

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 27TH COMBAT SUPPORT GROUP (TAC)
CANNON AIR FORCE BASE, NM 88103

Ed/Herb

24 SEP 1991

Mr. Benito Garcia, Chief
Hazardous & Radioactive Waste Bureau
New Mexico Environment Department
1190 St. Francis Drive
Santa Fe, NM 87502

RE: Attachments to Cannon AFB's Permit Modification Request (NM7572124454)

Dear Mr. Garcia

Cannon AFB inadvertently left off a set of attachments to our permit modification request (dated 4 Sep 91). These attachments consist of the modified pages of the permit which were referenced in the last paragraph of the "Requested Modification to Cannon Air Force Base's Operating Permit."

We regret any inconvenience which this has caused. Questions concerning the permit modification may be directed to Mr. Jim Richards at (505) 784-4639.

Sincerely

DAVID E. BENSON, Colonel, USAF
Commander

1 Atch
Page Changes (16)

cc: Mr. Bill Gallagher,
EPA Region VI
HQ/TAC/DEV

Readiness is our Profession

Date:
Revision No.: 4
Section: C
Cannon

The Jet Engine Shop performs maintenance on the F-111D jet engines. They use Carbon Remover.

The Wheel and Tire shop, the Metals Technology shop and the Propulsion shop each have a bead blaster whose dust is characteristically hazardous due to metals such as lead, cadmium, silver and chromium. Wastes are collected at a satellite accumulation point in the respective shops for later transfer to DRMO.

The Auto Hobby shop and Civil Engineering paint shop generate small quantities (5-10 gallons per year) of paint related waste in the course of routine operations. Wastes are collected at a satellite accumulation point in the respective shops for later transfer to DRMO.

The base hospital generates small quantities (less than 1 gallon per year) of phenol, lindane, and formaldehyde in the course of routine operations. On occasion outdated or off specification phenol, warfarin, epinephrine and formaldehyde must also be turned in as hazardous waste. All wastes are collected at satellite accumulation points in the hospital for later transfer to DRMO.

Date:
Revision No.: 4
Section: C
Cannon

Corrosion Control accumulates their wastes (slop paint) in an outdoor storage area.

The Jet Engine Shop (Bldg 680) also accumulates wastes in an outdoor storage area. They segregate and accumulate waste Freon 113 and Carbon Remover. See page C-5a thru C-5d for waste analysis concentrations generated by the above hazardous waste generators.

The DRMO on Cannon AFB disposes of the waste accumulated at Corrosion Control and any other wastes generated on Cannon AFB. The DRMO may accept, upon written request, hazardous waste from Reese AFB, near Lubbock, Texas. Waste streams and processes are identified in Appendix C-2.

DRMO-Cannon will only accept hazardous wastes for which it is permitted. Periodically, DRMO-Cannon will inform each generating activity of the hazardous wastes it is permitted to receive and store. DOD has issued specific regulations that govern the transfer of hazardous wastes and are applicable to all generators of hazardous wastes that transfer such wastes to DRMOs. These

Date:
Revision No.: 4
Section: C
Cannon

WASTE ANALYSIS

27EMS CORROSION CONTROL BLDG. 196, 27th TRANSPORTATION PAINT SHOP, 27th
CIVIL ENGINEERING PAINT SHOP AND AUTO HOBBY SHOP. CANNON AFB. NM
WASTE STREAM-RESTRICTED LAND BAN SOLVENT

Generation of Slop paint and wipe down material consisting of methyl ethyl
ketone. toluene. paint thinner. and paint resins. EPA WASTE CODE: D001.
D007. D006. D008. F003 AND F005; NON-HALOGENATED

<u>BULK CONCENTRATION</u>	<u>% BULK CONCENTRATION</u>	<u>COMMENTS</u>	<u>EPA</u>
EPA IGNITABLE		27C	D001
PETROLEUM HYDROCARBONS	7	PH	
METHYL ETHYL KETONE	20		F005
ISOBUTYL ACETATE	4		
TOLUENE	2		F005
ISOBUTANOL	3		F005
XYLENES	3		F003
CELLOSOLVE ACETATE	1		
BENZENE. TOLUENE. XYLENES	<1	PH --	
WATER	60	PH 6.9	
<u>EP TOXICITY-METALS:</u>			
ARSENIC	0.5 mg/1		
BARRUM	10.0 mg/1		
CADMIUM	5.0 mg/1		D006
CHROMIUM	193.0 mg/1		D007
LEAD	11.5 mg/1		D008
MERCURY	0.02 mg/1		
SELENIUM	0.1 mg/1		
SILVER	0.5 mg/1		

WASTE ANALYSIS

27 EMS/MAEA Aerospace Ground Equipment. Bldg 18, 27 EMS/MAEBW WHEEL & TIRE SHOP. BLDG. 194, 27 EMS/MAEFM METALS TECHNOLOGY. BLDG 680 AND 27 CRS/MACP PROPULSION SHOP. BLDG 680. CANNON AFB, NM
 WASTE STREAM - RESTRICTED LAND BAN SOLVENT

 Generation of Bead Blaster Residue to perform maintenance on the F-111 wheel and engine components. EP Toxicity test - Metals; EPA WASTE CODES D006 and D007

<u>BULK CONCENTRATION</u>	<u>% BULK CONCENTRATION</u>	<u>COMMENTS</u>	<u>EPA</u>
EPA 1GNITABLE			
PARAMETERS:			

ARSENIC	< 0.5 mg/1		
BARIUM	<10.0 mg/1		
CADMIUM	8.1 mg/1		D006
CHROMIUM	6.0 mg/1		D007
LEAD	< 0.5 mg/1		
MERCURY	< 0.02mg/1		
SELENIUM	< 0.1 mg/1		
SILVER	< 0.5 mg/1		
PH, UNITS		8.3	
SAMPLE TYPE: SOLID			

WASTE ANALYSIS

27 CRS/MACA AVIONICS MAINTENANCE. BLDG. 680. CANNON AFB. NM
WASTE STREAM - RESTRICTED LAND BAN SOLVENT

Generation of Freon 113 (1,1,2, Trichloro-1,2,2 Trifluoroethane Halogenated Hydrocarbon) Cleaner, also known as Trichlorotrifluoroethane. Mixture of 98% silicone fluid, freon 113 solvent and 2% water. NSN: 6850-00-033-8851; EPA WASTE CODE F002

<u>BULK CONCENTRATION</u>	<u>% BULK CONCENTRATION</u>	<u>COMMENTS</u>	<u>EPA CODE:</u>
EPA IGNITABLE		NO	
CORROSIVITY		NO	
HALIDES		YES	F002
EP TOXICITY		N/A	

Tested for: Infrared Spectrograph; pH measurement and closed cup flash point.

WASTE ANALYSIS

27 CRS/MACP JET ENGINE MAINTENANCE. BLDG. 680. CANNON AFB. NM
WASTE STREAM - RESTRICTED LAND BAN SOLVENT

Generation of Carbon Remover containing perchloroethylene
(Tetrachloroethylene); Major compounds consist of 95% paint remover
(NSN: 8010-01-040-1059) and 5% Mineral Oil. EPA WASTE CODE F001

<u>BULK CONCENTRATION</u>	<u>% BULK CONCENTRATION</u>	<u>COMMENTS</u>	<u>EPA CODE:</u>
EPA IGNITABILITY		NOT < 140 F	N/A
CORROSIVE		NO	N/A
REACTIVE		NO	
HALIDES (TOX)	1,000 ppm	0.1	

Tested for: Infrared Spectro.graph: pH measurement and closed cup
flash point.

Date:
Revision No.: 4
Section: C
Cannon

(1X) Regional Environmental Specialist (Who has more reference documents on hand).

Figure C-2 is an example of the data output obtained from the Hazardous Materials Information System for acetone, a Group I item listed in Appendix C-1. It provides an example of the detail of information which can be obtained through HMIS, without requiring a sample of the item to undergo laboratory analysis. The NSN for this item is 6810-00-184-4796, and it consists of 100 percent acetone. DRMO-Cannon can identify this compound as ignitable. The handling and storage information indicates that acetone should be stored in an area away from heat, sparks, and open flames, and separated from strong oxidizers, nitric/sulfuric acid mixtures, and chloroform. To fight fires involving this chemical, a type of dry chemical extinguisher should be used. Small spills can be removed with absorbent materials, while large spills should be contained and pumped into appropriate containers.

The above discussion of Group I waste items is intended to meet the requirements of paragraph 40 CFR 264.13(a)(2), which indicates that existing published or documented data on the hazardous waste may be used to meet the general waste analysis requirements.

Hazardous material/waste generators will segregate all materials/wastes as much as possible so as to maintain identity of the materials. Corrosion Control, for instance, will segregate wipe down material (50% toluene and 50% MEK) from unused and slop paint.

Any material that is not mixed with other materials (solvents used to clean Parts, for example) will be returned to its original container.

In accordance with 40 CFR 268 Land Disposal Restrictions, Cannon will notify the receiving facility of all restricted and prohibited wastes requiring treatment prior to land disposal with the following reference, "These wastes should be treated to the standards set by 40 CFR 268 Subpart D as applicable." Additionally, a completed "Restricted Waste Notification" form as shown in Figure C-1a will accompany all restricted wastes. Test results or knowledge of process may be used to determine if the waste is restricted from land disposal.

Figure C-1a

Date:
 Revision No.: 4
 Section: C
 Cannon

RESTRICTED WASTE NOTIFICATION				MANIFEST NUMBER
INSTRUCTIONS				
1. Fill in corresponding manifest number. 2. Fill in EPA waste number, Treatment subcategory, Treatability group, Treatment standard or 40 CFR reference. 3. Sign and date form below. 4. Attach waste analysis data, where available. 5. Retain one copy with the manifest.				
NOTIFICATION STATEMENT				
This notification is provided IAW 40 CFR Part 268.7(a)(1). The above numbered manifest includes the following wastes which are prohibited from land disposal (except injection wells) unless an exemption has been granted pursuant to a petition under 268.6 or the applicable treatment standards have been met. Wastes that have a capacity variance as established by EPA may be land disposed in facilities that meet EPA minimum technological requirements for land disposal units.				
EPA NO.	TREATMENT SUBCATEGORY	TREATABILITY GROUP	STANDARD OR REFERENCE	VARIANCE DATE
TYPED OR PRINTED NAME		SIGNATURE		DATE

DRMS Form 1881 (Previous edition is obsolete)
 JUN 90
 HSH 754600.001881

Date:
Revision No.: 4
Section: C
Cannon

Copies of the current quantitative analysis will be maintained at SGPB and copies will be kept by the Environmental Coordinator (DEV), the Defense Reutilization Marketing Office (DRMO) and by the waste generator in accordance with Section XIII (Record Keeping Requirements) of the base Hazardous Waste Management Plan.

2. Identity Unknown. If the identity of a material/waste is unknown, the material will be tested for the parameters listed in Section C.2.c.(1). Sampling procedures outlined in Section C.2.e. will be followed.

(a) SGPB will verify the chemical composition of the materials by obtaining a sample of the material and request qualitative analysis by USAF Occupational and Environmental Health Laboratory (OEHL), Brooks AFB, Texas or another lab which employs current SW-846 methods and can obtain the detection limits specified in that document. Unused unopened materials will not require analysis as long as the container has not been opened and the identity is visible and legible on the container label.

(b) Samples will be preserved and packaged according to instructions in the USAF OEHL Recommended Sampling Procedures manual. Reusable cold packs will be used for temperature control. The containers will be made of insulated material and sealed.

C.2.b. Additional Requirements for Wastes Generated Off-Site [40 CFR 264.13(c)]

DRMO-Cannon may, on written request, accept waste from Reese AFB in Lubbock, Texas. These shipments and any other waste received at the facility through a Memorandum of Understanding will be inspected by DRMO-Cannon in order to assure proper identification by the generator.

DATE
Revision No. 4
Section: B
Cannon

A Toxicity Characteristic Leaching Procedure (TCLP), metals only, will be performed on all wastes IAW SW 846 Section 2.1.4.

If the infrared identification test does not adequately quantify the Waste constituents a sample will be resubmitted. An EPA approved method for further quantification will then be performed. Refer to Figure C-3 for flow chart description of the identification process.

C.2c(1)(a) Frequency of Analysis (40 CFR 264.13(b)(4))

Frequency of analysis will be as follows:

1) For offbase turn-in activities transferring property to the DRMO once or more per month sampling will be performed once per month. Number of samples are determined by number of containers received from a generator (each generator has a separate EPA Id number). (See Table C-6)

2) For offbase turn-in activities transferring property to the DRMO less than once per month, sampling will be performed at each turn-in.

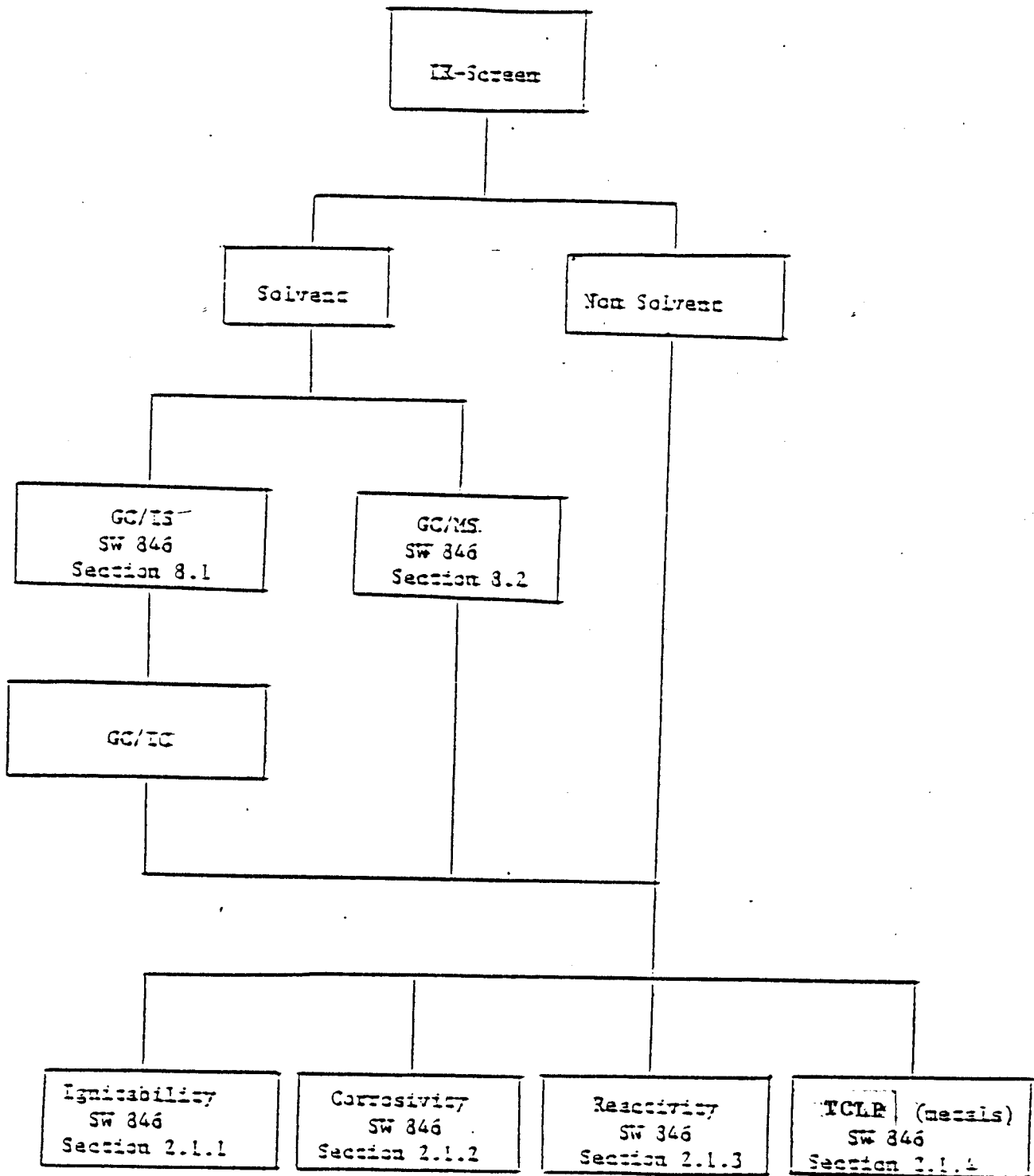
Table C-6 will be used to determine the number of samples to be taken. Shipment size is the number of containers (whatever size) which hold Group II wastes. Containers to be sampled and selected at the discretion of the environmental specialist or other person designated by the DRMO Chief.

Table C-6. Number of Samples To be Collected As a Function of the Number of Items in the Shipments.

SCHEDULE A - Military Standard 105D Normal Inspection

<u>Shipment Size</u>	<u>Number of Samples To Be Collected</u>
2 to 8	2
9 to 15	3
16 to 25	5
26 to 50	8
51 to 90	13
91 to 150	20

FIGURE C-3
 IDENTIFICATION PROCESS FLOW CHART



NOTE: Updated SW-846 method numbers included in Permit Attachment II-1A.

Date:
Revision No.: 4
Section: C
Cannon

lined lid. Although this will not ensure a representative sample, it will identify all possible constituents.

C.2.f. Sampling Frequency.

C.2.f.(1) Continuous processes will be sampled annually. C.2.f.(2) Intermittent processes will be sampled upon request for turn-in to DRMO.

C.2.f.(3) Process Changes requiring a change in chemical useage will be reported to SGPB by all organization on Cannon Air Force Base whereupon SGPB will determine new sampling requirements.

C.2.g. Chain of Custody. Samples will be sent to an approved lab in a sealed container. A Chain-of-custody record (figure C-4) will be filled out, signed and placed in a plastic bag along with the usual sample submission form (see figure C-5) and sealed in the shipping container. A duplicate will be kept by SGPB with the duplicates of the sample submission forms. Lab personnel will acknowledge receipt of the samples in good condition by signing the Chain-of-Custody form and returning it to Cannon AFB. If the container is damaged in any way or not sealed when the lab receives the package, the technician will so annotate on the form.

2. Record Keeping. Sample results (along with Chain-of-Custody forms) will be maintained at SGPB and copies will be kept by the generator, Environmental Coordinator (DEV), and by the Defense Reutilization and Marketing Office (DRMO) in accordance with Section XIII (Record Keeping Requirements) of the base Hazardous Waste Management Plan.

SW-846, "Test Methods for Evaluating Solid Waste", 3rd. edition
Method Number Updates for CAFB Waste Analysis Plan

<u>Description of Hazardous Waste</u>	<u>EPA Hazardous Waste Number</u>	<u>SW-846, 3rd ed. Method Number</u>
Characteristic for ignitability	D001	1010
Characteristic for corrosivity	D002	9040 1110
Cadmium containing waste	D006	7130 7131
Chromium containing waste	D007	7190 7191
2,4-D Herbicide	D016	8150
Spent halogenated solvents	F001 F002	8010
Non-halogenated spent solvents	F003 F005	8015 8020
Toxicity Characteristic Leaching Procedure (TCLP)		1310
Arsenic	D004	7060, 7061
Barium	D005	7080
Cadmium	D006	7130, 7131
Chromium	D007	7190, 7191
Lead	D008	7420, 7421
Mercury	D009	7470
Selenium	D010	7740, 7741
Silver	D011	7760
Gas chromatography/mass spectrometry methods for organics		8240 8250

Date
Revision No.: 4
Section D
Cannon

TABLE D-1 (Continued)

HAZARDOUS MATERIAL	DOT CONTAINER CODE	APPLICABLE DOT REGULATION SECTION	CONTAINER DESCRIPTION GENERAL PACKING REQUIREMENT
Trichloro-ethylene, Tetrachloro-ethylene, 1,1,1 Tri-chloroethane	None	173.805	IAW 49 CFR 173.605
Naptha Methyl alcohol, Petroleum ether	Metal Drums 17C Various	173.119	IAW 49 CFR 173.119
Mercury	Various	173.860	IAW 49 CFR 173.860
Potassium dichromate, DDT, Chloroform Formaldehyde, Epinephrine, Lindane and Warfarin	None	173.510	IAW 49 CFR 173.510
Zinc phos-phide	Various	173.365	IAW 49 CFR 173.365
Phenol	Various	173.349	IAW 49 CFR 173.349

Date:
Revision No.: 4
Section: G
Cannon

10. Telephonic and message notification of other Federal and state agencies must be made promptly following telecon notification of reportable spill to TAC/DEV. These agencies (New Mexico Environment Department), Santa Fe, New Mexico (505) 827-9329) will be notified within 24 hours of any hazardous substance spill, regardless of quantity.

Most waste spills and leaks at the HWSF are easily contained within the berms and grated trenches, and can be collected with absorbent materials or pumped into a container. The contaminated area can then be flushed with water, or some other appropriate solvent. The rinsate and any contaminated absorbents will also be containerized for disposal.

DRMO will have in stock five eighty-five gallon overpack containers. 27 CSG/DEV or the Fire Department Spill kit will contain twenty fifty-five gallon drums and twenty eighty-five gallon drums in stock at all times. These drums will be the types approved under DOT and military container specifications.

The final rinsate of equipment and the facility will be analyzed for appropriate parameters (see Section C), depending on materials involved in the spill. A minimum of four samples will be taken.

DATE:
Revision No.:
Section G
Cannon

TABLE G-4
DRMO EMERGENCY EQUIPMENT LIST
TSDF BUILDING 226 CAFB, NM

EQUIPMENT	LOCATION	PHY. DESCRIPTION
YALE 'EE' Electric Forklift	Bldg. 226	Good
Manual Drum lift	Bldg. 226	Good
Manual Pallet Jack	Bldg. 226	Good
Safe Step (AD) Sorbent	Bldg. 226	Good
85-Gallon Over Pack Drums	Bldg. 226	Good
Broom	Bldg. 226	Good
Nonsparking Shovel	Bldg. 226	Good
Bronze Bung Wrench	Bldg. 226	Good
Every Ready First Aid Kit	Bldg. 226	Good
4'X 4' Plastic Bags	Bldg. 226	Good
Chemical Resistant		Good
Plaxtic Footwear Covers	Bldg. 226	Good
Disposal Shoe Slip Clovers	Bldg. 226 & 215	Good
Rubber Over Boots, Black	Bldg. 226 & 215	Good
Short unlined rubber gloves	Bldg. 226 & 215	Good
Lined rubber gloves	Bldg. 226 & 215	Good
Sol-vex Long, Blue gloves	Bldg. 226 & 215	Good
Neoprene Chemical Protective pioneer style	Bldg. 226	Good
Leather gloves by Ketch All Company	Bldg. 226	Good
Aural (Ear) protector	Bldg. 226	Good
Goggles, Cesco	Bldg. 226	Good
Goggles, Splash, sun, wind	Bldg. 226	Good
Eye protection glasses w/side shields	Bldg. 226	Good
Apron, Rubber, White	Bldg. 226	Good
Acid Protection Suit, Yellow, Rubber Rain Coat and pants	Bldg. 215	Good
Snap Button Type Rain Boots	Bldg. 215	Good
Coveralls, Yellow, Disposal	Bldg. 226	Good
1 piece Coveralls, White Disposal	Bldg. 215	Good
Face Shield, Industrial	Bldg. 226	Good
White Safety Hat, Sentry	Bldg. 226	Good