



Department of Energy
 Richland Operations Office
 P.O. Box 550
 Richland, Washington 99352

01-RCA-345

JUL 02 2001

Mr. Michael A. Wilson, Program Manager
 Nuclear Waste Program
 State of Washington
 Department of Ecology
 1315 W. Fourth Avenue
 Kennewick, Washington 99336

RECEIVED
 JUL 25 2001

EDMC

Dear Mr. Wilson:

SUBMITTAL OF CORRECTIVE MEASURES REPORT FOR THE NOTICE OF CORRECTION (NoC), DATED MARCH 1, 2001, FROM THE STATE OF WASHINGTON DEPARTMENT OF ECOLOGY (ECOLOGY)

- References: (1) Ecology ltr. to R. D. Hanson, FHI, and K. A. Klein, RL, from R. W. Wilson, "Notice of Correction from January 22, 2001, Inspection into Discovery of Shock-Sensitive Dangerous Waste at 222-S Laboratories, Waste Sampling and Characterization Facility and Plutonium Finishing Plant," 0101448, dtd. March 1, 2001. ✓
- (2) RL ltr. to R. W. Wilson, Ecology, from J. Hebdon, "Request for Extension of Time to Comply with 222-S Laboratory Notice of Correction (NoC) Dated March 1, 2001," 01-RCA-224, dtd. March 23, 2001. 54837

On March 1, 2001, the U.S. Department of Energy, Richland Operations Office (RL) and Fluor Hanford, Inc. (FHI) received an NoC resulting from the inspection conducted from January 26, 2001, through February 6, 2001, concerning the discovery of potentially shock-sensitive dangerous waste at 222-S Laboratories, Waste Sampling and Characterization Facility (WSCF), and the Plutonium Finishing Plant (PFP). The NoC alleged three violations of the Washington Administrative Code (WAC) 173-303. In addition, Ecology requested that three corrective measures be conducted.

On March 23, 2001, RL issued a letter requesting a 90-day extension to the due date for submittal of the corrective measures report. Ecology granted that extension request and established a new submittal date of July 2, 2001. As agreed upon in the March 23, 2001, letter, enclosed is the corrective measures report for all three identified corrective measures found in the March 1, 2001, NoC. The corrective measures report is divided into four sections: Section I, Summary of Corrective Measures and Negotiations; Section II, Processes Used by the Laboratories to Perform Chemical Sweeps; Section III, Results of the Laboratory Chemical Sweeps; and Section IV, Location of Generator Records.

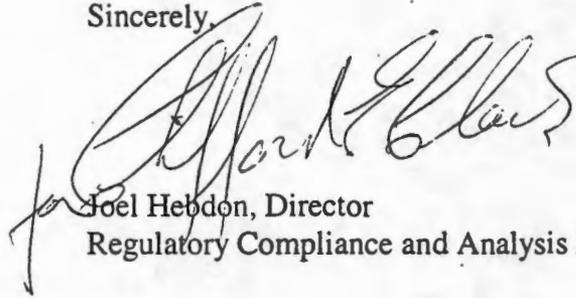
Mr. Michael A. Wilson
01-RCA-345

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All chemical material that has been determined to be a solid waste has had waste codes assigned to the material. If you have any questions, please contact Gloria Williams, of my staff, on (509)-372-0586.

Sincerely,



Joel Heddon, Director
Regulatory Compliance and Analysis Division

RCA:GAW

Enclosure

cc w/encl:

Administrative Record, H6-08

Ecology Library, Kennewick

R. Gay, CTUIR

F. Jameson, Ecology

R. W. Wilson, Ecology

R. H. Gurske, FHI

F. A. Ruck, III, FHI

Environmental Portal, A3-01

P. Sobotta, NPT

R. Jim, YN

**RESPONSE TO NOTICE OF CORRECTION DATED MARCH 1, 2001
CONCERNING DISCOVERY OF SHOCK-SENSITIVE DANGEROUS WASTE
AT 222-S LABORATORY, WASTE SAMPLING AND CHARACTERIZATION
FACILITY AND PLUTONIUM FINISHING PLANT**

I. SUMMARY OF CORRECTIVE MEASURES AND NEGOTIATIONS

On March 1, 2001, the State of Washington, Department of Ecology (Ecology) issued a Notice of Correction (NoC) to the U.S. Department of Energy, Richland Operations Office (RL) and Fluor Hanford (FH). This NoC was the result of an inspection into the discovery of potentially shock-sensitive dangerous waste at the 222-S Laboratory Complex (222-S), the Waste Sampling and Characterization Facility (WSCF), and the Plutonium Finishing Plant (PFP), of the Hanford Site. The NoC alleged three violations of the Dangerous Waste Regulations, WAC 173-303, and proposed three corrective measures are listed and summarized below:

Corrective Measure No. 1

RL and FH must issue a report to Ecology documenting a review of chemical materials in all laboratories managed by RL and FH that 1) may be shock-sensitive, 2) are expired chemical products or reagent and have no further use, 3) may become unstable upon continued storage, or 4) otherwise pose a threat to human health from continued storage. This report must specify that the materials identified above are or are not solid waste per all requirements of WAC 173-303-016. Any materials identified as solid waste must immediately be designated as dangerous waste or extremely hazardous waste per the procedures set for in WAC 173-303-070.

Corrective Measure No. 2

RL and FH must issue a report to Ecology documenting waste designation of all chemical materials subject to the requirements of Corrective Measure #1 above. Waste designations documented in this report must meet all requirements of WAC 173-303-170, and be reference of this regulation, all requirements of WAC 173-303-070. Accurate and complete designation of all chemical materials subject to the requirements of Corrective Measure #1 above must be performed immediately upon the determination that the material is a solid waste.

Corrective Measure No. 3

RL and FH must issue a report to Ecology describing the management and on-site location of designation records that meet the requirements of WAC 173-303-210(3) and requirements of facility operating records per the Hanford Site Facility RCRA Permit. All information gathered per Corrective Measures #1 and #2 must be documented as described in this corrective measure and be available for review by Ecology inspectors upon request.

Negotiations to Complete Corrective Measures

After a review of the NoC by RL and FH, a meeting was held with Ecology on March 15, 2001, to discuss the scope and content of the corrective measures and how long it may take to complete the corrective measures. During the meeting, discussion were held on 1)

Refining scope of Corrective Measure #1; 2) Definition of chemical materials in Corrective Measure #1, 3) Contents of report for Corrective Measure #1; and 4) Additional time that will be needed to complete corrective measures. As a result of the meeting, RL issued a letter, dated March 23, 2001, which requested an extension to comply with the corrective measures and included the methodology to document the results of the corrective measures which were previously agreed upon. Ecology issued a letter dated March 28, 2001 approving a new completion date, July 2, 2001, and submittal of the corrective measures report.

The specific items that were agreed upon concerning the corrective measures report include:

- Agreement was reached that one report for all the laboratories and all the corrective measures would be appropriate. Ecology agreed that the laboratories covered by this corrective measure included 222-S and 222-SA, WSCF, and PFP A Lab. It was also agreed that the corrective actions only pertained to the analytical portions of these facilities and did not include maintenance activities or waste already being managed in accordance with WAC 173-303.
- For Corrective Measure #1, the report will state the analytical laboratories did indeed conduct a product chemical sweep using parameters for legitimate use. As a result of performing Corrective Measure #1, the report will include a table of chemicals that have been declared solid waste.
- To satisfy Corrective Measure #2, the table will include the quantity of the material and initial waste codes that have been assigned to the chemical material that has been declared a solid waste and not the actual waste designation documentation. If analytical results are needed to completely identify and characterize the waste material, and the results are not available by the due date of the report, then the table should identify that more information is being obtained and no delay should occur with respect to the issuance of the report.
- To satisfy Corrective Measure #3, the report will indicate the location of the waste generating records for each laboratory.

II. ACTIVITIES BY THE LABORATORIES TO PERFORM CHEMICAL SWEEPS

Listed below are brief descriptions of the processes that each laboratory used to conduct sweeps of its chemical product inventories to determine which chemical materials should be declared a solid waste.

222-S

The 222-S laboratory completed the following actions in order to establish the inventory of laboratory chemical products that have a legitimate use. The following process was used:

1. An inventory of all the chemical materials in storage at the 222-S was completed. The inventory of each laboratory room was established, the inventory was a combination of Standard Laboratory Inventory Control/Chemical Management System (SLIC/CMS) and hand inventories of miscellaneous chemical items in each room. A physical walk through of each lab room was performed comparing these findings with existing chemical tracking records to determine what chemicals were in each room. The inventory of all chemical materials involved:
 - a) Identification of high hazard chemicals (i.e., shock-sensitive, peroxide formers, or unstable in storage) was verified using pre-established list,
 - b) Each room's inventory of general chemical use was reviewed using the following criteria and documented.
 - Each chemical must be analytically viable:
 - The bottle must be in good condition.
 - The chemical must not be degraded as determined by the cognizant scientist.
 - The chemical must be properly stored.
 - Reagents/standards must not be expired
 - The chemical must not pose a high hazard (i.e., shock-sensitive, peroxide forming, or unstable in storage).
 - c) Chemicals that did not meet the above criteria as a "general use" chemical were justified for use by the room owner and cognizant scientist on a case-by-case basis and documented. The justification contains a listing of controls for the items. Items that required an individual justification were:
 - Continued use of expired standards/reagents.
 - Use of shock-sensitive, peroxide forming chemicals.
 - Chemicals, standards, reagents removed from inventory and used for non-analytical use (e.g., acids used for equipment decontamination)
 - d) Items that had no use identified by the room owner were evaluated for other uses in the laboratory.
 - If no uses could be identified for the item, it was declared waste.

2. The above inventories were further reviewed by the room cognizant scientist and an analytical team lead to determine what materials were to be kept and what needed to be disposed of. Approximately 450 containers, comprised of approximately 280 different chemicals, have been determined to be waste. The waste has been designated for disposal on an expedited basis.

WSCF

The WSCF laboratory completed the following actions in order to establish the inventory of laboratory chemical products that have a legitimate use. The following process was use:

1. An inventory of all the chemical materials in storage at the WSCF was completed. The inventory entailed a physical walk through of each lab room and comparing these findings with existing chemical tracking records to determine what chemicals were in each room. The inventory looked at all chemical materials that;
 - a. May be shock-sensitive;
 - b. Are expired chemical product or reagent, which have no further use;
 - c. May become unstable upon continued storage, or
 - d. Otherwise, pose a threat to human health from continued storage.
2. The above inventory was then reviewed by the room owner/cognizant chemist and analytical team lead to determine what materials were to be kept and what needed to be disposed of. An independent review to look at reactivity concerns was done by the Chemical Hygiene Officer and Industrial Hygiene Officer. The review looked at the above inventory to identify if the materials are or are not solid waste per WAC 173-303-016. During the course of the review, 20 items (with one item an OSHA Regulated Chemical Service Kit consisting of 148 ~20 ml vials of chemical product) were identified as solid waste. The waste has been designated for disposal on an expedited basis.

PFP

The PFP laboratory completed the following actions in order to establish the inventory of laboratory chemical products that have a legitimate use. The following process was use:

1. An inventory of each room in the laboratories was completed. The inventory process entailed a physical walk through of each room within the laboratories to ensure all chemicals in storage were identified in the CMS database. The inventory also looked at all chemical materials that;
 - a. May be shock-sensitive;
 - b. Are expired chemical product or reagent, which have no further use;
 - c. May become unstable upon continued storage, or

- d. Otherwise, pose a threat to human health from continued storage.

The review for potential shock-sensitive materials was accomplished by comparing PFP laboratory inventories with the list of potential shock-sensitive materials provided by 222-S, and an independent review conducted by the Facility Industrial Hygienist.

2. The above inventory was then reviewed by the room owner/cognizant chemist and analytical team lead to determine what materials were to be kept and what needed to be disposed of. An independent review to look at reactivity concerns was done by the facility Industrial Hygiene Officer. The review looked at the above inventory to identify if the materials are or are not solid waste per WAC 173-303-016. During the course of the review the chemical materials totaling approximately 14 containers were identified as solid waste. The waste has been designated for disposal on an expedited basis

III. RESULTS OF THE LABORATORY CHEMICAL SWEEPS

Once the sweep was completed for each laboratory, all chemical products that were to be discarded were declared a solid waste. The waste chemicals have been or are awaiting packaging and transportation to an appropriate permitted treatment, storage, and/or disposal unit.

When the chemical products were declared a solid waste, information on the chemical material was gathered together to determine whether or not the material would designate as a dangerous waste. Waste designation for the materials was accomplished following process contained in WAC 173-303-070(3), *Designation procedures*. Information reviewed for performing the waste designations included material safety data sheets (MSDS), vendor information, chemical information contained in standard chemical references, and other types of information available. Information on chemical materials that pre-date the requirements for MSDS are still being acquired from various sources, vendors, patent offices, foreign manufactures, and other sources. No chemical material that was declared a solid waste required analytical testing as required under WAC 173-303-070(4).

Table 1 contains the results of the chemical sweeps at each laboratory. The table includes the laboratory, chemical name, quantity, and waste codes.

IV. GENERATOR RECORDS

All generator records are kept at the Hanford Facility and are maintained per WAC 173-303-210. The information needed to complete the waste designation for each waste chemical is summarized in a Solid Waste Engineering Analysis (SWEA) form. This form and other records that form the basis for the waste designations are maintained and retrievable by individual numbers. Currently, the waste designation records for 222-S are located in files in room 5B, 222-SC and the 219-S regulatory file, for WSCF in the files in building 6269, Room 103; and for PFP in the files in MO429.

**TABLE 1:
CHEMICAL WASTE INFORMATION**

Container Size	Chemical / Product Name	Waste Codes	Facility
25 g	(Ethylene dinitrilo)tetraacetic acid Copper Disodium Salt - Eastman	None	222S
100 ML	1,1,2,2-Tetrabromoethane (Lot #00101DY) - Aldrich	WT01 WP01	222S
20 ml	1,1-DICHLORO-1- NITROETHANE	D001	WSCF
20 ml	1,1-DIMETHYLHYDRAZINE	D002 U098	WSCF
20 ml	1,2-EPOXY-3- PHENOXYPROPANE	WT02	WSCF
1000mL	1-Butanol	D001 U031	222S
20 ml	1-CHLORO-1-NITROPROPANE	WT02	WSCF
20 ml	1-CHLORO-4-NITROBENZENE	WT02	WSCF
20 ml	1-NITROPROPANE	WP01	WSCF
20 ml	2,3-DIMETHYLANILINE	WT02	WSCF
25 GM	2,4,5,6-Tetrachloro-m-xylene (Lot #JX 0052481) - Aldrich	None	222S
20 ml	2,4-DICHLOROPHENYLACETIC ACID	U240	WSCF
20 ml	2,4-DICHLOROPHENYLACETIC ACID	U240	WSCF
20 ml	2,4-DICHLOROPHENYLACETIC ACID	U240	WSCF
20 ml	2,4-DIMETHYLANILINE	WT02	WSCF
20 ml	2,4-DINITROTOLUENE	U105	WSCF
20 ml	2,4-TOLYLENE DIISOCYANATE	U223 D003	WSCF
20 ml	2,5-DIMETHYLANILINE	WT02	WSCF
20 ml	2,6-DIMETHYL-4-HEPTANONE	D001	WSCF
20 ml	2,6-DIMETHYLANILINE	WT02	WSCF
20 ml	2,6-DINITROTOLUENE	U106	WSCF
1g	2-Amino-2-methyl-1,3-propanediol	None	222S
20 ml	2-AMINOPYRIDINE	WT02	WSCF
4 L	2-Butanol - Aldrich	D001	222S
4 L	2-Butanol - Aldrich	D001	222S
4 L	2-Butanol - Aldrich	D001	222S
4 L	2-Butanol - Aldrich	D001	222S
100 ML	2-Butoxyethanol - Aldrich	D001	222S
20 ml	2-CHLOROACETOPHENONE	WT02 WP01	WSCF
5 ML	2-Chloroethyl ether - Aldrich	D001 U025	222S
5 ML	2-Chloroethyl ether - Aldrich	D001 U025	222S

**TABLE 1:
CHEMICAL WASTE INFORMATION**

Container Size	Chemical / Product Name	Waste Codes	Facility
100 ML	2-Chloroethyl ether - Aldrich	D001 U025	222S
20 ml	2-CHLOROETHYL VINYL ETHER	U025 D001	WSCF
20 ml	2-DIETHYLAMINOETHANOL	D001 D002	WSCF
20 ml	2-ETHOXYETHANOL	U359	WSCF
20 ml	2-ETHOXYETHYL ACETATE	D001	WSCF
20 ml	2-METHYL-1-BUTYL ALCOHOL	D001	WSCF
20 ml	2-NITROPROPANE	U171	WSCF
20 ml	2-PIVALOYL-1-3-INDANDIONE (Pival)	WT02	WSCF
20 ml	2-PROPYN-1-OL (Propargyl Alcohol)	P102	WSCF
20 ml	4,6-DINITRO-o-CRESOL	P047	WSCF
5 ML	4-Chlorodiphenyl ether - Aldrich	WP01	222S
20 ml	4-tert-BUTYLCATECHOL	WT02	WSCF
1 ml	AccuStandard - Custom Surrogate	D001	WSCF
1 ml	AccuStandard - Custom Surrogate	D001	WSCF
1 ml	AccuStandard - Custom Surrogate	D001	WSCF
1 ml	AccuStandard - Custom Surrogate	D001	WSCF
1 ml	AccuStandard - Custom IS	D001	WSCF
1 ml	AccuStandard - Custom IS	D001	WSCF
1 ml	AccuStandard - Custom IS	D001	WSCF
1 ml	AccuStandard - Custom IS	D001	WSCF
1 ml	AccuStandard - Custom IS	D001	WSCF
1 ml	AccuStandard - Custom IS	D001	WSCF
1 ml	AccuStandard - Custom IS	D001	WSCF
1 ml	AccuStandard - Custom IS	D001	WSCF
1 ml	AccuStandard - Custom LCS	D001 D018	WSCF
1 ml	AccuStandard - Custom LCS	D001 D018	WSCF
1 ml	AccuStandard - Custom LCS	D001 D018	WSCF
1 ml	AccuStandard - Custom LCS	D001 D018	WSCF
1 ml	AccuStandard - Custom LCS	D001 D018	WSCF
20 ml	ACRIDINE	WT02	WSCF
20 ml	ACROLEIN	P003	WSCF
20 ml	ACRYLAMIDE	U007	WSCF
20 ml	ACRYLONITRILE	D001 U009	WSCF

**TABLE 1:
CHEMICAL WASTE INFORMATION**

Container Size	Chemical / Product Name	Waste Codes	Facility
500 ml	AE-3003 Jet Eng Clean Sodium Hydroxide <10% Isopropanol <6% in Water	D002	222S
500g	Alanine (beta)	None	222S
500g	Alanine (beta)	None	222S
20 ml	ALDRIN	P004	WSCF
20 ml	ALLYL ALCOHOL	P005	WSCF
20 ml	ALLYL CHLORIDE	D001	WSCF
20 ml	ALLYL CYANIDE	D001 D003	WSCF
0.015 L	Alpha hydroxyisobutyric acid (2- hydroxyisobutyric acid)	None	222S
10g	Aluminum Hydroxide	None	222S
0.020 L	Aluminum Nitrate	D001	222S
0.007 L	Aluminum Nitrate	D001	222S
250 ML	Aluminum Nitrate Nanohydrate 10.5% in water	WT02	222S
139 g	Aluminum oxide dried filter + acid wash.	None	222S
20 ml	a-METHYL STYRENE	D001	WSCF
25g	Ammonium citrate	None	222S
25 ml each	Ammonium Hydroxide	D002	222S
1L	Ammonium Hydroxide 0.04M	D002	222S
1L	Ammonium Hydroxide 0.04M	D002	222S
0.05 L	Ammonium Hydroxide 1% in Water	D002	222S
0.1 L	Ammonium Hydroxide 1.5 M (5.3% Ammonium Hydroxide in Water)	D002	222S
0.005 L	Ammonium Nitrate	D001	222S
500 GM	Ammonium nitrate (Lot #925079A) - Fisher	D001	222S
500 GM	Ammonium nitrate (Lot #925079A) - Fisher	D001	222S
20 ml	AMMONIUM SULFAMATE	WT02	WSCF
500 g	Ammonium Thiocyanate - J. T. Baker	D003	222S
500 g	Ammonium Thiocyanate - J. T. Baker	D003	222S
500 g	Ammonium Thiocyanate - J. T. Baker	D003	222S
500 g	Ammonium Thiocyanate - Aldrich	D003	222S
500 g	Ammonium Thiocyanate - Aldrich	D003	222S
500 g	Ammonium Thiocyanate - Aldrich	D003	222S

**TABLE 1:
CHEMICAL WASTE INFORMATION**

Container Size	Chemical / Product Name	Waste Codes	Facility
500 g	Ammonium Thiocyanate - Aldrich	D003	222S
500 g	Ammonium Thiocyanate - Aldrich	D003	222S
500 g	Ammonium Thiocyanate - Aldrich	D003	222S
200 g	Ammonium Zirconium Fluoride	None	222S
200 g	Ammonium Zirconium Fluoride	None	222S
500mL	Amyl Alcohol, primary	D001	222S
500mL	Amylacetate	D001	222S
20 ml	a-NAPHTHYLTHIOUREA	P072	WSCF
20 ml	ANILINE	U012	WSCF
20 ml	ANILINE	U012	WSCF
20 ml	ANTHRACENE	WP03	WSCF
20 ml	a-PINENE	D001	WSCF
0.1 L	Arsenic 1000 ppm in KOH 2%	D002 D004	222S
1000 ml	BALZERS PUMP OIL (ROTARY-SLIDE-VANE) PT.#275140203 - Balzers AG	NON-REG.	234-5Z
1000 ml	BALZERS PUMP OIL (ROTARY-SLIDE-VANE) PT.#275140203 - Balzers AG	NON-REG.	234-5Z
1000 ml	BALZERS PUMP OIL (ROTARY-SLIDE-VANE) PT.#275140203 - Balzers AG	NON-REG.	234-5Z
500 ml	BALZERS PUMP OIL (ROTARY-SLIDE-VANE) PT.#275140203 - Balzers AG	NON-REG.	234-5Z
500 ml	BALZERS PUMP OIL (ROTARY-SLIDE-VANE) PT.#275140203 - Balzers AG	NON-REG.	234-5Z
0.1 L	Barium Chromate Catalyst	D001 D005 D007	222S
0.1 L	Barium Chromate Catalyst	D001 D005 D007	222S
0.25L	Barium Nitrate 0.81%; Water 99.18%	D005	222S
25 gm	Basic Fuchsin	None	222S
0.5 L	Benzene	D001 U019	222S
125g	Benzoic Acid	WT02	222S
0.020 L	Benzoic Acid (Baker)	WT02	222S
20 ml	BENZOTHIAZOLE	D003	WSCF
20 ml	BENZYL CHLORIDE	P028 D002	WSCF

**TABLE 1:
CHEMICAL WASTE INFORMATION**

Container Size	Chemical / Product Name	Waste Codes	Facility
100mL	BF3 in Methanol 14%	D001 D002	222S
20 ml	bis 2-CHLOROETHYLEETHER	U025 D001	WSCF
50g	Bismuth Nitrate	D001	222S
20 gm	Bismuth Phosphate	None	222S
100 g	Boric Acid (solid)	WT02	222S
20 ml	BORON TRIFLUORIDE ETHER (complex)	D002 D003	WSCF
approx. 50 1mL pillows	Bromcresol Green/Methyl Red HACH: Potassium chloride >98% other ingredients <1%	WT02	222S
500 ml	BUFFER PH 10 - Fisher Scientific	NON-REG.	234-5Z
500 ml	BUFFER PH 4 - Fisher Scientific	NON-REG.	234-5Z
500 ml	BUFFER PH 7 - Fisher Scientific	NON-REG.	234-5Z
500 ml	BUFFER PH 7 - VWR BDH	NON-REG.	234-5Z
0.1 L	Buffer Solution Hardness 1 pH 10.1+-0.1	WT02	222S
(9) 2mL	C14 EDTA: 1.5086uCi/L in water	None	222S
2ML	C14 STD in .02M Nitric 1.5086 uCi/L	D002	222S
0.25L	Cadmium Nitrate Tetrahydrate 0.82%; Cadmium Sulfate Octahydrate 1.13%; Water 98.05%	D006	222S
50g	Cadmium Sulfide	D003 D006	222S
1"X1" X2.5"	Cal Ver2	WT02	222S
1"X1" X2.5"	Cal Ver2	WT02	222S
0.1 L	Calcium Carbonate (Coulometrics)	None	222S
0.005	Calcium Oxalate	None	222S
5 mL	Caprylic Acid - Fluka	D002	222S
20 ml	CARBARYL	WT02	WSCF
125 mL	Carbon Disulfide	D001 P022	222S
500g	CC41, Micrgranular Cellulose Powder	None	222S
5g	Cesium Nickel Ferrocyanide	D001	222S
0.01 L	Cesium; 10 ug/mL in 2M Nitric Acid (12% Nitric Acid)	D002	222S

**TABLE 1:
CHEMICAL WASTE INFORMATION**

Container Size	Chemical / Product Name	Waste Codes	Facility
0.1 L	Cesium, 1004 ug/mL - Inorganic Ventures	D002	222S
0.5 L	Chem West Sodium Metabisulfite	WT02	222S
10 gm	ChemService Std - tributyl phosphate	WT02	WSCF
10 gm	ChemService Std - nitrobenzene	U169	WSCF
20 ml	CHLORDANE (mix of isomers)	U036	WSCF
20 ml	CHLOROACETALDEHYDE	P023	WSCF
125 ML	Chloroform 0.7% in water	U044	222S
7 mL	Chromium (III) oxide	D007	222S
0.25L	Chromium III Nitrate Nanohydrate 7.53%; Water 92.47%	D002 D007	222S
20 ml	CHRYSENE	U050	WSCF
0.01 L	CMPO [Methylpropyl-2- (OctylphenylPhosphinyl)Acetamide]	None	222S
0.01 L	CMPO [Methylpropyl-2- (OctylphenylPhosphinyl)Acetamide]	None	222S
(6) 500 ml	CMPO 14 % Octyl(Phenyl)-N,N- diisobutylcarbamoylmethylphosphine oxide and TBP 38% Tributyl Phosphate in NPH Normal Paraffin Hydrocarbons with HNO3 <1%	D001 D002	222S
0.1 L	Concentrated Ammonium Hydroxide (100% Ammonium Hydroxide)	D002	222S
250g	Copper (II) Sulfide	D003	222S
0.02 L	Copper(powder)	None	222S
0.02 L	Copper(powder)	None	222S
20 ml	CROTON ALDEHYDE	U053	WSCF
0.5 L	Custom Multi Element Standard - Spex	D002	222S
0.5 L	Custom Multi Element Standard - Spex XWHC-35	D002	222S
2.5"x2.5"x1"	Cyaniver 3 powder pillows cat# 21068	WP01	222S
2.5"x2.5"x1"	Cyaniver 3 powder pillows cat# 21068	WP01	222S
2.5"x2.5"x1"	Cyaniver 4 powder pillows cat# 21069	WSC2	222S
2.5"x2.5"x1"	Cyaniver 4 powder pillows cat# 21069	WSC2	222S

**TABLE 1:
CHEMICAL WASTE INFORMATION**

Container Size	Chemical / Product Name	Waste Codes	Facility
2.5"X2.5"X1"	Cyaniver 5 powder pillows cat# 21070	WT02	222S
2.5"X2.5"X1"	Cyaniver 5 powder pillows cat# 21070	WT02	222S
500 ml	DAXAD 30 Sodium Polymethacrylate	None	222S
20 ml	DDT (20% o.p./75% p.p.)	U061	WSCF
150 ml	Dearborn 692 Phosphonic Acid, (1-hydroxyethylidene)bis	None	222S
20 ml	DIACETONE ALCOHOL	D001	WSCF
20 ml	DIACETONE ALCOHOL	D001	WSCF
20 ml	DIBROM	WT02	WSCF
250 ML	Dibutyl butyl phosphonate (Lot #BP127-128) - Pfaltz & Bauer	None	222S
0.125 L	Dibutyl Phosphate	D002	222S
0.125 L	Dibutyl Phosphate	D002	222S
0.125 L	Dibutyl Phosphate	D002	222S
4000mL	Dibutyl Phosphate	D002	222S
200mL	Dibutyl-N,N-Diethylcarbamoyl Phosphate	None	222S
20 ml	DIELDRIN	P037	WSCF
1000g	Diethanolamine	WT02	222S
20 ml	DIETHYL FORMAMIDE	NONE	WSCF
20 ml	DIETHYLAMINE	D001 D002	WSCF
20ml	Diethylene Glycol	WT02	222S
1 Kg	Dihexyl Diethyl Methylene Carbomoyl Phosphonate - Columbia Organic	None	222S
20 ml	DIISOPROPANOLAMINE	WT02	WSCF
(19) 5 ml	Dilute E12 Uranium in 2M Nitric Acid , 23.843 g/L (2.4% Uranium, 12% Nitric Acid)	D002	222S
20 ml	DIMETHYL SULFATE	U103	WSCF
250g	Dimethylamine HCl	WT02 WP01	222S
0.75 gal	Di-n-butyl-N,N-diethylcarbamoyl methylene phosphonate - Wateree Chemical	None	222S
20 ml	DIOCTYLPHTHALATE	U107	WSCF
20 ml	DIOCTYLPHTHALATE	U107	WSCF
0.025 L	Disodium molybdate dihydrate solution	WT02	222S

TABLE 1: CHEMICAL WASTE INFORMATION

Container Size	Chemical / Product Name	Waste Codes	Facility
(27) 5 ml	Dissolved Pin Metal - Uranium , 0.19447 g U/g (20% Uranium, 12% Nitric Acid)	D002	222S
(25) 5 ml	Dissolved Pin Metal - Uranium , 0.22746 g U/g (23% Uranium, 12% Nitric Acid)	D002	222S
500g	DL-Analine	None	222S
100g	DL-Serine	None	222S
25 g	Docosane - Fluka	None	222S
25 g	Docosane - Fluka	None	222S
1L	Dodecane	None	222S
0.020 L	EDTA 0.8M	None	222S
0.1	EDTA 3.4% in water	None	222S
1 L	EDTA, Tetra Sodium	None	222S
60mL	Electrode Filling Solution ORION# 810007: Orange dye <0.1% Wetting agent <0.1% Potassium chloride 22.3% in water	WT02	222S
20 ml	EPN	D003	WSCF
11.3 K	EPO-TEX 301-2 Part A - Epoxy Technology, Inc.	None	222S
1 gal	EPO-TEX 301-2 Part B - Epoxy Technology, Inc.	WT02	222S
1 gal	EPO-TEX 301-2 Part B - Epoxy Technology, Inc.	WT02	222S
4 L	Ethyl Acetate	D001 U112	222S
4 L	Ethyl Acetate	D001 U112	222S
1000mL	Ethyl Acetate	D001 U112	222S
0.5 L	Ethyl Acohol	D001	222S
20 ml	ETHYL FORMATE	D001	WSCF
0.25 L	Ethylene Diamine	D001 D002	222S
4000mL	Ethylene Glycol	WT02	222S
0.1 L	Ethylene Glycol	WT02	222S
0.25L	Europium III Nitrate Hexahydrate 2.58%; Water 97.42%	None	222S
250 ML	Europium oxide 0.52%, HN03 2.3%, water 97.2%	D002	222S
0.05 L	Europium, 1000 ug/mL - High Purity	D002	222S
20 ml	FENCHLORPHOS (Ronnell)	WT02	WSCF
20 ml	FERBAM	WT02	WSCF

**TABLE 1:
CHEMICAL WASTE INFORMATION**

Container Size	Chemical / Product Name	Waste Codes	Facility
50g	Ferric Hydroxide 50% / Sodium Nitrate 50%	D001	222S
120ml	Ferrioin Indicator	None	222S
50g	Ferrous Sulfide	D003	222S
500g	Fluorescein Na2	None	222S
20 ml	FORMALDEHYDE	U122 D002	WSCF
0.02 L	Formaldehyde Solution	D001	222S
250m	Formamide	WT02	222S
0.125L	Formic Acid 3M	D002 U123	222S
0.125L	Formic Acid 3M	D002 U123	222S
500ML	Gea Cal Std in 2M Nitric :3.44E-02 uCi(Am241) 1.96E-01 uCi(Cd109) 7.45E-03 uCi(Co57) 9.36E-03 uCi(Ce139) 2.56E-02 uCi(Hg203) 3.59E-02 uCi(Sn113) 4.25E-02 uCi(Sr85) 3.04E-02 uCi(Cs137) 3.60E-02 uCi(Co60) 7.25E-02 uCi(Y88)	D002	222S
500ML	Gea Cal Std in 2M Nitric 3.89E-02 uCi(AM241) 2.20E-01 uCi(Cd109) 8.39e-03 uCi(Co57) 1.07e-02 uCi(Ce139) 3.00e-02 uCi(Hg203) 4.10e-02 uCi(Sn113) 4.96e-02 uCi(Sr85) 3.65e-02 uCi(Cs137) 4.15e-02 uCi(Co60) 8.39e-02 uCi(Y88)	D002	222S
500ML	GEA CAL STD in 2M Nitric: 4.40E-02 uCi(Am241) 2.51E-01 uCi(Cd109) 9.54E-03 uCi(Co57) 1.22E-02 uCi(Ce139) 3.26E-02 uCi(Hg203) 4.50E-02 uCi(Sn113) 5.49E-02 uCi (Sr85) 4.04E-02 uCi(Cs137) 4.69E-02 uCi(Co60) 9.25E-02 uCi(Y88)	D002	222S

**TABLE 1:
CHEMICAL WASTE INFORMATION**

Container Size	Chemical / Product Name	Waste Codes	Facility
500ML	Gea Cal Std in 2M Nitric: 2.92E-02 uCi(AM241) 1.67E-01 uCi(Cd109) 6.33E-03 uCi(CO57) 7.95E-03 uCi(CE139) 2.17E-02 uCi(HG203) 3.05E-02 uCi(SN113) 3.61E-02 uCi(SR85) 2.58E-02 uCi(CS137) 3.06E-02 uCi(CO60) 6.14E-02 uCi(Y88)	D002	222S
500ML	Gea Calc Std in 2M Nitric :3.55E-02 uCiAm(241) 2.02E-1 uCi(Cd109) 7.70E-3 uCi(Co57) 9.81E-03 uCi(Ce139) 2.63E-02 uCi(Hg203) 3.63E-02 uCi(Sn113) 4.42E-02 uCi(Sr85) 3.25E-02 uCi(Cs137) 3.78E-2 uCi(Co60) 7.46E-02 uCi(Y88)	D002	222S
22ML	Gea Calc Std in 2M Nitric: 3.21E-02 uCi(Am241) 1.83E-01 uCi(Cd109) 6.96E-03 uCi(Co57) 8.74E-03 uCi(Ce139) 2.39E-02 uCi(Hg203) 3.35E-02 uCi(Sn113) 3.97E-02 uCi(Sr85) 2.84E-02 uCi(Cs137) 3.36E-02 uCi(Co60) 6.77E-02 uCi(Y88)	D002	222S
22ML	Gea Calc Std in 2M Nitric: 2.84E-02 uCi(Am241) 1.62E-01 uCi(Cd109) 6.15E-03 uCi(Co57) 7.73E-03 uCi(Ce139) 2.11E-02 uCi(Hg203) 2.96E-02 uCi(Sn113) 3.51E-02 uCi(Sr85) 2.51E-02 uCi(Cs137) 2.97E-02 uCi(Co60) 5.99E-02 uCi(Y88)	D002	222S
22ML	Gea Calc Std in 2M Nitric: 5.85E-01 uCi(Am241) 5.631E-01 uCi(Co60) 6.969E-01 uCi(Cs137)	D002	222S

**TABLE 1:
CHEMICAL WASTE INFORMATION**

Container Size	Chemical / Product Name	Waste Codes	Facility
125ml Liq	Gea Check Std in 2M Nitric: 3.26E-02 uCi(Am241) 1.86E-01 uCi(Cd109) 7.06E-03 uCi(Co57) 8.87E-03 uCi(Ce139) 2.42E-02 uCi(Hg203) 3.40E-02 uCi(Sn113) 4.03E-02 uCi(Sr85) 2.88E-02 uCi(Cs137) 3.41E-02 uCi(Co60) 6.87E-02 uCi(Y88)	D002	222S
125ml Liq	Gea Check Std in 2M Nitric: 3.26E-02 uCi(Am241) 1.86E-01 uCi(Cd109) 7.07E-03 uCi(Co57) 9.01E-03 uCi(Ce139) 2.41E-02 uCi(Hg203) 3.34E-02 uCi(Sn113) 4.07E-02 uCi(Sr85) 2.99E-02 uCi(Cs137) 3.48E-02 uCi(Co60) 6.85E-02 uCi(Y88)	D002	222S
22ML	Gea Check Std in 2M Nitric: 3.63E-02 uCi(Am241) 2.06E-01 uCi(Cd109) 7.83E-03 uCi(Co57) 9.97E-03 uCi(Ce139) 2.80E-02 uCi(Hg203) 3.83E-02 uCi(Sn113) 4.63E-02 uCi(Sr85) 3.41E-02 uCi(Cs137) 3.87E-02 uCi(Co60) 7.83E-02 uCi(Y88)	D002	222S
125ml Liq	Gea Check Std in 2M Nitric: 3.42E-02 uCi(Am241) 1.84E-01 uCi(Cd109) 7.38E-03 uCi(Co57) 9.39E-03 uCi(Ce139) 2.64E-02 uCi(Hg203) 3.61E-02 uCi(Sn113) 4.36E-02 uCi(Sr85) 3.21E-02 uCi(Cs137) 3.65E-02 uCi(Co60) 7.38E-02 uCi(Y88)	D002	222S

TABLE 1: CHEMICAL WASTE INFORMATION

Container Size	Chemical / Product Name	Waste Codes	Facility
22ml Liq	Gea Check Std in 2M Nitric: 2.36E-02 uCi(Am241) 1.34E-01 uCi(Cd109) 5.12E-03 uCi(Co57) 6.53E-03 uCi(Ce139) 1.75E-02 uCi(Hg203) 2.42E-02 uCi(Sn113) 2.94E-02 uCi(Sr85) 2.17E-02 uCi(Cs137) 2.52E-02 uCi(Co60) 4.96E-02 uCi(Y88)	D002	222S
22ML	Gea Check Std in 2M Nitric: 3.33E-02 uCi(Am241) 1.89E-01 uCi(Cd109) 7.18E-03 uCi(Co57) 9.14E-03 uCi(Ce139) 2.57E-02 uCi(Hg203) 3.51E-02 uCi(Sn113) 4.24E-02 uCi(Sr85) 3.12E-02 uCi(Cs137) 3.56E-02 uCi(Co60) 7.18E-02 uCi(Y88)	D002	222S
22ml Liq	Gea Check Std in 2M Nitric: 3.40E-02 uCi(Am241) 1.93E-01 uCi(Cd109) 7.33E-03 uCi(Co57) 9.34E-03 uCi(Ce139) 2.63E-02 uCi(Hg203) 3.58E-02 uCi(Sn113) 4.33E-02 uCi(Sr85) 3.19E-02 uCi(Cs137) 3.63E-02 uCi(Co60) 7.33E-02 uCi(Y88)	D002	222S
22ml Liq	Gea Check Std in 2M Nitric: 2.82E-02 uCi(Am241) 1.80E-01 uCi(Cd109) 6.09E-03 uCi(Co57) 7.78E-03 uCi(Ce139) 2.18E-02 uCi(Hg203) 2.97E-02 uCi(Sn113) 3.60E-02 uCi(Sr85) 2.65E-02 uCi(Cs137) 3.01E-02 uCi(Co60) 6.08E-02 uCi(Y88)	D002	222S

TABLE 1: CHEMICAL WASTE INFORMATION

Container Size	Chemical / Product Name	Waste Codes	Facility
125ml Liq	Gea Check Std in 2M Nitric: 3.28E-02 uCi(Am241) 1.84E-01 uCi(Cd109) 7.01E-03 uCi(Co57) 6.83E-03 uCi(Ce139) 2.81E-02 uCi(Hg203) 3.43E-02 uCi(Sn113) 4.14E-02 uCi(Sr85) 3.05E-02 uCi(Cs137) 3.47E-02 uCi(Co60) 7.01E-02 uCi(Y88)	D002	222S
125ml Liq	Gea Check Std in 2M Nitric: 2.97E-02 uCi(Am241) 1.69E-01 uCi(Cd109) 6.44E-03 uCi(Co57) 8.21E-03 uCi(Ce139) 2.20E-02 uCi(Hg203) 3.04E-02 uCi(Sn113) 3.70E-02 uCi(Sr85) 2.72E-02 uCi(Cs137) 3.17E-02 uCi(Co60) 6.24E-02 uCi(Y88)	D002	222S
22ml Liq	Gea Check Std in 2M Nitric: 2.31E-02 uCi(Am241) 1.32E-01 uCi(Cd109) 5.01E-03 uCi(Co57) 6.38E-03 uCi(Ce139) 1.71E-02 uCi(Hg203) 2.36E-02 uCi(Sn113) 2.88E-02 uCi(Sr85) 2.12E-02 uCi(Cs137) 2.46E-02 uCi(Co60) 4.85E-02 uCi(Y88)	D002	222S
22ML	Gea Std in 2M Nitric: 1.1792 uCi(Am241) 1.1881 uCi(Co60) 1.0335 uCi(Cs137)	D002	222S
(2) 22ML	Gea Std in 2M Nitric: 1.5253e-01 uCi(Am241) 6.6905E-02 uCi(Co60) 4.8105E-02 uCi(Cs137)	D002	222S
0.005 L	Grasp Cyanoacrylate Glue	D003	222S
20 ml	GUTHION (Azinophos methyl)	WT01	WSCF
20 ml	GYMSEAL (PAINTING BULK)	D001	WSCF
20mL	HACH Titration Cartridge, 1.6N Sulfuric Acid	D002	222S
20mL	HACH Titration Cartridge, 0.16N Sulfuric Acid	D002	222S

**TABLE 1:
CHEMICAL WASTE INFORMATION**

Container Size	Chemical / Product Name	Waste Codes	Facility
10 g	Hafnium oxynitrate - Rocky Mountain Denver	D001 WSC2	222S
0.005	Heat Sink Compound	None	222S
0.005	Heat Sink Compound	None	222S
250mL	Hexadecane	None	222S
250mL	Hexadecane	None	222S
250mL	Hexadecane	None	222S
250mL	Hexadecane	None	222S
250mL	Hexadecane	None	222S
250mL	Hexadecane	None	222S
250mL	Hexadecane	None	222S
250mL	Hexadecane	None	222S
250mL	Hexadecane	None	222S
250mL	Hexadecane	None	222S
250mL	Hexadecane	None	222S
20 ml	HEXANE NITRILE	D001	WSCF
20 ml	HEXYLAMINE	D001 D002	WSCF
20mL	Hydrazine 5.5M in water	D002 U133	222S
500 ML	HYDROBROMIC ACID - ALFA	D002	234-5Z
500 ML	HYDROBROMIC ACID - ALFA	D002	234-5Z
500 ML	HYDROBROMIC ACID - ALFA	D002	234-5Z
0.250L	Hydrochloric Acid 3M	D002	222S
6 LBS	HYDROCHLORIC ACID, 38% - JT Baker	D002	234-5Z
6 LBS	HYDROCHLORIC ACID, 38% - JT Baker	D002	234-5Z
6 LBS	HYDROCHLORIC ACID, 38% - JT Baker	D002	234-5Z
6 LBS	HYDROCHLORIC ACID, 38% - JT Baker	D002	234-5Z
6 LBS	HYDROCHLORIC ACID, 38% - Mallinckrodt Baker	D002	234-5Z
473 ML	HYDROGEN PEROXIDE 30% - Spectrum Chemical MFG	D001 D002	234-5Z
100 ML	Hydrogen Sulfide Standard 600 g/mL (<0.5% Sodium Sulfide Nanohydrate in water)	D002 D003	222S
100 ML	Hydrogen Sulfide Standard 600 g/mL (<0.5% Sodium Sulfide Nanohydrate in water)	D002 D003	222S
500 ML	HYDROIODIC ACID - Fluka	D002	234-5Z
500 ML	HYDROIODIC ACID - Fluka	D002	234-5Z
22ML	I129: 5.15uCi/mL in 0.08M NAOH	D002	222S
22ml	I129: 8.4068uCi/mL in 0.8M NAOH	D002	222S
2ML	I129:0.00541uc/L in 0.5M NaOH	D002	222S

**TABLE 1:
CHEMICAL WASTE INFORMATION**

Container Size	Chemical / Product Name	Waste Codes	Facility
(4) 2ML	1129:26Mg/ml in Na Sulphite/H2O	D002	222S
(20) 7.4 ml	Index of Refraction Fluids, Cargille Series H-1 Cat# 18181 Arsenic Disulfide Arsenic (II) Bromide 1 Bromonaphthalene	D004	222S
(20) 7.4 ml	Index of Refraction Fluids, Cargille Series M-1 Cat# 18151 Methylene Iodide	WP01	222S
60mL	Inner Filling Solution ORION# 900002: Potassium nitrate 17.1% Silver chloride trace GLYCOLS, POLYETHYLENE, MONO(P-(1,1,3,3-TETRAMETHYL BUTYL) PHENYL) ETHER (TRITON X 100) trace NAPHTHOL GREEN B 0.5% Potassium chloride 5% Sodium chloride 0.4% in water	D011	222S
500g	Iodine	None	222S
113g	Iodine, resublimed	None	222S
0.25L	Iron III Nitrate Nanohydrate 2.99%; Water 97.01%	D002	222S
4 L	Isooctane	D001	222S
4 L	Isooctane	D001	222S
4000mL	Isooctane	D001	222S
4000mL	Isooctane	D001	222S
20 ml	ISOPHORONE	WT02	WSCF
4000mL	Isopropanol	D001	222S
4000mL	Isopropanol	D001	222S
4000mL	Isopropanol	D001	222S
4 L	Isopropyl Alcohol - Columbus Chemical	D001	222S
20 ml	ISOPROPYL ETHER	D001	WSCF
20 ml	ISOPROPYLAMINE	D001 D002	WSCF
1500 ml	JEOL ROTARY PUMP OIL/TEXACO CANOPUS OIL 68 - TEXACO	NON-REG.	234-5Z
1500 ml	JEOL ROTARY PUMP OIL/TEXACO CANOPUS OIL 68 - TEXACO	NON-REG.	234-5Z
1500 ml	JEOL ROTARY PUMP OIL/TEXACO CANOPUS OIL 68 - TEXACO	NON-REG.	234-5Z

**TABLE 1:
CHEMICAL WASTE INFORMATION**

Container Size	Chemical / Product Name	Waste Codes	Facility
1500 ml	JEOL ROTARY PUMP OIL/TEXACO CANOPUS OIL 68 - TEXACO	NON-REG.	234-5Z
(36) 5 ml	K6UO3 Blind Standards, 78% Uranyl Nitrate in 12% Nitric Acid with <0.0025% Iron, <0.001% Chromium, <0.0008% Nickel, and <0.0013% Sodium	D001 D002 D007	222S
(27) 5 ml	K6UO3 Blind Standards, 78% Uranyl Nitrate in 12% Nitric Acid with <0.0025% Iron, <0.001% Chromium, <0.0008% Nickel, and <0.0013% Sodium	D001 D002 D007	222S
125g	Koaline Powder (clay, Aluminum silicate) with 10% Nickel Nitrate	D001	222S
100g	L- Histidine	None	222S
0.25L	Lead II Nitrate 0.64%; Water 99.36%	D008	222S
25 ML	Lead Nitrate 17% in water	D001 D008	222S
0.050 L	Liquid 6 Cation II Standard .05 Calcium Choride .025 Ammonium Chloride .05 Potassium Chloride .005 Lithium Chloride 1.0 Hydrochloric Acid .02 Sodium Choride 100.0 Water .025 Magnesium Chloride Hexahydrate	WT02	222S
100 g	Lithium hydroxide monohydrate	WSC2	222S
100G	L-Valine	None	222S
20 ml	MALATHION	WT01	WSCF
20 ml	MALEIC ANHYDRIDE	U147	WSCF
1*X1* X2.5"	Man Ver2	WT02	222S
1*X1* X2.5"	Man Ver2	WT02	222S
50g	Manganese Dioxide	D001	222S
500mL	Manganese(II) NO3	D001	222S
20 ml	m-DINITROBENZENE	WT02	WSCF
500gm	Mercurous Nitrate	D001 D009	222S
500ml	Mercury	U151	222S

**TABLE 1:
CHEMICAL WASTE INFORMATION**

Container Size	Chemical / Product Name	Waste Codes	Facility
150ml	Mercury	U151	222S
0.5 L	Mercury 1030 ppm in HNO3 1%	D002 U151	222S
0.25L	Mercury II Nitrate Monohydrate 0.10%; Water 99.90%	D002 D009	222S
0.25L	Mercury II Nitrate Monohydrate 0.76%; Water 99.24%	D002 D009	222S
100g	Mercury Indicator; Silicon dioxide 50% Copper iodide 50% Sulfur 50% Starch 50%	None	222S
0.1 L	Mercury, 10 ug/mL - Spec HNO3 1.5%, remaining H2O	D002 U151	222S
20 ml	MESITYL OXIDE	D001	WSCF
20 ml	MESITYLENE	D001	WSCF
1000mL	Methanol	D001 U154	222S
25 GM	Methoxychlor (Lot #EV 02518DV) - Aldrich	U247	222S
20 ml	METHYL FORMATE	D001	WSCF
20 ml	METHYL PROPYL CARBINOL	D001	WSCF
20 ml	METHYLAL	D001	WSCF
20 ml	METHYLAMINE	D001 D002	WSCF
250GM	Methylamine HCl	WT02	222S
500mL	MIBK	D001 U161	222S
500 ML	Mixed Element Standard Potassium Chloride 0.04312% Sodium Chloride 0.03251% Calcium Chloride 0.02947% Cesium Chloride 0.01865% Copper Chloride 0.00093% Nitric Acid 0.00058% Indium <0.01% Bismuth <0.01% Lanthanum <0.01% Scandium Oxide <0.01% Magnesium Oxide <0.01% Water 0.87464%	D002	222S
20 ml	m-NITROTOLUENE	U105	WSCF
2500mL	Monophase S	D001	222S
2500mL	Monophase S	D001	222S
2500mL	Monophase S	D001	222S
2500mL	Monophase S	D001	222S
20 ml	MORPHOLINE	D001	WSCF

**TABLE 1:
CHEMICAL WASTE INFORMATION**

Container Size	Chemical / Product Name	Waste Codes	Facility
20 ml	m-TOLUIDINE	U220 D001	WSCF
0.5 L	Multi Element Plasma Std - Spex	D002	222S
0.5 L	Multi Element Plasma Std - Spex	D002	222S
0.1 L	Multi Element Sol CLMS-2A - Spec	D002 D011 D004 D006 D007 D010 D008	222S
0.1 L	Multi Element Std 1 - Spex	D002	222S
125 ML	Myristri trimethylammonium bromide 0.55% in water	None	222S
20 ml	n,n-DIMETHYLACETIMIDE	WT02	WSCF
20 ml	n,n-DIMETHYLANILINE	D001 D002	WSCF
20 ml	n,n-DIMETHYLANILINE	D001 D002	WSCF
20 ml	n,n-DIMETHYLFORMAMIDE	NONE	WSCF
20 ml	n,n-DIMETHYLFORMAMIDE	NONE	WSCF
20 mL	Na7F(PO4)2 11% Sodium Fluoride 89% Sodium Phosphate	WT02	222S
20 ml	n-AMINOETHYL PIPERAZINE	D002	WSCF
20 ml	n-AMYL ACETATE	D001	WSCF
0.075 L	Natural Uranium, 100 ug/mL in 0.5 M Nitric Acid (3.1% Nitric Acid)	D002	222S
0.020	NBS SRM 1475 (linear-polyethylene)	None	222S
20 ml	n-BUTYL MERCAPTAN	D001	WSCF
20 ml	n-BUTYL NITRATE	D001	WSCF
20 ml	n-BUTYLAMINE	D001 D002	WSCF
20 ml	n-BUTYRALDEHYDE	D001	WSCF
0.1 L	n-Decane	D001	222S
0.002 L	n-Decane, n-Undecane, n-Dodecane, n-Tridecane, 2-Octanone, 1-Octanol, 2,6-Dimethylaniline, 2,6-Dimethylphenol, (all 500ug/ml in Methylene chloride	WT02 WP01	222S

**TABLE 1:
CHEMICAL WASTE INFORMATION**

Container Size	Chemical / Product Name	Waste Codes	Facility
20 ml	n-ETHYLMORPHOLINE	D001	WSCF
0.25L	Nickel Nitrate Hexahydrate 2.33%; Water 97.67%	None	222S
20 ml	NICOTINE	P075	WSCF
0.125L	Nitric Acid 1.6M	D002	222S
8 LBS	NITRIC ACID 70% - JT Baker	D002	234-5Z
20 ml	NITROBENZENE	U169	WSCF
20 ml	NITROETHANE	D001	WSCF
3000ML	Nitroethane: 98+%	D001	222S
20 ml	NITROMETHANE	D001 D003	WSCF
20 ml	N-METHYLANILINE	WT02	WSCF
20 ml	n-METHYLANILINE	WT02	WSCF
0.25 L	n-Nonane	D001	222S
20 ml	n-OCTYL NITRILE	NONE DOT COMBST.	WSCF
20 ml	n-OCTYL NITRILE	NONE DOT COMBST.	WSCF
20 ml	n-OCTYL NITRILE	NONE DOT COMBST.	WSCF
10 g	Nonadecane - Fluka	None	222S
100 ml	NPH	D001	222S
4 L	N-Propyl Alcohol	D001	222S
4 L	N-Propyl alcohol	D001	222S
4 L	N-Propyl alcohol	D001	222S
0.5 L	n-Undecane	None	222S
20 ml	o-ANISIDINE	WT02	WSCF
10 g	Octacosane - Fluka	None	222S
25 g	Octadecane - Fluka	None	222S
20 ml	OCTAFLUOROTOLUENE	D001	WSCF
20 ml	OCTYL ALCOHOL	WT02	WSCF
0.1 L	Oenanthic acid - Fluka	D002	222S
20 ml	o-ETHYL SILICATE	D001	WSCF
20 ml	o-NITROTOLUENE	U105	WSCF
100 g	o-Sulfobenzoic acid monoammonium salt - Kodac	None	222S
100 g	o-Sulfobenzoic acid monoammonium salt - Eastman	None	222S
20 ml	o-TOLUIDINE	U328	WSCF
20 ml	o-TOLUIDINE	U328	WSCF
1L	Oxalic Acid Development Soln: 50.5g Oxalic acid in 1L trace ammonium hydroxide trace nitric acid	D002	222S

**TABLE 1:
CHEMICAL WASTE INFORMATION**

Container Size	Chemical / Product Name	Waste Codes	Facility
0.1 L	O-Xylene	D001 U239	222S
20 ml	p-ANISIDINE	WT02	WSCF
20 ml	PARAQUAT CL	WT02 WP01	WSCF
20 ml	PARATHION	P089	WSCF
1 g	Pentacosane - Fluka	None	222S
5 ML	Pentadecane (Lot #289641/1 1) - Fluka	None	222S
1 L	Pentane	D001	222S
1 L	Pentane	D001	222S
20 ml	PERCHLOROMETHYL MERCAPTAN	P118	WSCF
2500mL	Permafluor - 10%Methanol 90%Toluene	D001	222S
1 L	Petroleum Ether	D001	222S
20 ml	PETROLEUM ETHER	D001	WSCF
20 ml	PHENANTHRENE	WP03	WSCF
0.015 L	Phenol 374 ppm in water	U188	222S
28 GM	PHENOL RED, SODIUM SALT - JT Baker	NON-REG.	234-5Z
approx. (50) 1ml pillows	Phenolphthalein Indicator pillows: HACH 942 Sodium Chloride 95% Phenolphthalein <2% Other <1%	WT02	222S
20 ml	PHENYL ETHER	WT02	WSCF
20 ml	PHENYLHYDRAZINE	D003	WSCF
20 ml	PHOSDRIN (Mevinphos, mix of isomers)	WT01	WSCF
20 ml	PHOSPHORIC ACID	D002	WSCF
8 LBS	PHOSPHORIC ACID - Ashland Chemical	D002	234-5Z
8 LBS	PHOSPHORIC ACID - EM Science	D002	234-5Z
20 ml	PHOSPHORUS PENTASULFIDE	U189 D001 D003	WSCF
20 ml	p-NITROANILINE	WT02	WSCF
20 ml	p-NITROTOLUENE	U106	WSCF
0.005 L	Polyethylene powder	None	222S
150 ml	Polymate 980 Benzotriazole, methyl Na salt 2-Phosphonobutane - 1,2,4,-tricarboxylic acid Phosphoric acid, tripotassium salt	D002	222S

**TABLE 1:
CHEMICAL WASTE INFORMATION**

Container Size	Chemical / Product Name	Waste Codes	Facility
500 g	Potassium antimonate (Product 10193) - BDH Chemicals, LTD, Poole, England	None	222S
500 g	Potassium antimonate (Product 10193) - BDH Chemicals, LTD, Poole, England	None	222S
250g	Potassium Bromide	WT02	222S
0.020 L	Potassium Bromide liquid	WT02	222S
10g	Potassium Chloroplatinate	None	222S
50 gm	Potassium Dichromate	D001 D007	222S
20GM	Potassium Ferricyanide	D003	222S
500 GM	Potassium ferricyanide (Lot #6912KJVB) - Mallinckrodt	D003	222S
15g	Potassium Ferrocyanide	D003	222S
500 ML	Potassium Hydrogen Phthalate 0.8% in water	None	222S
50 ML	Potassium Hydrogen Phthalate 2.2% in Phosphoric Acid 0.2%	None	222S
0.020 L	Potassium Hydrogen Phthlate Solution	None	222S
0.1 L	Potassium Hydroxide 8N	D002	222S
1 L	Potassium Permanganate	D001	222S
1 L	Potassium Permanganate Saturated 7% Potassium Permanganate 93% Water	None	222S
500 g	Potassium Thiocyanate - JT Baker	WT02	222S
500 g	Potassium Thiocyanate - JT Baker	WT02	222S
500 g	Potassium Thiocyanate - JT Baker	WT02	222S
500 g	Potassium Thiocyanate - JT Baker	WT02	222S
500 g	Potassium Thiocyanate - JT Baker	WT02	222S
500 g	Potassium Thiocyanate - JT Baker	WT02	222S
500 g	Potassium Thiocyanate - JT Baker	WT02	222S
500 g	Potassium Thiocyanate - JT Baker	WT02	222S
20 ml	p-QUINONE	U197	WSCF
25 ML	Propylene glycol (Lot #122-67a) - Chem Service	None	222S
20 ml	p-TOLUIDINE	U353	WSCF
500mL	p-Xylene	D001 U239	222S

**TABLE 1:
CHEMICAL WASTE INFORMATION**

Container Size	Chemical / Product Name	Waste Codes	Facility
500mL	p-Xylene	D001 U239	222S
25 GM	Pyrene (Lot #05230DX) - Aldrich	WT02 WP03	222S
20 ml	PYRETHRUM (py1 & py2)	WT02	WSCF
60mL	Reference Electrode Filling Solution ORION# 900001: Potassium nitrate 17% Silver chloride <0.01% Triton X-100 <0.01% Potassium chloride 5% Sodium chloride <1%	WT02	222S
60mL	Reference Electrode Outer Fill Solution ORION# 900003: Potassium nitrate 10% Triton X-100 trace in water	WT02	222S
10g	Rhenium powder	D001	222S
20 ml	ROTENONE	WT02	WSCF
20 ml	s-DEMETON	WT01	WSCF
0.1 L	Selenium 1000 ppm in HNO3 1%	D002 D010	222S
100g	Semicarbazide hydrochloride	WT02	222S
20 ml	SESONE (Crag Herbicide)	WP03 WT02	WSCF
500g	Silica gel	None	222S
500g	Silica gel	None	222S
100 GM	Silicon (IV) oxide (Lot #B12D05) - Johnson Matthey Chemical	None	222S
0.020 L	Silver Nitrate	D001 D011	222S
250 ML	Silver Nitrate 0.66% in water	D011	222S
20mL	Silver/Silver Chloride Filling Soln ORION#900011; Silver Chloride 1% Potassium Chloride 29.8% in water	D011	222S
2500GM	Soda Lime: 80% Calcium Hydroxide 3% Potassium Hydroxide 2% Sodium Hydroxide 1% Ethyl Violet	WT02 WSC2	222S
250g	Sodium Aluminate	WSC2	222S
250 ML	Sodium Arsenate Dibasic Heptahydrate 0.27% in water	D004	222S
0.025 L	Sodium bisulfate 0.36 M	D002	222S
50 g	Sodium Borate, 10-Hydrate (solid)	WT02	222S

**TABLE 1:
CHEMICAL WASTE INFORMATION**

Container Size	Chemical / Product Name	Waste Codes	Facility
0.020 L	Sodium Carbonate 0.5% in Sodium Chloride (0.597 mg C/g)	WT02	222S
0.020	Sodium Carbonate in Sodium Nitrate (Sodium Carbonate; Sodium Nitrate; Sodium Nitrite)	D001	222S
0.25L	Sodium Dichromate Dihydrate 0.17%; Water 99.83%	D007	222S
0.25L	Sodium Dichromate Dihydrate 1.03%; Water 98.97%	D007	222S
15GM	Sodium Ferricyanide	D003	222S
50G	Sodium Fluoride	WT02	222S
20 ml	SODIUM FLUOROACETATE	P058	WSCF
0.01 L	Sodium Formate	None	222S
0.125 L	Sodium hydrosulfide Na ₂ S ₂ O ₄ (ALFA #307672)	D001 D003	222S
0.1 L	Sodium Hydroxide 0.200 M	D002	222S
0.125L	Sodium nitrate 2M Potassium Permanganate 0.2M	D001	222S
0.020 L	Sodium Nitrate 93.7% Sodium Nitrite 6.2% Sucrose 0.14%	D001	222S
0.025.L	Sodium Oxalate	None	222S
250GM	Sodium Peroxide	D001 D003	222S
250GM	Sodium Peroxide	D001 D003	222S
0.005 L	Sodium Sulfate	None	222S
5 gm	Sodium sulfate anhydrous	None	222S
500GM	Sodium Sulfide,9-hydrate	D001 D003 WSC2	222S
500GM	Sodium Sulfide:9-hydrate	D001 D003 WSC2	222S
5000GM	Sodium Sulfite	WT02	222S
1 L	Sodium titanate pellets - Norton 6/4/80 #1	None	222S
0.250 L	Spectrum Chemical Potassium Dichromate	D001 D007	222S
0.015.L	Stilbene 420 (Excitor)	WT02	222S
0.25L	Strontium Nitrate 1.12%; Water 98.88%	None	222S
20 ml	STRYCHNINE	P108	WSCF
0.02 L	Succinic Acid	WT02	222S
0.020 L	Sucrose 0.14% in NaCl (0.6 mg C/g)	WT02	222S

**TABLE 1:
CHEMICAL WASTE INFORMATION**

Container Size	Chemical / Product Name	Waste Codes	Facility
0.1 L	Sulfuric Acid 0.75 M (7% Sulfuric acid in water)	D002	222S
0.025 L	Sulfuric Acid 9 M (60% Sulfuric Acid in water)	D002	222S
9 LBS	SULFURIC ACID 98% - Mallinckrodt Baker	D002	234-5Z
9 LBS	SULFURIC ACID 98% - Mallinckrodt Baker	D002	234-5Z
9 LBS	SULFURIC ACID 98% - Mallinckrodt Baker	D002	234-5Z
9 LBS	SULFURIC ACID 98% - Mallinckrodt Baker	D002	234-5Z
9 LBS	SULFURIC ACID 98% - Mallinckrodt Baker	D002	234-5Z
100 ML	Surasil Siliconizing agent 10% v/v = Dichlorooctamethyltetra siloxane in Xylene	D001 D002 D003	222S
1ML	T-9 VIAL CAL STD in 2M Nitric 2.92E-02 uCi(Am241) 1.84E-01 uCi(Cd109) 7.00E-03 uCi(Co57) 9.49E-03 uCi(Ce139) 2.45E-02 uCi(Hg203) 3.40E-02 uCi(Sn113) 4.10E-02 uCi(Sr85) 2.99E-02 uCi(Cs137) 3.46E-02 uCi(Co60) 6.86E-02 uCi(Y88)	D002	222S
1ML	T9-VIAL CAL STD in 2M Nitric: 2.05E-02 uCi(Am241) 1.29E-01 uCi(Cd109) 4.90E-03 uCi(Co57) 6.65E-03 uCi(Ce139) 1.71E-02 uCi(Hg203) 2.38E-02 uCi(Sn113) 2.87E-02 uCi(Sr85) 2.09E-02 uCi(Cs137) 2.42E-02 uCi(Co60) 4.80E-02 uCi(Y88)	D002	222S
0.025 L	Tantalum, 1000 ug/mL High Purity	D002	222S
1ML	Tc99: 3.34E-02uCi/mL in 2M Nitric	D002	222S
20 ml	TERPENTINE	D001	WSCF
10 g	Tetracosane - Fluka	None	222S
0.25 L	Tetradecane	None	222S
20ML	Tetraethylene Glycol	None	222S

**TABLE 1:
CHEMICAL WASTE INFORMATION**

Container Size	Chemical / Product Name	Waste Codes	Facility
10g	Tetraethylenepentamine Pentahydrochloride	None	222S
20 ml	TETRAETHYLPYROPHOSPHATE (TEPP)	P111	WSCF
20 ml	TETRAMETHYLTHIURAM DISULFIDE (Thiram)	U244 D003	WSCF
20 ml	TETRANITROMETHANE	P112 D003	WSCF
250 ML	Thymol Blue 0.04% in sodium hydroxide solution <0.001%	None	222S
0.025 L	Thymol Blue 0.04% in sodium hydroxide solution >0.001%	None	222S
5g	Tin (IV) Sulfide	D003	222S
0.025 L	Tin, 1004 ug/mL - MV Lab	D002	222S
100g	Tiron	None	222S
0.020 L	Titra Ver EDTA 0.08M	None	222S
0.5 L	Toluene	D001 U220	222S
0.125 L	Tributly Phosphate	WT02	222S
0.06 L	Tributyl Phosphate (TBP) 0.3M Di-2-2ethyl hexyl phosphoric acid 0.5M Normal Parafin hydrocarbons (NPH)	D001	222S
0.1 L	Tributylphosphate in Methanol	D001	222S
0.25 L	Tributylphosphate in Normal Pariffin Hydrocarbons	D001	222S
0.25 L	Tributylphosphate in Normal Pariffin Hydrocarbons	D001	222S
0.25.L	Tributylphosphate in Normal Pariffin Hydrocarbons	D001	222S
0.25.L	Tributylphosphate in Normal Pariffin Hydrocarbons	D001	222S
0.120 L	Trichloroethene	U228	222S
250 mL	Trichloroethylene Acetonitrile Contains maximum of 68% TCE in Acetonitrile matrix	D001 U228	222S
250 mL	Trichloroethylene Acetonitrile Contains maximum of 68% TCE in Acetonitrile matrix	D001 U228	222S
250 mL	Trichloroethylene Acetonitrile Contains maximum of 68% TCE in Acetonitrile matrix	D001 U228	222S
250 mL	Trichloroethylene Acetonitrile Contains maximum of 68% TCE in Acetonitrile matrix	D001 U228	222S

**TABLE 1:
CHEMICAL WASTE INFORMATION**

Container Size	Chemical / Product Name	Waste Codes	Facility
250 mL	Trichloroethylene Acetonitrile Contains maximum of 68% TCE in Acetonitrile matrix	D001 U228	222S
250 mL	Trichloroethylene Acetonitrile Contains maximum of 68% TCE in Acetonitrile matrix	D001 U228	222S
250 mL	Trichloroethylene Acetonitrile Contains maximum of 68% TCE in Acetonitrile matrix	D001 U228	222S
250 mL	Trichloroethylene Acetonitrile Contains maximum of 68% TCE in Acetonitrile matrix	D001 U228	222S
250 mL	Trichloroethylene Acetonitrile Contains maximum of 68% TCE in Acetonitrile matrix	D001 U228	222S
5 g	Tricosane - Fluka	None	222S
500ml	Triethanolamine	WT02	222S
0.5 L	Triethanolamine - J. T. Baker	WT02	222S
0.5 L	Triethanolamine - J. T. Baker	WT02	222S
0.5 L	Triethanolamine - J. T. Baker	WT02	222S
0.5 L	Triethanolamine - J. T. Baker	WT02	222S
0.5 L	Triethanolamine - J. T. Baker	WT02	222S
0.5 L	Triethanolamine - J. T. Baker	WT02	222S
0.5 L	Triethanolamine - J. T. Baker	WT02	222S
50 ml	Triethanolamine 1.5% in H2O 98.5%	None	222S
250 g	Triethylene glycol monoethyl ether - Fluka	None	222S
0.25 L	Triethylene glycol monoethyl ether - Fluka	WT02	222S
20ML	Triethylene Gylcol	None	222S
250GM	Trimethylamine hydrochloride	D003	222S
20 ml	Tri-o-cresyl phosphate	WT02	WSCF
0.25 L	Trioctylphosphine Oxide,cyclohexane	D001	222S
20 ml	TRIPHENYLPHOSPHATE	WT02	WSCF
100 ML	Tris(Hydroxymethyl)- aminomethane 2.42% in water	None	222S
500GM	Tris(OH-CH3)Aminomethane	None	222S
0.1 L	Triton X-100 (Octyl Phenoxy Polyethoxyethanol)	WT02	222S
0.05 L	Tungsten, 1000 ug/mL - High Purity	D002	222S

**TABLE 1:
CHEMICAL WASTE INFORMATION**

Container Size	Chemical / Product Name	Waste Codes	Facility
130 G	Uranium acetate < 0.01% in Silicon Dioxide	None	222S
133 G	Uranium acetate < 0.01% in Silicon Dioxide	None	222S
133 G	Uranium acetate < 0.01% in Silicon Dioxide	None	222S
131 G	Uranium acetate < 0.01% in Silicon Dioxide	None	222S
137 G	Uranium acetate < 0.01% in Silicon Dioxide	None	222S
134 G	Uranium acetate < 0.01% in Silicon Dioxide	None	222S
132 G	Uranium acetate < 0.01% in Silicon Dioxide	None	222S
133 G	Uranium acetate < 0.01% in Silicon Dioxide	None	222S
135 G	Uranium acetate < 0.01% in Silicon Dioxide	None	222S
132 G	Uranium acetate < 0.01% in Silicon Dioxide	None	222S
130 G	Uranium acetate < 0.01% in Silicon Dioxide	None	222S
130 G	Uranium acetate < 0.01% in Silicon Dioxide	None	222S
134 G	Uranium acetate < 0.01% in Silicon Dioxide	None	222S
137 G	Uranium acetate 0.02% in Silicon Dioxide	None	222S
134 G	Uranium acetate 0.02% in Silicon Dioxide	None	222S
131 G	Uranium acetate 0.09% in Silicon Dioxide	None	222S
132 G	Uranium acetate 0.09% in Silicon Dioxide	None	222S
136 G	Uranium acetate 0.18% in Silicon Dioxide	None	222S
115 G	Uranium trioxide 0.01% in Sodium Nitrate	D001	222S
118 G	Uranium trioxide < 0.01% in Sodium Nitrate	D001	222S
115 G	Uranium trioxide < 0.01% in Sodium Nitrate	D001	222S
110 G	Uranium trioxide < 0.01% in Sodium Nitrate	D001	222S
119 G	Uranium trioxide < 0.01% in Sodium Nitrate	D001	222S
120 G	Uranium trioxide < 0.01% in Sodium Nitrate	D001	222S

**TABLE 1:
CHEMICAL WASTE INFORMATION**

Container Size	Chemical / Product Name	Waste Codes	Facility
118 G	Uranium trioxide < 0.01% in Sodium Nitrate	D001	222S
123 G	Uranium trioxide < 0.01% in Sodium Nitrate	D001	222S
116 G	Uranium trioxide < 0.01% in Sodium Nitrate	D001	222S
122 G	Uranium trioxide < 0.01% in Sodium Nitrate	D001	222S
167 G	Uranium trioxide < 0.01% in Sodium Nitrate	D001	222S
166 G	Uranium trioxide < 0.01% in Sodium Nitrate	D001	222S
156 G	Uranium trioxide < 0.01% in Sodium Nitrate	D001	222S
180 G	Uranium trioxide < 0.01% in Sodium Nitrate	D001	222S
172 G	Uranium trioxide < 0.01% in Sodium Nitrate	D001	222S
176 G	Uranium trioxide < 0.01% in Sodium Nitrate	D001	222S
120 G	Uranium trioxide 0.06% in Sodium Nitrate	D001	222S
115 G	Uranium trioxide 0.12% in Sodium Nitrate	D001	222S
0.475 L	Uranium, 1000 ug/mL - Plasma Chem	D002	222S
0.1 L	Uranium, 1000 ug/mL - Plasma Chem	D002	222S
0.02 L	Urea	None	222S
25 ml	Vanadyl Sulfate	WT02	222S
25 ml	Vanadyl Sulfate	WT02	222S
2 L	Vitrokele Product #55 (DH: RE-PL884-1) DeVoe-Holbein	Manufacturer no longer in business. Locating MSDS information via historical search.	222S
20 ml	WARFARIN	P001	WSCF
10g	Ytterbium Oxide	None	222S
0.075 L	Yttrium, 1000 ug/mL - MV Lab	D002	222S
1 L	Zapon thinner Spec Grade Tolulene	D001 U220	222S
100GM	Zinc powder	D001 D003	222S
0.125 L	Zinc powder	D001 D003	222S
100g	Zinc sulfide	D003	222S