulb.	0	Changed to Optional 2012	OPT	OPT	OPT
3.1.10	TEST TUBES, Disposable: Borosilicate glass 12-14 ml.	100	Must be Borosilicate glass			
3.1.11	SWAB STERILE: Single use non-organic (no cotton) on stick	6 individual Units	(Takes the place of the fiberglass cloth) 2012			
3.1.12	SPONGES, Sealed, for surface swipe sample taking	2				
3.1.15	ENVIRONMENT DIPPER, Telescopic; Nominal to 20-24 feet; with slip-on 500 ml ladle.	1				
3.1.16	TONGS, BEAKER or CRUCIBLE, for handling beakers; PTFE (Teflon) Coated stainless steel, nominal 10" long	-2- Two of either type, or one of each				
3.1.17	TONGS, BEAKER or JAR, Metal, Plastic Coated for handling jars.					
3.1.19	FORCEPS – Steel, Teflon coated or uncoated, or plastic polypropylene, with pointed or round tips; Nominal length 3 1/2 to 6".	2				
3.1.20	FUNNEL, Plastic (Disposable) or Glass or Metal (Re-Useable); Small 1 1/2 to 2" dia; Medium 2 1/2 to 3 1/2 " dia; Large 4 to 6" dia.	Complement of 3, with at least 1 of each size	3 different sizes			
3.1.24	SPATULA, SAMPLING, LARGE, "V" Shape: Plastic or metal, nominal 6 to 11" length.	5, in any combination				
3.1.25	SPATULA, SAMPLING, MICRO: Nickel plated – Teflon coated tips; One end oblong, other end blunt, nominal 8" length.	1	Meets FDA compliance			
3.1.26	SPOON, Plastic: Polypropylene, disposable, long handle; 1/4 teaspoon, 1/2 teaspoon, 1 teaspoon, and 3 teaspoon (Tablespoon) sizes.	Complement of 12, with at least 1 of each size	4 different sizes			
3.1.27	SCOOP, SMALL, Sterile, 2 oz minimum size: General purpose	1	(4 oz or 8 oz acceptable)			

3.2 Bulk Liquid Transfer – Mechanical

Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
3.2.1	PUMP, SYPHON, DRUM, Heavy Duty, Stainless Steel: For 55 gallon drums; with Teflon piston and 35 feet hose.	1 of any of the three types listed	FM or UL Listed			
3.2.2	PUMP, SYPHON, DRUM, Heavy Duty, PVC: For 55 gallon drums; with Viton or better gaskets and valves; 35 feet hose.		If electrical, MUST BE Intrinsicly Safe Rated 2012			
3.2.3	PUMP, ROTARY, Transfer, Metal: Suitable for flammable liquids in 55 gallon drums; flame arresting screen, vacuum breaker.					
3.2.7	PUMP, DIAPHRAGM, HAND Push-Pull; 1 1/2" hose connects w/strainer, nominal 15 GPM. (i.e. Galls, RMC Medical, Hoop, Aramsco, LabSafety)	1				

3.3 Containerization, Labeling, Documentation

Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
3.3.2	SAMPLE JARS, Sterile, Clear Glass, Wide-mouth 4 oz and 8 oz, with Teflon lined lids	Compliment of 24	Class 2000 EPA Protocol B (Printed on box or package)			
3.3.4	SAMPLE JARS, Sterile, Amber Glass, Wide-mouth 4 and 8 oz, with Teflon lined lids	Compliment of 4	Class 2000 EPA Protocol B (Printed on box or package)			

3.3.7	SAMPLE VIALS, Sterile, Clear Glass, 1.3 oz; Borosilicate with closed Teflon lined caps	12	Class 2000 EPA Protocol B (Printed on box or package)			
3.3.8	STOPPERS, Conical: Rubber, neoprene or silicone; Nine sizes range between #000 to #6, and 12 mm to 30 mm.	Compliment of 5 different sizes				
3.3.9	BAGS, PLASTIC, Zip Locking; Three different sizes – Small 3" x 3"; Medium 6" x 6"; Large 9" x 9" or nominal.	Kit of 24 representing all three sizes				
3.3.10	BAGS, EVIDENCE, Tamper-Proof; Sizes range between 7" x 4" to 12" x 9", pre-printed label, self-sealing.	Compliment of 12				
3.3.11	LABELS, ORDINARY BLANK; Of nominal size to fit on sides of evidence jars, vials, bags; Preferably self-adhesive (Agency designed or commercial is acceptable)	Kit of 50 of various sizes				
3.3.15	LABELS, EVIDENCE SEALS; Tamper-proof, self-destructive if tampered, nominal size 1 1/2" x 3", rolls or pads.	One role, or minimum of 25				
3.3.16	PENS, MARKING, PAINT; Permanent paint applying, various colors, about size of ball point pen, for marking abandoned drums, cans. (i.e. Tempil from hobby stores, Michaels, art supply stores)	4, preferably of different colors				
3.3.17	PENS, MARKING, INDELIBLE, Medium & Fine Point (i.e. Sharpie, Expo, Stiblo)	Kit of 6				
3.3.18	CHAIN OF EVIDENCE FORMS: Usually available from local law enforcement or Arson Bureau.	20				
3.3.19	PHOTO, ASSESSMENT and RECONISANCE KIT, Film Type or Digital Technology: Must provide "instant" printed images or printable from on-board computer.	1 kit or system of Either Type	Digital is acceptable if they can download and print from on-board computer High definition, 4 mega-pixels or better			
3.3.20	PHOTO, ASSESSMENT and RECONISANCE KIT, Digital Type; High quality, downloadable and printable from computer. (i.e. Minolta, Canon, Nikon, etc)					
3.4 Transportation						
Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
3.4.1	CONTAINER, BIOLOGICAL, Plastic: Complete packaging system with locking screw lid, jars of various sizes (6 ml to 500 ml), reinforcing receptacle with instructions; Suitable for infectious bodily fluids, biological threat substances. (i.e. Saf-T-Pak)	1 complete kit, any size	ICAO Packing #602 for Infectious Substances (Printed on box or container)			

4. RADIATION MONITORING / DETECTION						
4.1 Gamma, Beta, and Alpha Detection and Survey						
Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
4.1.1	GAMMA SURVEY CAPABILITY; Gamma radiation (10keV) with visual display meter 0.001 milli-R per hour scale, and CPM scale (0-60,000 CPM)	Must have capability to survey for alpha, beta, and gamma. Separate units will meet this requirement, -- OR -- One "combination" unit will suffice, see optional items	European "CE" Certification is recommended			
4.1.2	BETA SURVEY CAPABILITY; Beta detection (50 keV at 45% efficiency or 150 keV at 80% efficiency), with visual display read-out in R per minute /Counts Per Second (CPS)					As of 2007
4.1.3	ALPHA SURVEY CAPABILITY; Alpha particle detection (2.5 MeV with 70% efficiency) with variable visual display in R and milli-R per hour, or CPM.					
4.2 Radionuclide Detection						

4. RADIATION MONITORING / DETECTION						
4.1 Gamma, Beta, and Alpha Detection and Survey						
Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
4.2.1	RADIO-NUCLIDE DETECTION; Includes memory of radioactive nuclide library; Graphical display in CPS; Might be programmable	One Unit	Can identify and display specific radio nuclide			
4.3 Dosimeters						
Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
4.3.1	DOSIMETER, DIRECT READING: Accumulated dose, or quantity gamma and x-ray exposure; Requires re-charger; Scale increments should be in milli-R; - OR - Electronic version with alarm	1 for each assigned member	ANSI N-13.5 Electronic versions will also satisfy			

5. CHEMICAL PROTECTIVE CLOTHING						
5.1 Vapor Protective						
Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
5.1.1	VAPOR PROTECTIVE ENSEMBLE, NFPA 1991 <u>Industrial Chemicals</u>; Must display NFPA Certification label inside suit NOTE: Item # 5.1.4 (below) will also satisfy this requirement.	4-Type II 6-Type I	Provides for vapor industrial chemical entry NFPA 1991 Compliant	Must have 6	Must have 4	
5.1.4	VAPOR PROTECTIVE, with NFPA 1991 <u>WMD Chemical / Biological Protection</u>; NOTE: This item DOES satisfy requirement in 5.1.1. With year 2005 edition of 1991, WMD Chemical Testing is <u>included and automatic</u> . All 1991 compliant suits are WMD Certified. The label <u>does not say this</u> . The following garments Meet NFPA 1991 + WMD (2005 Edition): Drager – CPS R29500 (SEI) Dupont – Tychem TK 600T, 601T (SEI) Dupont – Responder RS 600T, 601T (SEI) Dupont - Reflector 600, 601, RF600T (SEI) Geomet Tech – 10-180, 10-182, 10-184 (UL) Kappler – Frontline FSH580 Lakeland – TK645, TK645W, TK654, TK654W (UL) Lakeland – 80645, 80655, 81645, 81655, 82645, 82655 (UL) Saint-Gobain – ONEsuit 1S-A, any size (SEI) Saint-Gobain – ONEsuit 1S-F, any size (SEI) Trelleborg – Trelchem VPS,- CV, VP1 (SEI) Trelleborg – Trelchem HPS,- CV, VP1 (SEI) Trelleborg – Trelchem HPS VP1 ET (SEI) Trelleborg – Trelchem LPS (SEI) Trelleborg – Trelchem EVO CV, VP Trelleborg – Trelchem NEO	Provides for WMD entry. 6 of either type of ensemble, must include gloves, boots to same certification	ONLY Provides for vapor / airborne WMD chemical entry (NOT Industrial Chemicals) NFPA 1991 WMD <input type="checkbox"/> - OR - NFPA 1994, Class One or Class Two <input type="checkbox"/>	Must have 6 on hand		
5.1.5	VAPOR PROTECTIVE, with NFPA 1994 <u>WMD Chemical / Biological Protection</u>. NOTE: This item DOES NOT satisfy Industrial requirement in 5.1.1 NOTE: See Chart Below for MFG Listings					
	The following garments meet NFPA 1994, Class 2 (2007 Edition): Blauer – Homeland HZ9420 (SEI) Dupont – Tychem TK 612T, and 613T (SEI) DuPont – Tychem BR 611 (SEI) DuPont – Tychem LV 611 (SEI) Dupont CPF-4 – LOST CERTIFICATION Geomet Tech – DTAPS 10-260 any size (SEI) Geomet Tech – DTAPS 70-300 (SEI) Kappler USA – Zytron Z5HTN C2 (SEI) Lakeland Ind. – TK648, TK648W (SEI) Lakeland Ind. – TK658, TK658W (SEI) Lion Apparel – Tactix, MT94-CMTM, any (SEI) Lion Apparel – ICG (SEI)					
5.1.6	PRESSURE TEST KIT: Usually supplied by garment manufacturer, includes Magnehelic gauge.	One	NFPA 1991; ASTM F-1052			NA

5.2 Liquid Splash Protective

Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
5.2.1	LIQUID SPLASH PROTECTIVE, NFPA 1992; For industrial chemical splash protection, jumpsuit or multi-piece ensemble.			Must have 6	Must have 4	Must have 4
	The following garments meet NFPA 1992 (2005 Edition): AirBoss – SA9427 (UL) Ansell Healthcare – 8017, 8057, MH28086 (UL) Athena-Goetzloff – Eurolite 92001-05 (UL) Blauer – Defender HZ9420, F, FG, G, FV (SEI) DuPont – Tychem BR 611, LV 611 (SEI) Kappler USA – Zytron 300 Z3H427-92 (SEI) Kappler USA – Zytron 300 Z3H428-92 (SEI) Lac-Mac (Canada) – 763A, 707A+706A (UL) Lakeland Indust. – C3T165N, or 4X165N (UL) Lion Apparel – Tactix MT-94 CMTM10 (SEI) Lion Apparel – Tactix MT-94 CMTM20 (SEI) Lion Apparel – Tactix MT-94 CMTM30 (SEI) Lion Apparel – Tactix MT-94 CMTM40 (SEI) Lion Apparel – Tactix MT-94 CMTM50 (SEI) Lion Apparel – Tactix MT 94 CMTM90 (SEI) Lion Apparel – ICG (SEI) Morning Pride – 21xC, 13xC, 46xC, 21xC (UL) Saint Gobain – ONE 1S-B- (SEI) Southern Mills – CSP (SEI)		NFPA 1992 Liquid Splash - OR SEE BELOW For NFPA 1994 (NEXT)	Of 1992 or 1994 (See Next Item 5.2.2)	Of 1992 or 1994 (See Next Item 5.2.2)	Of 1992 or 1994 (See Next Item 5.2.2)
5.2.2	LIQUID SPLASH PROTECTIVE, with NFPA 1994 Class 3 WMD Chemical / Biological Protection; For WMD/Biological splash protection, jumpsuit or multi-piece ensemble; Provides a LESSER level of protection than NFPA 1992 garment; NOTE: This item meets requirement of 5.2.1	Four (4) Or Six (6) of either type (1992) (1994)				
	The following garments Meet NFPA 1994, Class 3 (2007 Edition): CLASS 2: (Higher rating than Class 3) Blauer – Extended WZ9435, A, B, AB, VB (SEI) Blauer – Defender WZ9430 (SEI) Blauer – Defender HZ9420 (SEI) DuPont – Tychem BR-611 Yellow (SEI) DuPont – Tychem LV-611 Green (SEI) DuPont – Tychem TK-612T, 613T (SEI) Geomet – DTAPS 10-2600 (SEI) Kappler – Zytron 500- Z5HTN C2 (SEI) Lakeland – TK648, 648W, 658, 658W (SEI) Lion Apparel – Tactix MT-94 CMTM10 (SEI) Lion Apparel – Tactix MT-94 CMTM20 (SEI) Lion Apparel – Tactix MT-94 CMTM30 (SEI) Lion Apparel – Tactix MT-94 CMTM40 (SEI) Lion Apparel – Tactix MT 94 CMTM90 (SEI) Lion Apparel – Extended CBERSPC 20 Remploy – Frontliner PL001730, 1830, 2310, 2410 Saint-Gobain – OneSuit Pro 1S-P (SEI) CLASS 3: Blauer Mfg – Defender WZ9430 (SEI) GORE – Chempak SPFA 1994.3 (SEI) GORE – Chempak UBFA 1994.3 (SEI) LOST CERTIFICATION – CPF-4		NFPA 1994, Class 3 Liquid Splash (Class 2 also Acceptable, higher standard)			

5.3 Limited Use Protective

Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
5.3.1	LIMITED USE, Splash Protective; Apron, two piece garment, or coverall	2 for each assigned member	None			

ANCILLARY PROTECTIVE EQUIPMENT

6.1 Hand Protection

Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
6.1.1	REPLACEMENT GLOVES, Vapor Protective; Ample supply of manufacturer's recommended or supplied "outer glove". The "inner glove" is listed in item # 6.1.3 below.	1 replacement set for each suit	NFPA 1991			
6.1.2	REPLACEMENT GLOVES, Liquid Splash Protective: Ample supply of manufacturer's "outer glove". The "inner glove" is listed in item # 6.1.3 below. Gloves for 6.1.1 will satisfy. ALSO: The following gloves have attained NFPA 1992 certification: Saint-Gobain – OneGlove #22402 to 22414 (SEI) GORE – Chempak Ultra G9492-C2, G9492-C3 (SEI) Best Mfg – Nitri-Solve 717, 727, 730, 737, 747 (Nitrile) (UL) ? Best Mfg – Chloroflex #1823, #723, and N-8 (Neoprene) (UL) American Fireware - Superglove SGWMES, SGKCW (UL) Honeywell First Responder Products – SGKCG, SGKCW (SEI)	1 replacement set for each suit on hand;	NFPA 1992 OR certification message is on packaging OR certification is on GARMENT LABEL OR item Model Number Matches those as listed to the left			
6.1.3	UNDER-GLOVE; Chemical resistant disposable type used as an "inner glove"; (i.e. Silvershield, 4H, Barrier)	24 Pair				
6.1.4	HIGH TEMPERATURE Protective Glove; One minute direct contact protection for 800 ° F to 1,000 ° F surface temperatures; Usually made of Nomex / Kevlar / PBI. (i.e. Superior Flextra, WS Safety, Tempo, Thermo-best)	2 Pair				
6.1.6	ULTRA-COLD Protective Glove; Gauntlet length to elbow; Provides 1 minute continuous contact for liquids to (minus) - 260 ° F. (Usually made of Teflon/GorTex blend).	2 Pair	Gauntlet to elbow (16" minimum)			
6.1.7	RADIOLOGICAL Protective Glove; Lead lined butyl or nitril rubber.	2 Pair	DELETED 2012	X	X	X

6.2 Foot Protection

Inv. #:	Item Name and Description	Requirement	Certification Or Standard	Type 1	Type 2	Type 3
6.2.1	BOOTS, CHEMICAL RESISTANT; Must meet appropriate NFPA Standard – 1991 for Vapor protective, 1992 for Liquid Splash protective. Must be "stamped", or certification marking on package. The following boots meet NFPA 1991 (2005 Edition): OnGuard – Hazmax 87012, 87015, 87007 (SEI) Tingley – HazProof 82330 (SEI) (CAUTION- Tingley 82331 has no label) (SEI)	1 pair for each assigned member	NFPA 1991 or NFPA 1992 OR certification message is on packaging OR certification is on GARMENT LABEL OR item Model Number Matches those as listed to the left			
6.2.2	BOOTIE, OUTER PROTECTIVE; Disposable chemical protective slip-over bootie that protects entirely the "General Work Safety Boot" of worker for use in low threat contamination environments.	12 Sets	Changed to Opt 2012	Opt	Opt	Opt

6.3 Head and Eye Protection

Inv. #:	Item Name and Description	Requirement	Certification Or Standard	Type 1	Type 2	Type 3
6.3.1	HELMET; Light weight construction style helmet to provide head protection when wearing any CPC ensemble.	1 for each assigned member	ANSI Z-89.1			
6.3.2	GOGGLES; Used for sample taking, material testing, qualitative analysis; Wrap-around to protect side of eyes; Polycarbonate or better.	1 for each assigned member.	ANSI Z-87.1			

6.4 Support Systems

Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
6.4.1	UNDERGARMENT, FIRE RESISTANT; Long sleeve jumpsuit style (Nomex, PBA, Kevlar) The following Undergarment jumpsuits meet NFPA 2112 Bulwark Apparel – #CNB2, 3, 5, 6 & CNC 2, 6 (UL) DuPont – NL 149S, or Deluxe 100 (UL) Lakeland - # C011, C021 Topps Apparel – Model CO-07-XXXX WorkRite – 110NX, 111NX, 112NX, 116NX, 130NX	1 for each assigned member	Compliant to ONE of the following: NFPA 2112 <input type="checkbox"/> or 1975 <input type="checkbox"/> or 1977 <input type="checkbox"/>			

7. TECHNICAL REFERENCE

7.1 Printed References, Industrial and WMD Chemicals

Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
7.1.1	DATABASE TYPE, Printed: <u>Technical data</u> ; See Appendix E, Chart # 2 (i.e. NFPA, SAX, Dictionaries, MERCK, NIOSH)	3 Different references				
7.1.2	GUIDEBOOK TYPE, Printed: <u>Intervention Data</u> ; See Appendix E, Chart # 3 (i.e. DOT, AAR)	2 Different references				
7.1.3	SPECIALTY TYPE, Printed: <u>Special topics</u> ; See Appendix E, Chart # 4 (i.e. Rail Tank Cars, Pesticides, Incompatible Chemicals, Compressed Gas Valve Threads, etc.)	2 Different references				
7.1.4	REGULATORY TYPE, Printed or electronic: <u>Government Codes, Ordinances</u> ; See Appendix E, Chart # 5	1 each of: 49 CFR (DOT) that contains Sections 1 to 199 <input type="checkbox"/> 29 CFR (OSHA) that contains Section 1910.120 <input type="checkbox"/> NFPA standard 472 <input type="checkbox"/> NFPA Standard 1991 <input type="checkbox"/> NFPA Standard 1992 <input type="checkbox"/> NFPA Standard 1994 <input type="checkbox"/>				
7.1.5	REGULATORY TYPE, Printed or electronic: <u>Response Guidelines</u> , Local, Regional, State	1 copy – Local Response Plans <input type="checkbox"/> 1 copy – Op. Area Resp. Plan <input type="checkbox"/> 1 copy – OES HMICP <input type="checkbox"/>				
7.1.6	WMD Chemical / <u>Biological Substances</u>; Printed OR Electronic ; See Appendix E, Chart #6 (i.e. USAMRIID, Jane's, CRC)	At Least: 1 Copy of – Chemical WMD <input type="checkbox"/> 2 Copies of – Biological WMD <input type="checkbox"/>				

7.2 Electronic Reference Sources, Industrial and WMD Chemicals

Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
7.2.1	DATABASE TYPE, Electronic ; See Appendix E, Chart # 7 (i.e. Physical & chemical properties)	1 Program	Some commercial electronic data platforms have 2 or more of these databases included as separate files.			
7.2.2	GUIDEBOOK TYPE, Electronic ; See Appendix E, Chart # 8 (i.e. Intervention, control objectives, hazard assessment)	1 Program				
7.2.3	SPECIALTY TYPE, Electronic ; See Appendix E, Chart # 9 (i.e. Rail tank car, pesticides, incompatible chemicals)	1 Program				
7.2.4	WMD Chemical / <u>Biological Substances</u>; Electronic ; See Appendix E, #10 MUST HAVE AT LEAST 1 ELECTRONIC PROGRAM	1 Program				

7.3 Plume Air Modeling, Program Support

Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
7.3.1	AIR MODELING, Database Software (i.e. Cameo, Radian, or equal)	1 Program				
7.3.2	AIR MODELING, Overlay / Plume Display Software (i.e. Aloha, Radian, Charm, Safer, EIS, ADASHI, or equal)	1 Program				
7.3.3	AIR MODELING, Mapping (i.e. MarPlot, G.I.S., MapInfo, or equal)	1 Program				

7.4 Computer, Support Hardware, Software

Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
7.4.1	COMPUTER: Desktop or laptop;	1 Unit as described				
7.4.2	PRINTER Capability, Color: Inkjet or laser or equal; Can be combined with 7.4.3 and 7.4.4	Ability to perform all 3 functions	Separate or all-in-one components acceptable COLOR will be required after 1-2009			
7.4.3	SCAN Capability: Ability to SCAN document and save as a PDF or JPG file.					
7.4.4	DUPLICATION Capability,: - Can be combined with 7.4.2 and 7.4.3					
7.4.6	ACCESS To INTERNET, Wireless: Hardware, connections and ports, is Broadband capable, wireless card or internet device.	1 wireless capability				

7.4.8	HARDWARE, COMPUTER, GRAPHICS; Computer includes a high quality graphics chip or board enhancement	1 capability				
7.4.9	HARDWARE, COMPUTER, MODEM; Computer includes high speed "General Packet Radio Service" (GPRS) modem	1 capability	DELETED 2012			
7.4.11	HARDWARE, CD: CD-Rom or DVD drive	1	Must have one or the other			
7.4.12	HARDWARE, USB Drive: USB Flash Drive (Memory Stick, and Digital Camera download; thumb drives, Blackberry, etc)	1	At least one available USB port			
7.4.13	SOFTWARE, OPERATING SYSTEM, basic: (i.e. Microsoft Windows, Apple OS, Linux)	1				
7.4.14	SOFTWARE, DOCUMENT PROCESSING: One for word processing and one for graphic images processing in at least .jpg format.	a) Word Processing (i.e. Word, WordPerfect) <input type="checkbox"/> b) Graphics Processing (i.e. BMP, JPG, TIF) <input type="checkbox"/>		Req. 1/2009	Req. 1/2009	Req. 1/2009
7.4.15	SOFTWARE, FORMAT CONVERSION: Ability to save files to hard drive, especially graphics and photographs, in at least PDF format and JPG format (i.e. Acrobat Reader, PDF Creator, PrimoPDF, E-PrintDriver, File-Convert)	1	CONVERSION: 1. Document to PDF, + <input type="checkbox"/> 2. Photos to JPG, + <input type="checkbox"/>			
7.4.16	SOFTWARE, PROTECTION: Protection for: 1) Viruses; 2) Trojan Horse, Parasites; 3) Spyware; 4) Intrusion Detection	1 Protective setup	Need Protect For: 1. Viruses <input type="checkbox"/> 2. Trojan Horse, Parasites <input type="checkbox"/> 3. Spyware, Ad-ware <input type="checkbox"/> 4. Intrusion Detection <input type="checkbox"/>			

8. SPECIAL CAPABILITIES

8.1 Advanced Technologies, Vision, Heat, Sound

Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
8.1.1	LIGHT AMPLIFICATION, SCOPE, BASIC: Night Vision, monocular or binocular	1	Generation II or Better Technology			
8.1.8	INFRA-RED, SCOPE, Temperature Sensing Only: Hand-held with direct temperature reading display, nominal -25 ° F to +1,000 ° F. (i.e Omega Scope, Cole Palmer, Raynger)	1	NIST Certified (National Institute of Standards and Technology)			
8.1.15	SOUND SENSING, LEAK DETECTION, Ultra-Sonic: Detects harmonic sounds of escaping gas down to 30 dB, nominal frequency 15 to 100 kHz.. (i.e. SPer Scientific, Ex-Tech, Quest, Amprobe, SKF, Robinair, SDT.)	1	NIST Certified			
8.1.16	CAMERA, VIDEO, Digital; Hand-held color video with laser pointer, microphone, might have built-in compass, timer; (i.e. Search Systems)	1 UNDER REVIEW	UL Standard 1604			

8.2 Advanced Technologies, Weather, GPS

Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
8.2.1	WEATHER STATION, Basic Kit, complete; Wind t 100 mph; Barometer +/- 3 mBars, air temp -20 to 120 degrees F, internal compass, humidity to 100%.	1 complete kit: Either one as describe will suffice				
8.2.2	WEATHER STATION, Wireless Digital Support; Advanced version enhances above with digital transmitter to host computer 5 miles.					

9. INTERVENTION

9.1 Chemical Intervention

Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
9.1.1	NEUTRALIZATION - Acids: Granular Sesquicarbonate is recommended (i.e. LabSafety or XSORB), or biodegradable product that meets OSHA 1917.157(g) is acceptable (i.e. Acid Eater, LSS Spill-X-A, J.T.Baker Neutrasorb)	An amount sufficient to neutralize 5 gallon spill	Should be neutral salt producing			

9.1.2	NEUTRALIZATION – Alkali (Bases); Powdered Citric Acid is recommended (i.e. Spill-X-C, XSORB, J.T.Baker Neutrakit), or other biodegradable or encapsulating (i.e. Base Eater).	An amount sufficient to neutralize 5 gallon spill	Should be neutral salt producing			
9.1.3	ENCAPSULATING SPREADABLE POWDER – General Purpose Non-Clay Based, suitable for Pesticides and General Purpose; Absorbs polar and non-polar (water and hydrocarbons); Nominal size 5 to 16 lb bag or 5 to 10 Lbs; (i.e. X-SORB Super Absorbent, X-SORB II Encapsulator, WYK SuperSorbent; Enviromet KT; Chem-Sorb; Aqua Biber by Imbiber)	An amount sufficient to absorb or encapsulate a 5 gallon spill	OSHA 29CFR 1910.119 (Non-Clay Based absorbs pesticides – Clay-based types do not, i.e. Kitty Litter, diatomaceous earth, etc.)			
9.1.4	ENCAPSULATING SPREADABLE Powder - Formaldehyde; Nominal size 2 to 5 gallon pail kit or 5 to 10 Lbs, granular, spreadable (i.e. Clift Industries, SpillFyter, Spill-X-FP; Aqua Biber).	An amount sufficient to absorb or encapsulate a 5 gallon spill				
9.1.5	ENCAPSULATING SPREADABLE POWDER – Non-Polar Solvents; Granular, spreadable; For body fluids, organic or hydrocarbon non-polar solvents, oils, oil base poisons; Nominal size 2 gallon pail; (i.e. Oil Sponge Premium; Oil Sponge GP; LSS Universal Gel Sorbent; X-SORB Edge, X-SORB Oil Select, Spill-X-S, Imbiber Beads)	An amount sufficient to absorb or encapsulate a 5 gallon spill	EPA RCRA Burial Regulations (Solidifies into an acrylic polymer)			
9.1.6	FIRE EXTINGUISHER, CLASS “D”, Sodium Chloride formulation	Must have at least ONE.	FM or UL Approved Label			
9.1.7	FIRE EXTINGUISHER, CLASS “D”, Copper compound formulation	Any one from these two types will satisfy.				

9.2 Environmental Intervention

Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
9.2.1	ABSORBENT NON-POLAR SOLVENT, Pads or Roll; Repels polar (water); absorbs non-polar solvents (hydrocarbons, some Freon liquids, carbon tet); Nominal size 15" x 18" pads or rolls	150 square feet of coverage	40CFR 300.915(g)			
9.2.2	ABSORBENT GENERAL PURPOSE or POLAR SOLVENT, Pads or Roll; Absorbs polar (water, acids, alkalis, benzene ring solvents); If General Purpose also will absorb contaminated water. Nominal size 12" x 18" pads or rolls.	150 square feet of coverage	40CFR 300.915(g)			
9.2.3	ABSORBENT NON-POLAR SOLVENT, MINI-BOOMS (Pigs, Socks); Repels polar (water), absorbs non-polar (hydrocarbons, oils, some Freon liquids, carbon tet); Nominal Dia. 3" to 6", by 4 to 12 feet each.	40 feet total length	40CFR 300.915(g)			
9.2.4	ABSORBENT GENERAL PURPOSE or POLAR SOLVENT, MINI-BOOMS (Pigs, Socks); Absorbs polar (water, acids, alkalis, benzene ring solvents); Nominal Dia. 3" to 6", by 4 to 12 feet each.	40 feet total length	40CFR 300.915(g)			
9.2.5	ABSORBENT NON-POLAR SOLVENT, PILLOWS; Repels polar (water), absorbs non-polar solvents (hydrocarbons, oils, some Freon liquids, carbon tet); Nominal size 2 to 3 gallon absorption capacity each pillow.	10 Gallon Absorption	40CFR 300.915(g)			
9.2.6	ABSORBENT GENERAL PURPOSE or POLAR SOLVENT, PILLOWS; Absorbs polar (water, acids, alkalis, benzene ring); Nominal size 3" to 6" Dia., 2 to 3 gallon absorption capacity each pillow.	10 Gallon Absorption	40CFR 300.915(g)			
9.2.8	MERCURY KIT, Small Spills; Mercury absorbing sponges, and approx 500 gram container of mercury absorbing powder (i.e. Lab Safety, Mercon)	1 Kit	MUST INCLUDE 500 gram mercury absorbing powder 2012			
9.2.11	PIPE, PLASTIC; Assortment of various sizes (4 to 12") cut to nominal 8' to 12' lengths.	One 8 to 12' length of at least 3 dif. Dia.				

9.3 Mechanical Intervention

Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
9.3.1	CHLORINE “A”, Kit; (i.e. Indian Springs, Chlorine Specialties)	1 Kit	Chlorine Institute			
9.3.2	CHLORINE “B”, Kit	1 Kit	Chlorine Institute			
9.3.3	CHLORINE “C”, Kit	1 Kit	Chlorine Institute			

9.3.5	SULFUR DIOXIDE UPGRADE For Kit "A"	1 Upgrade Kit, Complete	Chlorine Institute				
9.3.6	SULFUR DIOXIDE UPGRADE For Kit "B"	1 Upgrade Kit, Complete	Chlorine Institute				
9.3.7	SULFUR DIOXIDE UPGRADE For Kit "C"	1 Upgrade Kit, Complete	Chlorine Institute				
9.3.10	PATCH AND REPAIR, PIPE, LIQUIDS, Basic Kit: Single or dual bolt steel pipe clamps with rubber sheeting lining; Ten or more different pipe sizes exist ranging from ½" dia to 4" dia; (i.e. Lab Safety # 35156, Edwards & Cromwell "C-2")	1 Kit (I.E. Edwards & Cromwell Kit "C-2")					
9.3.13	CLAMP, PIPE, GAS, Line, Mechanical; Nominal 2" dia to squeeze shut domestic low pressure gas line; (i.e. PG&E, Mustang)	1 Device	Preferably ASTM F-1563 rated 2012				
9.3.15	PATCH, PIPE, LIQUID, Pneumatic, Flange: Heavy duty rubber bandage device, nominal 8" x 36", slips over leaking pipe from 2" to 8" dia, then inflated. Requires air source, air hose, regulator (i.e. Vetter)	1 Kit: Either one will satisfy requirement	Air source, hose, regulators, and ratcheting straps from one kit can be used for another kit (Do not need to duplicate)				
9.3.16	PATCH, PIPE, LIQUID, Pneumatic, Bandage: Heavy duty rubber bandage device, nominal 8" x 36", slips over leaking pipe from 2" to 8" dia, then inflated. Requires air source, air hose, regulator (i.e. Vetter #1500013900 or #1500014000)	(9.3.16 is recommended)					
9.3.17	PATCH, TANKER, LIQUID; Foam or plastic (non-inflatable) pad nominal 7" x 12", with 6 feet ratchet strapping for 55 gallon drum leaks, AND 25 feet strapping for highway tankers. (i.e. Lab Safety, Edwards & Cromwell Kit "F" or "AE")	1 Complete Kit (I.E. Edwards & Cromwell Kit "AE" or "F")					
9.3.18	PATCH, TANKER, LIQUID, Side Patch: Pneumatic operated inflatable leak sealing patch or bag, with ratchet straps; Nominal size 24" x 12". Requires air source, air hose, regulator. (i.e. Vetter 150000102 or 1500011101)	1 Kit: Either one will satisfy requirement					
9.3.19	PATCH, TANKER, LIQUID, Side, Drainage Control; Identical to previous, but is heavy duty with internal plumbing for bleed-off control. (i.e. Vetter #1500005301, or 1500018301, or 1500000102)						
9.3.24	PATCH, DRUM, LIQUID, Pneumatic, Kit; Small rubber inflatable pads of nominal 4" x 4"; 4" x 9"; and 7" x 7"; Requires ratcheting straps, air source, air hose, regulator to inflate and stop leak; (i.e. Vetter # 1500009400)	1 Kit	Acceptable if inflatable pads included in 9.3.17				
9.3.26	PATCH, DRUM, LIQUID, Compression, Kit; Compression type stopper plugs up to 2" dia, with butterfly nuts; Two ball plugs with butterfly nuts; 8 piece tapered wood dowels. (I.E. Edwards & Cromwell Kit "D" or "AE", Lab Safety #35157)	Kit Consists of: 6 – compression tapered rubber plugs <input type="checkbox"/> 2 – ball rubber plugs <input type="checkbox"/> 8 – tapered wood dowels <input type="checkbox"/> 2 – "T" bolt patches <input type="checkbox"/> 1 – 8"x12" rubber patch <input type="checkbox"/> Assortment – sheet metal screws <input type="checkbox"/>					
9.3.29	PLUGS, TAPERED STOPPER, LIQUID, Compression, Large; Enhances item # 9.3.26 (above) with larger tapered compression plugs with butterfly nuts for holes up to 4" dia.. (I.E. Edwards & Cromwell Kit "A-2")	Consists of One of the Following: 3" dia. compression plug <u>or</u> 4" dia compression plug 2012					
9.3.31	PLUGS, BALL or HALF-ROUND, LIQUID, Compression, Extra Large; Enhances item # 9.3.26 (above) with Individual tapered, ball, or half-round stopper plugs for holes up to 4" dia. (I.E. Edwards & Cromwell Kit "A-2")	Consists of One of the Following: 3" dia. round or half-round <u>or</u> 4" dia round or half-round plug 2012					
9.3.32	PLUGS, "T" BOLT, LIQUID, COMPRESSION, Extra Large; Enhances item # 9.3.26 (above) with stainless steel curved plate and ¾" neoprene closed cell foam for irregular slits 3" long. (I.E. Edwards & Cromwell Kit "A-2")	Consists of One of the Following: "T" bolt with foam pads, 3" or larger 2012					
9.3.33	PLUGS, CONICAL, LIQUID, Drain; Three tapered plastic plugs (nominal 10" -13" long) with eye bolts, ranging in sizes from 2 ½" to 8" dia for holes, drains, gravity flow pipes; (i.e. Ultra Drain; Lab Safety)	Consists of: 3 extra-large conical plugs, each a different size					
9.3.34	PLUGS, TAPERED, LIQUID, Pneumatic; Enhances kit in item # 9.3.15; Inflatable round tapered rubber plugs 4" nominal dia; Narrow wedge tapered from 2 ½" wide to 4 ½" wide. Requires air source air hoses, regulator; (i.e. Vetter # 1500019500 or 1500009600)	Consists of: Set of at least 3 sizes	Air source, hose, regulators, and ratcheting straps from one kit can be used for another kit (Do not need to duplicate)				
9.3.35	PLUGS, EXPANSION, LIQUID, Standard, Kit; Plumber style expansion plug with wing nut. Sizes range from 1" to 4" for drains or open butt pipe. (i.e. hardware store)	Mix or match set of at least 7 different sizes, of either style					
9.3.36	PLUGS, EXPANSION, LIQUID, Vented, Kit; Same as # 9.3.35 but vented or has drain valve, some with threaded end. (i.e. Cromwell)						

9.3.42	PLUGS, END CAP, LIQUID, Kit; Also known as "Jim Caps", rubber cap fitting for butt end of pipe with metal tightening band around circumference. (I.E. Edwards & Cromwell Kit "C-1", or Plumbing Supply Store)	Selection of at least 7 different sizes, mix or match			
9.3.43	PLUGS, END CAP, LIQUID, Specialized, Kit; Same as # 9.3.42 but vented or has drain valve, some with threaded end.				
9.3.44	PLUGS, DOWELS, LIQUID, Assortment; Long tapered round wood, rubber or plastic plugs from 1" to 5" dia and 3" to 10" long	Assortment to satisfy 1" to 5" full range			
9.3.48	DOME LID LOCK, Screw Clamp; Tightens tank truck "manway" lids; Adjustable width. (i.e. LidLoc, Clemens, Cromwell)	Set of four, mix or match			
9.3.49	DOME LID LOCK, Spring Loaded; Same as # 9.3.48 but side tongs self-adjust to width of manway lid. (i.e PatLoc, LidLoc)				

10. DECONTAMINATION

10.1 Ground Protection

Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
10.1.1	TARPS, PLASTIC, Ground Cover; At least 12' x 12' each.	2				
10.1.2	TARPS, CARRY-ALL, Small; Nominal 6' x 6' small tarp with rope type handles at corners for contaminated equipment.	1				
10.1.3	SHEETING, PLASTIC, ROLL, Heavy Duty; Nominal 5' wide x 100' length, unfolds to nominal 20', water repellent polyethylene.	1 Roll				
10.1.4	CATCH BASIN; Nominal six feet square, 18" high, with rigid sides; Sometimes supplied with a "gross de-con shower" system or commercial kit.	1 Basin	Might be part of the de-con shower system			
10.1.5	SHOWER, GROSS DECONTAMINATION; Homemade or commercial; water supply by garden hose or FD 1 1/2" hose connection, fits inside of the "Catch Basin".	1 System				
10.1.6	EYE WASH, Station: Portable, nominal 7 gallon, with 0.4 gpm flow rate.	1	ANSI Z-358.1 (2004)			
10.1.7	POOL, PORTABLE, LARGE; Nominal 60 – 80 gallon capacity, collapsing or inflatable style	3				

10.2 Support Tools for Decontamination

Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
10.2.1	STOOLS, Portable: Plastic, stackable or folding.	4				
10.2.2	BRUSHES, LONG HANDLE, SOFT BRISTLE: Toilet type: nominal 16" long, with plastic bristles	4				
10.2.4	BRUSHES, SHORT HANDLE, SOFT BRISTLE; Rat Tail; Carpenter or wood-worker type, synthetic bristles are best	2				
10.2.5	BRUSHES, CAR WASH TYPE; Long Handle; Soft bristled wand type brush, nominal extendable length to 3 feet, may come with garden hose connection.	2				
10.2.6	SPONGE, SET; Nominal 3' x 5" to 4" x 6"	Set of Four				
10.2.7	TOWELS, ABSORBANT, DRYING: Commercial laundry towels, cotton, nominal 20" x 40"	8	Cloth			
10.2.8	TOWELS, ABSORBANT, DISPOSABLE: Paper towels, usually in rolls.	1 Roll	Paper			
10.2.9	BLANKETS, DISPOSABLE:	4				
10.2.11	CLOTHING, MODESTY; Light weight disposable Tyvek style or equal, an array of different sizes, with booties	12 Sets				
10.2.12	TRAFFIC CONES, Ordinary; Nominal 18" to 28" high	Minimum of 6, mix or match				
10.2.13	TRAFFIC CONES, Ordinary, Reflective; Nominal 18" to 28" high					
10.2.15	SOAP, SOFT, Hypoallergenic, Liquid 2012	1 pint	Detergent Not Acceptable			
10.2.16	CHEM-TAPE; Nominal 2' wide in rolls of 50'; Similar to Duct Tape but has chemical resistant outer layer	2 Rolls				

10.2.17	CLOTHING REMOVAL TOOLS; Such as scissors, shears, etc.	1				
10.2.18	PERSONAL PROPERTY TRACKING Kit; To consist of property tracking forms, tags, receipts, sealable baggies, labels to document personal property collected (i.e. jewelry, wallets, pagers, cell phones, purses, documents, glasses)	Sufficient to manage 12 individuals minimum				

10.3 Water Supply, Distribution Tools

Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
10.3.1	ADAPTOR, 1 ½" to Garden Hose Reducer(s):	2				
10.3.2	MANIFOLD, HEAVY DUTY; All metal construction with 1-1/2" female fire hose inlet coupling, and four to six ¾" garden hose discharge ball gates; Tested to 250 psi (i.e. Aramsco)	1 of either type				
10.3.3	MANIFOLD, LIGHT DUTY; Plastic PVC construction, and same as above.					
10.3.4	HOSE, GARDEN: 12' to 24' lengths	3 sections				
10.3.5	HOSE GARDEN, SHUT-OFF, In Line: Separate detachable ¼ turn valve.	3	Might be attached to Car Wash Brushes			
10.3.6	WRENCH, HYDRANT, UNIVERSAL	1				
10.3.7	APPLICATOR, NOZZLE, Garden type, Adjustable	2				
10.3.8	APPLICATOR, PRESSURE, Garden Sprayer; Hand pressurized pump sprayer (for de-con solutions)	1				

10.4 Collection

Inv. #:	Item Name and Description	Requirement	Certification Or Standard	Type 1	Type 2	Type 3
10.4.1	BUCKETS: Ordinary plastic, 5 gallon capacity, with or without lids	4				
10.4.2	BAGS, HEAVY DUTY YARD, Large; 32" x 48" wide, 3 mil, 42 gallon capacity, with tie straps	Ten	Might be in rolls			
10.4.3	BAGS, HEAVY DUTY YARD, Medium; 28" x 36", 3 mil, 33 gallon capacity, with tie straps	Ten	Might be in rolls			
10.4.4	DEBRIS COLLECTION UNIT; Light weight polyethylene drum, 35 to 65 gallon capacity, or collapsible mylar drum liners.		49 CFR 173.3(c) Minimum of TWO required, -- but -- Must have at least ONE of either 10.4.5 Or 10.4.6			
10.4.5	DRUM, CONTAINMENT UNIT, 85 to 95 Gallon; Steel or polyethylene drum, removable bolt lid, for contaminated clothing collection					
10.4.6	DRUM, OVER-PACK UNIT, 110 Gallon; Heavy duty polyethylene drum with screw lid.					
10.4.7	DRUM, LINER, 85 to 95 Gallon: Heavy duty polyethylene	10				

11. COMMUNICATIONS

11.1 Radio

Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
11.1.1	RADIO, PORTABLE, Intrinsically Safe (I.S.); Walkie-Talkie hand-sets, NOT including battery (see #11.1.6 below for battery) UL or FM label must be attached to authenticate certification.	1 for each assigned member	Intrinsic to UL #913 Class I, II, III Division 1 Label must be on Walkie-Talkie	Must have 7	Must have 5	Must have 5
11.1.3	RADIO, PORTABLE, Headphone Set; With boom mic, one for each member – NOT for in-suit use.	1 for each assigned member	Latest technology might include ear bone-mic wired to hand-set	Changed To Opt	Changed To Opt	Changed To Opt
11.1.4	RADIO, PORTABLE, In-Suit Communications; Attachable hardware to item # 11.1.1, with boom mic (throat, bone, ear, or SCBA facepiece), earphone system, remote "Push-To-Talk" switch.	6 – Type I 4 – Type II 4 – Type III		Must have 6 systems	Must have 4 systems	
11.1.6	RADIO, PORTABLE, Interchangeable battery, Intrinsic	2 for each portable unit	Must be compatible with I.S. Radio			

11.2 Cellular Phone						
Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
11.2.1	PHONE, CELLULAR; Priority access service capable; CPAS, BROADBAND, PCS and ROAMING enabled.	1 per Company	IEEE 1512.3 IEEE 269			

12. RESPIRATORY PROTECTION

12.1 Self-Contained

Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
12.1.1	SCBA, COMPLETE, 1 Hour Rating, with bottle; NIOSH and NFPA certified for structural use.	1 for each assigned member	NFPA and NIOSH Label on frame		Must have 5	Must have 5
12.1.2	SCBA, COMPLETE, WMD CBRN, 1 Hour Rating; NFPA certified for structural use, and NIOSH certified for WMD CBRN use.	1 for each assigned member	NFPA and NIOSH CBRN Label on frame OR regulator	Must have 7		
12.1.3	MASK, FULL-FACE, STRUCTURAL; NFPA and NIOSH compliant for structural use.	1 for each assigned member	NFPA Structural		Must have 5	Must have 5
12.1.4	MASK, FULL-FACE, WMD CBRN; NFPA certified for structural use, and NIOSH compliant for WMD CBRN use.	1 for each assigned member	NFPA Structural and NIOSH WMD CBRN	Must have 7		
12.1.7	BOTTLE, Spare; Replacement, same type and size	1 spare bottle for each assigned SCBA	DOT	Must have 7	Must have 5	Must have 5

12.2 Air Purifying Respirator

Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
12.2.1	MASK and UNIT, APR, INDUSTRIAL; Single or dual cartridge style, certified for use in industrial chemical threats only.	1 for each assigned member	NIOSH	Must have 7		
12.2.2	MASK and UNIT, APR, CBRN; Single or dual cartridge style, certified for use in CBRN threats; NOTE: Combination INDUSTRIAL and CBRN certified is acceptable for both # 12.2.1 and 12.2.2	1 for each assigned member	NIOSH CBRN Label on Canister	Must have 7		
12.2.5	CARTRIDGES, APR or PAPR, INDUSTRIAL; Cartridges certified ONLY for industrial chemical threats.	Multi-gas cartridge set for each APR	NIOSH	Must have 7 sets		
12.2.6	CARTRIDGES, APR or PAPR, CBRN; Cartridges certified ONLY for WMD CBRN threats	CBRN cartridge set for each APR	NIOSH - CBRN	Must have 7 sets		

13. TOOLS / OTHER

13.1 General Purpose, Hand Tools, Large

Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
13.1.1	SHOVEL, Round Point, Steel; long handle	1				
13.1.3	SHOVEL, Square Point, Steel: long handle	1				
13.1.4	SHOVEL, Square Point, Polypropylene plastic or equal: long handle	1				
13.1.5	SHOVEL, Scoop, Polypropylene plastic or equal:	1				
13.1.6	BROOM, Street, Stiff Polypropylene Bristle, with handle	1				
13.1.7	DRUM "Up-Enders"	1				
13.1.8	HAMMER, Sledge, (7 – 10 Lbs)	1				
13.1.9	BAR, WRECKING – 36" or >	1				
13.1.10	COOLER, Rehydration; Five to 10 gallon, industrial quality	1				

13.1.11	MEGAPHONE; Battery operated, 16 watt, adjustable volume.	1				
13.1.12	FIRST AID, Kit – Large; Gauze pads, wipes, tape, ointments, bandages, splints, tourniquets, scissors, etc.	1 of each or combination kit	ANSI Z-308.1			
13.1.13	FIRST AID, TRAUMA, Kit; Resuscitator, airways, burn sheets, cervical collar, cold packs, eyewash, etc.					
13.1.14	MEDICAL MONITORING, Kit; Stethoscope, aneroid gage sphygmomanometer, thermometer unite, scale, individual documentation forms for Pre-entry baseline vitals.	1 Kit				
13.1.16	ZONE MARKING, Kit; Barrier tape 1000 feet rolls – yellow; 1000 feet red; Railroad Chalk Sticks red and yellow, powdered chalk yellow and red 12 to 16 oz dispensers; Carpenter’s crayons, yellow and red.	1 Kit – To Consist Of: Barrier Tape Yellow – 1000’ <input type="checkbox"/> Barrier Tape Red – 1000’ <input type="checkbox"/> Powder Chalk – Yellow <input type="checkbox"/> Powder Chalk – Red <input type="checkbox"/> Chalk Sticks – Yellow <input type="checkbox"/> Chalk Sticks – Red <input type="checkbox"/> Carpenter Crayons – Yellow <input type="checkbox"/> Carpenter Crayons - Red <input type="checkbox"/>				
13.1.18	SCOPE, Spotting: Adjustable telephoto spotting scope or binoculars.	1				

13.2 General Purpose, Hand Tools, Small

Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
13.2.1	HAMMER, Dead Blow: 36 to 45 oz.	1				
13.2.2	HAMMER, Claw: 20 to 24 oz.	1	Non-Sparking Acceptable (# 13.3.7)			
13.2.3	HAMMER, Engineer: 36 to 40 oz.	1	Non-Sparking Acceptable (# 13.3.8)			
13.2.4	HAMMER, Ball Peen: 16 to 40 oz.	1	Non-Sparking Acceptable (# 13.3.9)			
13.2.5	SCREWDRIVER, CHISEL, KIT; At least any 3 sizes of: Small, medium large, extra-large	1 Kit of 3 different	Non-Sparking Acceptable (# 13.3.10)			
13.2.6	SCREWDRIVER, PHILLIPS, KIT; At least any 3 of: # 1, #2, #3, #4.	1 Kit of 3 different	Non-Sparking Acceptable (# 13.3.11)			
13.2.7	PLIERS, ORDINARY, Utility; With square blunt end, any size	1	Non-Sparking Acceptable (# 13.3.12)			
13.2.8	PLIERS, WIRE, Side Cutting; May be incorporated with other pliers.	1	Non-Sparking Acceptable (# 13.3.13)			
13.2.9	PLIERS, LONG-NOSE, Needle; Between 7” to 10”	1	Non-Sparking Acceptable (# 13.3.14)			
13.2.10	PLIERS, COMBINATION, Kit; At least any 3 of: Slip Joint, Groove Joint, or Channel Lock ranging between 8” to 12” size.	1 Kit of 3 Different Types Or Sizes	Non-Sparking Acceptable (# 13.3.15)			
13.2.11	PLIERS, LOCKING, Vice Grip Type, Kit; At least any 4 representing <u>four different types</u> : Adjustable chain, welding clamp, pipe clamp, curved jaw, straight jaw, long nosed, “C” clamp style, ultra-long “C” clamp style, or sliding bar	1 Kit of 4 Different Types OR Sizes Mix or Match 2012	Non-Sparking Acceptable (# 13.3.16) Adjustable chain Welding clamp Pipe clamp Curved jaw Straight jaw Long nosed “C” clamp style Ultra-long “C” clamp style Sliding bar			
13.2.12	WRENCH, ALLEN, Complete Set, English: (Approx. 9 piece)	1 Kit				
13.2.13	WRENCH, ALLEN, Complete Set, Metric: (Approx. 9 piece)	1 Kit				
13.2.14	WRENCH, CRESCENT, Adjustable, Kit; At least any 2 of: 12”, 15”, 22”, 24”	1 Kit of 2	Non-Sparking Acceptable (# 13.3.18)			
13.2.16	WRENCH, PIPE, Adjustable, Kit: Any 2 of: House – 16”; Standard – 18”; Medium – 22”; Large – 28”.	1 kit of 2	Non-Sparking Acceptable (# 13.3.20)			
13.2.18	WRENCH, UNIVERSAL, Bung Cap; Should be able to function on 5 or more different bung cap designs.	1	Non-Sparking Acceptable (# 13.3.17)			
13.2.19	WRENCH, COMBINATION, Ordinary, Kit; (Open end-box end): Set of 10 minimum from 3/8” to 1 3/8”.	1 kit of 10	Non-Sparking Acceptable (# 13.3.22)			
13.2.23	CHISEL, COLD, Standard or Hex; ¾” or 1” x 12” long.	1 Chisel				
13.2.26	PUNCH, PIN, Spring Loaded	1				

13.2.27	TAPE, MEASURING, Retractable, Metal (or plastic): 24' min.	1				
13.2.28	TAPE, MEASURING, Re-Wind; Cloth, Tyvek, Plastic (non-metallic, non-conductive), 50 feet or longer	1				
13.2.29	KNIFE, PUTTY, Scrapping; Approx 2" wide	1	Non-Sparking Acceptable (# 13.3.26)			
13.2.30	KNIFE, GENERAL UTILITY, Cutting; Any type	1				
13.2.31	SHEARS, Cutting; Suitable to cut sheet metal, heavy carpet, thick plastic sheeting.	1	Non-Sparking Acceptable (# 13.3.27)			
13.2.32	STRAPS, RATCHET, Tie down; Nominal 1" x 20', 1000 lbs rating. NOTE: Strapping in item # 9.3.17 may suffice.	2 Sets	NOTE: Strapping in item # 9.3.17 may suffice.			
13.2.33	STOP WATCH: Wind-up or battery, goes "tick-tock".	1				

13.3 Special Purpose						
Inv. #:	Item Name and Description	Requirement	Function, Certification Or Standard	Type 1	Type 2	Type 3
13.3.1	GROUNDING, CABLE; 3/16" carbon steel, 25' min., with either "C" clamp / screw bolt OR 3/4" pin point type end clamps, at least 75' total.	75' minimum	Not less than 75' total. Separate lengths should not be less than 25'			
13.3.2	GROUNDING, ROD: Nominal 3/8" to 1/2" dia x 4 to 6' length NOTE: New requirement to have GROUNDING RESISTANCE VERIFICATION capability (detection devices) is not included here. We will continue to inspect for only GROUNDING CABLE and GROUNDING ROD as noted above, until such time as HMEP GRANT efforts succeed to purchase and distribute these detection devices.	1	Not less than 4'			
13.3.3	VESTS, I.C.S., Haz-Mat Group: For all Group positions.	1 Set	ANSI 107 and FIRESCOPE			
13.3.6	NON-SPARKING, Hammer, Sledge: 7 to 10 pound.	1				
13.3.7	NON-SPARKING, HAMMER, Claw: 20 to 24 oz.	1				
13.3.10	NON-SPARKING, SCREWDRIVER, CHISEL, Kit; Any 3 sizes of: Small, medium, large, extra-large.	1 Kit of 3 different				
13.3.11	NON-SPARKING, SCREWDRIVER, PHILLIPS, Kit; Any 3 sizes of: # 1, #2, #3, #4.	1 Kit of 3 different				
13.3.12	NON-SPARKING, PLIERS, ORDINARY, Utility: With square blunt end, any size	1				
13.3.13	NON-SPARKING, PLIERS, WIRE, Side Cutting:	1				
13.3.14	NON-SPARKING, PLIERS, LONG-NOSE, Needle:	1				
13.3.17	NON-SPARKING, WRENCH, BUNG, Universal; Able to function on 5 or more different cap designs.	1				
13.3.18	NON-SPARKING, WRENCH, CRESCENT, Adjustable, Kit; Any 2 of the following: 12", 15", 22", 24".	1 Kit of 2				
13.3.20	NON-SPARKING, WRENCH, PIPE, Adjustable, Kit; Any 2 of: House – 16"; Standard – 18"; Medium – 22"; Large – 28".	1 kit of 2				
13.3.26	NON-SPARKING, KNIFE, PUTTY, Scrapping; 2" wide (Lexan plastic is acceptable)	1				
13.3.27	NON-SPARKING, SHEARS, Cutting: Suitable to cut sheet metal, heavy carpet, thick plastic sheeting.	1				
13.3.30	REFRIGERATOR, UTILITY, Small: Onboard response unit.	1				

IMPORTANT WEB SITES:

NFPA GARMENT CERTIFICATION

www.seinet.org/search/search.php

www.ul.com

NIOSH WMD BREATHING APPARATUS CERTIFICATION

www.cdc.gov/niosh/nppt/topics/respirators/cbrnapproved/scba/

www.cdc.gov/niosh/nppt/topics/respirators/cbrnapproved/apr/

www.cdc.gov/niosh/nppt/topics/respirators/cbrnapproved/papr/default.html