METHODIST UNIVERSITY

OFFICE OF ENVIRONMENTAL SAFETY AND HEALTH

Hazardous Waste Plan (HWP)

METHODIST UNIVERSITY
Environmental Health and Safety Office

Hazardous Waste Plan (HWP)

40 CFR 262 – Generators of Hazardous Waste

Revision 8

May 2018

Estimated time to review: 60 – 90 minutes

Review of this document needs to be completed prior to working with or handling any hazardous waste on campus.

DOCUMENT REVIEW LOG

May 7, 2018……Annual Update by Dempster

August 20, 2016…… Annual Update by Blackley

May 13, 2015…… Annual Update by Blackley

July 16, 2014…… Annual Update by Blackley

September 13, 2013…… Annual Update by Blackley

January 16, 2012…… Annual Update by Blackley

January 31, 2012…… Annual Update by Blackley

January 31, 2011…… Annual Update by Raineri-Padilla

January 11, 2010……Annual Update by Raineri-Padilla

January 14, 2009……Original Document Created

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1.0 General Information

This document complies with 40 CFR 262, Generators of Hazardous Waste, and with 42 U.S.C. s/s 6901 et seq. (1976) the Resource Conservation and Recovery Act (RCRA).

2.0 Location and Description of the University

Methodist University
5400 Ramsey Street
Fayetteville, NC 28311

General information telephone number: 910-630-7000

The main campus of Methodist University (MU) is 617 acres. The university is bounded by the Cape Fear River on the east, and by US 401 (Ramsey Street) on the west. The university has one commercial property on campus, The Methodist Development Corporation, which is currently leased to BB&T (Branch Banking and Trust).

3.0 Policy Statement

The purpose of the Hazardous Waste Policy at Methodist University is to ensure that the university is in compliance with all federal and state and local regulations governing the handling and disposal of hazardous waste. Furthermore it is the policy of MU to protect, employees, students, the general public and the environment from any exposure to hazardous waste.

The MU Hazardous Waste Policy covers all generators and handlers of hazardous waste on any campus property. No member of the MU community (faculty, staff or student) will be allowed to handle any hazardous waste until they have successfully completed the MU Hazardous Waste Handling Class.

4.0 MU EPA Hazardous Waste Generator Status

Methodist University (MU) is a classified by the Environmental Protection Agency (EPA) as a Small Quantity Generator (SQG) of hazardous waste, as defined in 40 CFR 262.5. As an SQG MU may generate up to 1000 kg of hazardous waste per calendar month and up to a total of 1 kg or less of acutely hazardous waste per calendar month. MU uses a Transport Storage and Disposal (TSD) that has an EPA Identification number and that is bonded. As an SQG, MU must have a hazardous waste disposal by a licensed TSD, within a maximum of 180 days of waste being stored in the Hazardous Waste Accumulation room. All hazardous waste disposals are overseen by the University's Director of Environmental Health and Safety. All hazardous wastes being entered into the Hazardous Waste Accumulation room must be added to the Hazardous Waste Accumulation room inventory and must be dated with the date of entry to the room, to ensure compliance with the 180 day disposal rule. All hazardous waste disposal manifests are mai ntained by the university's Director of Environmental Health and Safety.

5.0 Responsible Parties with Title Designations

Title	Name	Phone Number
President of the University	Dr. Ben E. Hancock	910-630-7005
Chief of Police and Security	Chief, Mark Brewington	910-630-7149
Campus Safety Officer	Lt. Janet Bird	910-630-7149
Director of Environmental Health & Safety	Matthew Dempster	910-630-7558

Evening Emergency	Security Office	910-630-7577

6.0 Definition of Hazardous Waste

Universal wastes (U wastes) are defined in 40 CFR 261. Universal Wastes are limited to 4 categories of waste. Unfortunately these wastes are widely found in households and often end up in municipal waste sites. Because of this the Environmental Protection Agency (EPA) has promulgated specific standards to reduce the amount of these wastes entering sanitary landfills.

This policy specifically covers the following:

- Any liquid, semi-solid, solid or gaseous substance defined as hazardous waste.
- Waste which consists of or contains a hazardous material.
- A waste mixture formed by mixing any waste or substance with a hazardous waste.
- A hazardous sludge, residue, concentrate, or ash originating from a hazardous waste.
- Hazardous material disposed of to land, accidentally discharged onto land or accidentally spilled onto land.

7.0 Handling of Hazardous Waste

All hazardous waste will be handled at the point of generation according to proper hazardous waste handling policies as explained in the "Hazardous Waste Handling Standard Operating Procedures" Appendix B of this document.

General waste handling hygiene protocols include:

- Always wear appropriate chemical resistant gloves when handling hazardous waste.
- Always wear ANSI approved chemical resistant goggles when handling hazardous waste.
- Pour hazardous waste into waste storage container using funnel.
- Hazardous waste storage container must be labeled "CAUTION HAZARDOUS WASTE"
- Hazardous waste storage container must have list of hazardous wastes and approximate volumes attached to the bottle.
- Hazardous waste storage containers must be kept in chemical resistant secondary containment.

- Hazardous waste storage containers should only be moved from point of accumulation to storage facility by authorized personnel.

Hazardous waste containers must be kept on impervious surfaces and kept away from all drains.

8.0 Labeling of Hazardous Waste

All hazardous waste containers will be clearly labeled with the Methodist University Hazardous Waste Label. Containers will also be labeled as to what chemicals they contain and approximate volumes. The label will be clearly legible and firmly affixed to the containers. The label must be in English.

9.0 Hazardous Waste Container Requirements

A container is any portable device, in which a material is stored, transported, treated, disposed of or otherwise handled (40 CFR 260.10)

Hazardous wastes must only be placed in containers that are compatible with that Hazardous Waste (40 CFR 265.172). All Hazardous Waste containers must be clearly labeled "Hazardous Waste". All Hazardous Waste containers must be maintained in good condition, clean and intact (40 CFR 265.171). All Hazardous Waste Containers must be kept closed at all times unless filling or emptying the container (40 CFR 265.173).

Containers holding Hazardous Waste must be in good condition, no cracks, no leaks, no rust and must be compatible with the waste. All containers holding Hazardous Waste must be placed in secondary containment must be provided that will prevent the waste from spilling or getting into any sanitary sewer system.

9.1 Secondary Containment and Containers

All secondary containers must comply to all of the following standards:

- The base of the secondary container must be free of cracks or gaps and must be sufficiently impervious to contain leaks, spills, and accumulated precipitation (40 CFR 264.175(b)(1)).
- The base must be sloped or the system must be designed so that liquids resulting from releases can drain and be removed. This is not necessary, however, if the container is elevated (e.g., on pallets) or otherwise protected from contacting accumulated liquids (40 CFR 264.175(b) (2)).

- The secondary containment system must have the capacity to contain at least 10 percent of the volume of the containers or 100 percent of the volume of the largest container, whichever is greater. If containers hold no free liquids, they do not have to be considered in this calculation (40 CFR 264.175(b)(3))
- Storm water run-off must be prevented from entering the system unless the collection system has sufficient capacity to contain any run- on entering the system in addition to the capacity requirements (40 CFR 264.175(b)(4)).
- Any waste that has spilled or leaked into the secondary containment area or any accumulated precipitation must be removed in as timely a manner as is necessary to prevent overflow (40 CFR 264.175(b)(5)).
- CHEMISTRY LABORATORY WASTE must be placed in the specific secondary containment bin color coded for the characteristics of the particular waste as follows:
    - CLEAR – Inorganic Wastes
    - PURPLE – Organic Wastes
    - BLUE – Strong Acid Waste

9.2 Cleaning and Disposal of Chemical Bottles

All empty chemical bottles will be disposed according to proper procedures as outlined in "Disposal of Chemical Bottles: SOP" Appendix C of this document.

If the bottle contained a hazardous chemical the bottle must be triple rinsed with clean tap water and the rinse water collected as waste. The bottle may then be disposed of or reused for hazardous waste storage. All triple rinsed bottles should have all original labels removed and should be labeled "triple rinsed".

After the bottles have been triple rinsed they may be used for hazardous waste disposal as long as all appropriate regulations are followed.

10.0 Incompatible Wastes, Reactive Wastes and Ignitable Wastes

Special considerations must be taken into account when dealing with Incompatible, Reactive or Ignitable Wastes. All ignitable or reactive wastes must be separated from all sources of ignition (40 CFR 265.17).

"No Smoking" signs must be conspicuously placed in the area where ignitable or reactive wastes or chemicals are being used (40 CFR 265.17(a)).

No one should smoke inside any Methodist University academic building as this is against university policy.

Ignitable Hazardous waste must be stored in the American National Standards Institute (ANSI) approved, vented Flammable storage cabinet in the Hazardous Waste Accumulation Area.

Incompatible wastes must never be stored in unwashed containers (40 CFR 265.177(b). Incompatible wastes must never be stored in Hazardous Waste containers that contain chemicals with which that waste is incompatible with (40 CFR 265.177(a)).

Incompatible, Reactive and Ignitable wastes must always be stored in a safe manner until ultimate disposal by a TSD.

If the mixing or commingling of wastes is done it must be done in a manner that does NOT do any of the following:

- Generate extreme heat or pressure, fire or explosion, or violent reaction (40 CFR 265.17(b) (1)).
- Produce uncontrolled toxic mists, fumes, dusts or gasses in sufficient quantities to threaten human health (40 CFR 265.17(b) (2)).
- Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosion (40 CFR 265.17 (b)(3)).
- Damage the structural integrity or the device or facility containing the waste (40 CFR 265.17(b)(4)).
- Through other like means threaten human health or the environment (40CFR 265.17 (b)(5)).

11.0 Hazardous Waste Universal Mixture Rule

Hazardous Waste must not be mixed with non-hazardous waste. If non-hazardous waste is mixed with Hazardous Waste the entire volume must then be treated as a hazardous waste (40 CFR 261.5(h)). The exception to this rule is the complete neutralization of highly corrosive chemicals. When chemicals with a pH at or below 2.5 or at or above 12.5 are neutralized to pH where they no longer constitute as Hazardous waste based on the characteristics of Corrosivity, they may be disposed of in the normal waste stream. If however the corrosive chemicals are completely neutralized as to pH but still contain any other property of a Hazardous Chemical, it must still be managed as Hazardous Waste.

Do not mix Hazardous Wastes with Solid Wastes or the entire amount is subject to regulation as a Hazardous Waste (40 CFR 261.5(i)).

Do not mix Hazardous Waste with used oil. If Hazardous Waste is mixed with used oil the entire volume is subject to regulation as Hazardous Waste (40 CFR 261.5(j)).

12.0 Hazardous Waste Accumulation & Satellite Accumulation Areas

The primary hazardous waste accumulation area is located in the Main Accumulation Room inside the Hendricks Science building – Original Section (next to the ROTC Office) and is maintained by the Director of Environmental Health and Safety. The Director of Environmental Health and Safety or her representative will visually inspect the Hazardous Waste Accumulation Area weekly (40 CFR 265.174) and will maintain a log of these inspections. Any leaking chemical bottles will be immediately cleaned up using appropriate procedures (40 CFR 265.171). Only Authorized Personnel may enter the Accumulation Area.

Satellite Hazardous Waste Accumulation areas are located in the Physician Assistant Anatomy Laboratory, in the Art Department in both the painting room and the print room, at the Golf Course at golf maintenance building, at the Monarch Press Print Shop, at the Riddle Center in the athletic trainers rooms, in the chemistry department in the labs and in the biology labs. The satellite accumulation areas are maintained by the following Responsible Parties, Howard Bragg at the Maintenance Department, Department Chair of the Art Program in the Bethune Center for Visual Arts and Steve Dockery at the Golf Course, Mike Harrison at the Print Shop, Hugh Harling at the Riddle Center, Christina Beard or Matthew Kesic in the Physician Assistant Anatomy Laboratory, Narendra Singh in chemistry and Dr. Rob McCandless in biology.

12.1 Rules for Satellite Accumulation Areas (SAA)

Rules for Satellite Accumulation Areas must be posted at the Accumulation Area in a conspicuous place. The document that must be posted is attached in Appendix E of this document.

All relevant environmental regulations and safe handling procedures must be followed at all time. Containers holding Hazardous Waste must be kept in or near the point of generation (in the same room). The container must be kept in the control of the Responsible Party.

The area must be clearly labeled “Satellite Accumulation Area”. Only approved containers may be used for Hazardous waste storage (40 CFR 265.172). The containers must be clearly labeled “Hazardous Waste” and labeled as to specific chemical contents (i.e. hazardous chemical name and approximate volume). Non-hazardous waste must not be placed in hazardous waste containers. All hazardous waste containers must be placed in approved secondary containers. All hazardous waste containers must be kept closed at all times, except when being filled.

Hazardous waste containers must be visually inspected weekly (40 CFR 265.174) by the Responsible Party or their representative. Any leaking containers must be immediately contained and the waste placed in an approved container. A weekly inspection log must be maintained at each satellite facility and initialed by the inspector.

When a hazardous waste container is filled at the satellite accumulation area, it must be marked with the date it was filled. Within 3 days of the container being filled the Responsible Party should contact campus maintenance at 630-7199 or by the campus online work order system, for pickup and delivery to the Hazardous Waste Accumulation Area.

All personnel handling hazardous waste must attend a Hazardous Waste handling class. The personnel must attend the Hazardous Waste handling class, prior to handling hazardous waste and initially thereafter. All training must be conducted according to established training protocols.

Generators of Hazardous waste must establish protocols for the reduction of hazardous waste as mandated by congress in the Pollution Prevention Act of 1990 (P2) and identified in the Methodist University Pollution Prevention Plan. Waste minimization may include such things as changing procedures to generate less waste, substitution, reducing scale, recycling and reuse.

EMERGENCY SPILL RESPONSE: In the event of an emergency spill immediately contact Campus Security at 910-630-7577. Fire extinguishers and fire alarms should be used as necessary. The Fayetteville Fire Department can be reached at 911 and is automatically called whenever a fire alarm is pulled.

13.0 Proper Handling of Accumulated Hazardous Waste

- Total accumulation per calendar month must be less than 1000kg/calendar month of Hazardous Waste and less than 1kg/calendar month of Acutely Hazardous Chemicals/month. (40 CFR 261.5 (g)).
- If at any time MU surpasses the hazardous waste accumulation amount of 1000kg per calendar month or 1kg of acutely hazardous waste accumulated per calendar month, then the university will become a Large Quantity Generator and is subject to all applicable, federal, state and local regulations as such.
- Hazardous waste must be accumulated in containers compatible with that waste.
- Corrosive wastes (strong acids or bases) must be accumulated in glass containers.
- Properly label all Hazardous Waste containers
- Keep all Hazardous Waste containers closed unless filling or emptying.
- All Hazardous Waste containers must be placed in appropriate secondary containment.
- There must be no chemicals on the outside of the bottles.
- All containers must be kept away from drains.
- All containers must be stored with the base flat on an impervious shelf that is large enough to support the entire bottom of the secondary containment.
- No Hazardous Waste may be stored above eye level.
- No eating, smoking, drinking, gum or tobacco chewing in any Hazardous Waste Accumulation or SAA.
- All Hazardous Waste must stay under the control of the Responsible Party for that area.

14.0 Personnel Training – *[40 CFR 262.34(d)(5)(iii)]*

All personnel at MU that handle Hazardous Waste are required to undertake a Hazardous Waste Handling Training Course prior to handling Hazardous Waste. This training must be conducted by a Responsible Party trained in Hazardous Waste handling. Refresher training is not required unless the person handling the waste violates any of the provisions of the Methodist University Hazardous Waste Policy and those set forth by the Code of Federal Regulations. Personnel taking the Hazardous Waste Training Course must show proficiency of 100% on the Hazardous Waste Handlers Test, either by testing or by review and understanding of testing. Test is included in Appendix F of this document. Tests are to be forwarded to the Director of Environmental Health and Safety. Records of personnel training are to be maintained by the Director of Environmental Health and Safety.

15.0 Record-keeping and Recording – *[40CFR 262.44]*

At least once a week, container storage areas must be visually inspected for leaking and deteriorating containers (40 CFR 264/265.174).

The Responsible Party must record inspections in a log, including the date and time of the inspection, their name, any observations made, and the date and nature of any repairs. These records must be kept for a minimum of three years from the date of inspection (40 CFR 264/265.15(d)).

Records of Personnel Training will be kept for 5 years after that person has left MU.

16.0 Manifesting and Removal of Hazardous Waste from Campus

The following policies will be followed for the manifesting and removal of all hazardous waste from all Methodist University facilities and properties.

16.1 Manifest of Hazardous Waste

All hazardous wastes will be manifested in accordance with the EPA Hazardous Waste Policy on the Uniform Hazardous Waste Manifest Form (OMB No. 2050-00390.

16.2 Removal of Hazardous Waste

All hazardous waste will be removed from MU by a licensed TSD with an EPA registration number and will be done under the direct supervision of the Director of Environmental Health and Safety.

17.0 Paint Can and Paint Disposal

All paint is to be properly disposed of in DOT approved drums with proper labeling.

18.0 Aerosol Spray Can Disposal

Propellant driven aerosol spray cans, can contain a wide variety of regulated materials including Volatile Organic Compounds (VOCs) and Hazardous Air Pollutants (HAPs) and/or ozone depleting chemicals. VOCs are regulated under 40 CFR 60 and HAPs are regulated under 40 CFR 61 & 63.

No intact spray cans may be thrown in any trash receptacle. Spray cans must be taken to the MU maintenance department and punctured using the Aerosol emitor spray can

puncture system. All hazardous materials are captured during the puncture process in a drum attached to the puncture apparatus. The hazardous materials are filtered and the filtrate is no longer hazardous waste and may go into the regular waste disposal stream.

Attached to the spray can puncture system is a filter. This filter must be changed every three months. When the filter is depleted it is not a hazardous material and may be disposed of in the regular waste stream.

Whenever a filter is depleted it must be replaced before the spray can puncture system is used.

NEVER use the spray can puncture apparatus to puncture a spray can containing any form of spray insulation, as this will clog the filter and make it non-functional.

19.0 Definitions and Acronyms

Acutely Hazardous Waste– All specific wastes identified in 40 CFR 261.31 and Which include EPA F List F020, F021, F022, F023, F026, F027 and all P listed wastes. Methodist University has no F listed wastes.

Container- Any Portable device, in which a material is stored, transported, treated, disposed of, or otherwise handled.

Conditionally Exempt Small Quantity Generator– Generates no more than 100 kg of hazardous waste, 1 kg of acutely hazardous waste, or 100 kg of contaminated waste from an acutely hazardous waste spill in a month and accumulates no more than 1,000 kg of hazardous waste at any time.

Disposal- The discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste may enter the environment or be emitted into the air or discharged into any waters.

EPA Identification Number- Number assigned by the Environmental Protection Agency to each generator; transporter; and processing, storage or disposal facility. Methodist University EPA ID Number is: *NCR-000146464*.

Friable Asbestos-Containing Materials- contain over 1% asbestos and can be crumbled, crushed or reduced to powder by hand pressure when dry. Common examples of friable asbestos-containing materials are spray acoustic ceilings, acoustic tiles, plaster, pipe and duct wrap, and paper backing of linoleum.

Generator- Any person by site, whose act or process producer hazardous waste identified or listed in 40 CFR 261.

Handling- The transportation from one place to another, loading, unloading, pumping or packaging of waste.

Hazardous Waste Manifest - A hazardous waste manifest form is to accompany shipments of hazardous waste as defined by 49 CFR

Hazardous Waste- Hazardous Waste as defined in 40 CFR 261 subpart C & D or Toxicity Characteristic Leaching Procedure (TCLP) as defined in Part 261.

Incompatible Waste- A hazardous waste which is unsuitable for (1) placement in a particular device or facility because it may cause corrosion or decay of containment materials or (2) commingling with another waste or material under uncontrolled conditions because commingling might produce heat or pressure, fire or explosion, violent reaction, toxic dust, mist, fumes, or gases.

Non-friable Asbestos- Containing Materials - are typically bound up with cement, vinyl, asphalt or some other type of hard binder. Some examples of non-friable asbestos building materials are cement/transite siding, vinyl floor tiles and stucco. Non-friable asbestos-containing material may become friable if it is crushed, crumbled, pulverized, or subjected to sanding, drilling, grinding, cutting, or abrading.

Satellite Collection Station- A hazardous waste collection station at or near any point of generation where wastes initially accumulate under the control of the operator of the process generating the waste. Satellite collection stations must comply with the requirements specified under 40 CFR 264.34 (c).

Solid Waste - Solid waste as defined in 40 CFR 261.2.

Treatment- Any method, technique, or process, including, neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous

waste so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste non-hazardous, or less hazardous; safer to transport, store, or dispose of; or amenable for recover, amenable for storage, or reduced in volume.

Waste Stream- A waste material generated either one time or routinely at a single generating facility with physical characteristics and chemical composition that do not vary significantly from shipment to shipment.

Acronyms

ANSI	American National Standards Institute
CAN	Chemical Abstracts Number
CESQ	Conditionally Exempt Small Quantity Generator
Direc	Chemical Hygiene Officer
EPA	Environmental Protection Agency
HAPs	Hazardous Air Pollutants
MU	Methodist University
MU	Methodist University
P2	Pollution Prevention Act
RCRA	Resource Conservation Recovery Act
SAA	Satellite Accumulation Area
SOP	Standard Operating Procedure
SQG	Small Quantity Generator
TSD	Transport Storage and Disposal
VOCs	Volatile Organic Compounds

20.0 APPENDIX A| P and U Listed Wastes (non-university specific)

EPA | P Listed Chemicals

CODE	CAS #	CHEMICAL NAME
P023	107-20-0	Acetaldehyde, chloro-
P002	591-08-2	Acetamide, N-(aminothioxomethyl)-
P057	640-19-7	Acetamide, 2-fluoro-
P058	62-74-8	Acetic acid, fluoro-, sodium salt
P002	591-08-2	1-Acetyl-2-thiourea
P003	107-02-8	Acrolein
P070	116-06-3	Aldicarb
P203	1646-88-4	Aldicarb sulfone.
P004	309-00-2	Aldrin
P005	107-18-6	Allyl alcohol
P006	20859-73-8	Aluminum phosphide (R,T)
P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol
P008	504-24-5	4-Aminopyridine
P009	131-74-8	Ammonium picrate (R)
P119	7803-55-6	Ammonium vanadate
P099	506-61-6	Argentate(1-), bis(cyano-C)-, potassium
P010	7778-39-4	Arsenic acid H3AsO4
P012	1327-53-3	Arsenic oxide As2O3

P011	1303-28-2	Arsenic oxide As2O5
P011	1303-28-2	Arsenic pentoxide
P012	1327-53-3	Arsenic trioxide
P038	692-42-2	Arsine, diethyl -
P036	696-28-6	Arsonous dichloride, phenyl -
P054	151-56-4	Aziridine
P067	75-55-8	Aziridine, 2-methyl-
P013	542-62-1	Barium cyanide
P024	106-47-8	Benzenamine, 4-chloro-
P077	100-01-6	Benzenamine, 4-nitro-
P028	100-44-7	Benzene, (chloromethyl)-
P042	51-43-4	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)-
P046	122-09-8	Benzeneethanamine, alpha,alpha-dimethyl-
P014	108-98-5	Benzenethiol
P127	1563-66-2	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate.
P188	57-64-7	Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)- 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylp yrrolo[2,3-b]indol-5-yl methylcarbamate ester (1:1)
P001	fn1 81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-
		phenylbutyl)-, & salts, when present at concentrations greater than 0.3%
P028	100-44-7	Benzyl chloride
P015	7440-41-7	Beryllium powder
P017	598-31-2	Bromoacetone
P018	357-57-3	Brucine
P045	39196-18-4	2-Butanone, 3,3-dimethyl-1-(methylthio)- O-[methylamino)carbonyl] oxime
P021	592-01-8	Calcium cyanide
P021	592-01-8	Calcium cyanide Ca(CN)2
P189	55285-14-8	Carbamic acid, [(dibutylamino)- thio]methyl -, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester.
P191	644-64-4	Carbamic acid, dimethyl -, 1-[(dimethyl- amino)carbonyl]- 5-methyl-1H-pyrazol- 3-yl ester.
P192	119-38-0	Carbamic acid, dimethyl -, 3-methyl-1- (1-methylethyl)-1H- pyrazol-5-yl ester.
P190	1129-41-5	Carbamic acid, methyl-, 3-methylphenyl ester.
P127	1563-66-2	Carbofuran.
P022	75-15-0	Carbon disulfide
P095	75-44-5	Carbonic dichloride
P189	55285-14-8	Carbosulfan.
P023	107-20-0	Chloroacetaldehyde
P024	106-47-8	p-Chloroaniline
P026	5344-82-1	1-(o-Chlorophenyl)thiourea

P027	542-76-7	3-Chloropropionitrile
P029	544-92-3	Copper cyanide
P029	544-92-3	Copper cyanide Cu(CN)
P202	64-00-6	m-Cumenyl methylcarbamate.
P030		Cyanides (soluble cyanide salts), not otherwise specified
P031	460-19-5	Cyanogen
P033	506-77-4	Cyanogen chloride
P033	506-77-4	Cyanogen chloride (CN)Cl
P034	131-89-5	2-Cyclohexyl -4,6-dinitrophenol
P016	542-88-1	Dichloromethyl ether
P036	696-28-6	Dichlorophenylarsine
P037	60-57-1	Dieldrin
P038	692-42-2	Diethylarsine
P041	311-45-5	Diethyl-p-nitrophenyl phosphate
P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P043	55-91-4	Diisopropylfluorophosphate (DFP)
P004	309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4, 10,10-hexa- chloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha,4alpha,4abeta, 5alpha,8alpha,8abeta)-
P060	465-7 3-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa- chloro-1,4,4a,5,8,8a-hexahydro-,(1alpha, 4alpha,4abeta,5beta,8beta,8abeta)-
P037	60-57-1	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9- hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta, 2aalpha, 3beta,6beta,6aalpha,7beta, 7aalpha)-
P051	fn1 72-20-8	2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6,9,9- hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta, 2abeta,3alpha,6alpha,6abeta,7beta, 7aalpha)-, & metabolites
P044	60-51-5	Dimethoate
P046	122-09-8	alpha,alpha-Dimethylphenethylamine
P191	644-64-4	Dimetilan.
P047	fn1 534-52-1	4,6-Dinitro-o-cresol, & salts
P048	51-28-5	2,4-Dinitrophenol
P020	88-85-7	Dinoseb
P085	152-16-9	Diphosphoramide, octamethyl -
P111	107-49-3	Diphosphoric acid, tetraethyl ester
P039	298-04-4	Disulfoton
P049	541-53-7	Dithiobiuret
P185	26419-73-8	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-,
		O- [(methylamino)- carbonyl]oxime.
P050	115-29-7	Endosulfan

P088	145-73-3	Endothall
P051	72-20-8	Endrin
P051	72-20-8	Endrin, & metabolites
P042	51-43-4	Epinephrine
P031	460-19-5	Ethane dinitrile
P194	23135-22-0	Ethanimidothioc acid, 2-(dimethylamino)-N- [[(methylamino) carbonyl]oxy]-2 -oxo-, methyl ester.
P066	16752-77-5	Ethanimidothioic acid, N-[[(methylamino) carbonyl]oxy]-, methyl ester
P101	107-12-0	Ethyl cyanide
P054	151-56-4	Ethyleneimine
P097	52-85-7	Famphur
P056	7782-41-4	Fluorine
P057	640-19-7	Fluoroacetamide
P058	62-74-8	Fluoroacetic acid, sodium salt
P198	23422-53-9	Formetanate hydrochloride.
P197	17702-57-7	Formparanate.
P065	628-86-4	Fulminic acid, mercury(2+) salt (R,T)
P059	76-44-8	Heptachlor
P062	757-58-4	Hexaethyl tetraphosphate
P116	79-19-6	Hydrazinecarbothioamide
P068	60-34-4	Hydrazine, methyl -
P063	74-90-8	Hydrocyanic acid
P063	74-90-8	Hydrogen cyanide
P096	7803-51-2	Hydrogen phosphide
P060	465-73-6	Isodrin
P192	119-38-0	Isolan.
P202	64-00-6	3-Isopropylphenyl N-methylcarbamate.
P007	2763-96-4	3(2H)-Isox azolone, 5-(aminomethyl)-
P196	15339-36-3	Manganese, bis(dimethylcarbamodithioato-S,S')-,
P196	15339-36-3	Manganese dimethyldithiocarbamate.
P092	62-38-4	Mercury, (acetato-O)phenyl -
P065	628-86-4	Mercury fulminate (R,T)
1P192	23422-53-9	Methanimidamide, N,N-dimethyl-N'-[3- [[(methylamino)-carbonyl]oxy]phenyl]-, monohydrochloride.
P197	17702-57-7	Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-
		[[(methylamino)carbonyl]oxy]p henyl]-
P082	62-75-9	Methanamine, N-methyl-N-nitroso-
P064	624-83-9	Methane, isocyanato-
P016	542-88-1	Methane, oxybis[chloro-
P112	509-14-8	Methane, tetranitro- (R)
P118	75-70-7	Methanethiol, trichloro-

P050	115-29-7	6,9-Methano-2,4,3-benzodioxathiepin , 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide
P059	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-
		3a,4,7,7a-tetrahydro-
P199	2032-65-7	Methiocarb.
P066	16752-77-5	Methomyl
P068	60-34-4	Methyl hydrazine
P064	624-83-9	Methyl isocyanate
P069	75-86-5	2-Methyllactonitrile
P071	298-00-0	Methyl parathion
P190	1129-41-5	Metolcarb.
P128	315-18-4	Mexacarbate.
P072	86-88-4	alpha-Naphthylth iourea
P073	13463-39-3	Nickel carbonyl
P073	13463-39-3	Nickel carbonyl Ni(CO)4, (T-4)-
P074	557-19-7	Nickel cyanide
P074	557-19-7	Nickel cynaide Ni(CN)2
P075	fn1 54-11-5	Nicotine, & salts
P076	10102-43-9	Nitric oxide
P077	100-01-6	p-Nitroaniline
P078	10102-44-0	Nitrogen dioxide
P076	10102-43-9	Nitrogen oxide NO
P078	10102-44-0	Nitrogen oxide NO2
P081	55-63-0	Nitroglycerine (R)
P082	62-75-9	N-Nitrosodimethylamine
P084	4549-40-0	N- Nitrosomethylvinylamine
P085	152-16-9	Octamethylpyrophosphor amide
P087	20816-12-0	Osmium oxide OsO4, (T-4)-
P087	20816-12-0	Osmium tetroxide
P088	145-73-3	7-Oxabicyclo[2.2.1]heptane-2,3-dicar boxylic acid
P194	23135-22-0	Oxamyl.
P089	56-38-2	Parathion
P034	131-89-5	Phenol, 2-cyclohexyl -4,6-dinitro-
P048	51-28-5	Phenol, 2,4-dinitro-
P047	fn1 534-52-1	Phenol, 2-methyl-4,6-dinitro-, & salts
P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P128	315-18-4	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester).
P199	2032-65-7	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate
P202	64-00-6	Phenol, 3-(1-methylethyl)-, methyl carbamate.

P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-, methyl
		carbamate.
P092	62-38-4	Phenylmercury acetate
P093	103-85-5	Phenylthiourea
P094	298-02-2	Phorate
P095	75-44-5	Phosgene
P096	7803-51-2	Phosphine
P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester
P039	298-04-4	Phosphorodithioic acid, O,O-diethyl
		S-[2-(ethylthio)ethyl] ester
P094	298-02-2	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester
P044	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)- 2-oxoethyl] ester
P043	55-91-4	Phosphorofluoridic acid, bis(1-methylethyl) ester
P089	56-38-2	Phosphorothioic aci O,O-dimethyl ester
P040	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
P097	52-85-7	Phosporothioic acid, O-[4-[(dimethylamino) sulfonyl]phenyl]0,0-dimethyl ester
P071	298-00-0	Phosphorothioic acid, O,O,-dimethyl O-(4-nitrophenyl) ester
P204	57-47-6	Physostigmine.
P188	57-64-7	Physostigmine salicylate.
P110	78-00-2	Plumbane, tetraethyl -
P098	151-50-8	Potassium cyanide
P098	151-50-8	Potassium cyanide K(CN)
P099	506-61-6	Potassium silver cyanide
P201	2631-37-0	Promecarb
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime
P203	1646-88-4	Propanal, 2-methyl-2-(methyl-sulfonyl)-, O-
		[(methylamino)carbonyl] oxime.
P101	107-12-0	Propanenitrile
P027	542-76-7	Propanenitrile, 3-chloro-
P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl-
P081	55-63-0	1,2,3-Propanetriol, trinitrate (R)
P017	598-31-2	2-Propanone, 1-bromo-
P102	107-19-7	Propargyl alcohol
P003	107-02-8	2-Propenal
P005	107-18-6	2-Propen-1-ol
P067	75-55-8	1,2-Propylenimine
P102	107-19-7	2-Propyn-1-ol
P008	504-24-5	4-Pyridinamine
P075	fn1 54-11-5	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts

P204	57-47-6	Pyrrolo[2,3-b]indol -5-ol, 1,2,3,3a,8,8a- hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-
P114	12039-52-0	Selenious acid, dithallium(1+) salt
P103	630-10-4	Selenourea
P104	506-64-9	Silver cyanide
P104	506-64-9	Silver cyanide Ag(CN)
P105	26628-22-8	Sodium azide
P106	143-33-9	Sodium cyanide
P106	143-33-9	Sodium cyanide Na(CN)
P108	fn1 57-24-9	Strychnidin-10-one, & salts
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-
P108	fn1 57-24-9	Strychnine, & salts
P115	7446-18-6	Sulfuric acid, dithallium(1+) salt
P109	3689-24-5	Tetraethyldithiopyrophosphate
P110	78-00-2	Tetraethyl lead
P111	107-49-3	Tetraethyl pyrophosphate
P112	509-14-8	Tetranitromethane (R)
P062	757-58-4	Tetraphosphoric acid, hexaethyl ester
P113	1314-32-5	Thallic oxide
P113	1314-32-5	Thallium oxide Tl2O3
P114	12039-52-0	Thallium(I) selenite
P115	7446-18-6	Thallium(I) sulfate
P109	3689-24-5	Thiodiphosphoric acid, tetraethyl ester
P045	39196-18-4	Thiofanox
P049	541-53-7	Thioimidodi carbonic diamide [(H2N)C(S)]2NH
P014	108-98-5	Thiophenol
P116	79-19-6	Thiosemicarbazide
P026	5344-82-1	Thiourea, (2-chlorophenyl)-
P072	86-88-4	Thiourea, 1-naphthalenyl -
P093	103-85-5	Thiourea, phenyl -
P185	26419-73-8	Tirpate.
P123	8001-35-2	Toxaphene
P118	75-70-7	Trichlorome thanethiol
P119	7803-55-6	Vanadic acid, ammonium salt
P120	1314-62-1	Vanadium oxide V2O5
P120	1314-62-1	Vanadium pentoxide
P084	4549-40-0	Vinylamine, N-methyl-N-nitroso-
P001	81-81-2	Warfarin, & salts, when present at concentrations greater than 0.3%
P205	137-30-4	Zinc, bis(dimethylcarbamodithioato-S,S)-
P121	557-21-1	Zinc cyanide
P121	557-21-1	Zinc cyanide Zn(CN)2

P122	1314-84-7	Zinc phosphide Z[3]P[2], when present at concentrations greater than 10% (R,T)
P205	137-30-4	Ziram.

EPA | U Listed Chemicals

CODE	CAS #	CHEMICAL NAME
U394	30558-43-1	A2213
U001	75-07-0	Acetaldehyde (I)
U034	75-87-6	Acetaldehyde, trichloro-
U187	62-44-2	Acetamide, N-(4-ethoxyphenyl)-
U005	53-96-3	Acetamide, N-9H-fluoren-2-yl-
U240	n1 94-75-7	Acetic acid, (2,4-dichlorophenoxy)-, salts & esters
U112	141-78-6	Acetic acid ethyl ester (I)
U144	301-04-2	Acetic acid, lead(2+) salt
U214	563-68-8	Acetic acid, thallium(1+) salt
see F027	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-
U002	67-64-1	Acetone (I)
U003	75-05-8	Acetonitrile (I,T)
U004	98-86-2	Acetophenone
U005	53-96-3	2-Acetylaminofluorene
U006	75-36-5	Acetyl chloride (C,R,T)
U007	79-06-1	Acrylamide
U008	79-10-7	Acrylic acid (I)
U009	107-13-1	Acrylonitrile
U011	61-82-5	Amitrole
U012	62-53-3	Aniline (I,T)
U136	75-60-5	Arsinic acid, dimethyl -
U014	492-80-8	Auramine
U015	115-02-6	Azaserine
U010	50-07-7	Azirino[2,3: 3,4]pyrrolo [1,2-a]indole-4,7-dione, 6-amino-8-[[(aminocarbonyl) oxy]methyl]-1,1a,2,8,8a,8b- hexahydro-8a-methoxy-5-methyl-, (1aalpha, 8beta, 8aalpha,8balpha)]
U280	101-27-9	Barban.
U278	22781-23-3	Bendiocarb.
U364	22961-82-6	Bendiocarb phenol.
U271	17804-35-2	Benomyl.
U157	56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-
U016	225-51-4	Benz[c]acridine
U017	9 8-87-3	Benzal chloride

U192	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-
U018	56-55-3	Benz[a]anthracene
U094	57-97-6	Benz[a]anthracene, 7,12-dimethyl-
U012	62-53-3	Benzenamine (I,T)
U014	492-80-8	Benzenamine, 4,4 -carbonimidoylbis[N,N-dimethyl-
U049	3165-93-3	Benzenamine, 4-chloro-2-methyl-, hydrochloride
U093	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
U328	95-53-4	Benzenamine, 2-methyl-
U353	106-49-0	Benzenamine, 4-methyl-
U158	101-14-4	Benzenamine, 4,4 -methylenebis[2-chloro-
U222	636-21-5	Benzenamine, 2-methyl-, hydrochloride
U181	99-55-8	Benzenamine, 2-methyl-5-nitro-
U019	71-43-2	Benzene (I,T)
U038	510-15-6	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester
U030	101-55-3	Benzene, 1-bromo-4-phenoxy-
U035	305-03-3	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-
U037	108-90-7	Benzene, chloro-
U221	25376-45-8	Benzenediamine, ar-methyl-
U028	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester
U069	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
U088	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester
U102	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester
U107	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester
U070	95-50-1	Benzene, 1,2-dichloro-
U071	541-73-1	Benzene, 1,3-dichloro-
U072	106-46-7	Benzene, 1,4-dichloro-
U060	72-54-8	Benzene, 1,1 -(2,2-dichloroethylidene)bis[4-chloro-
U017	98-87-3	Benzene, (dichloromethyl)-
U223	26471-62-5	Benzene, 1,3-diisocyanatomethyl - (R,T)
U239	1330-20-7	Benzene, dimethyl - (I,T)
U201	108-46-3	1,3-Benzenediol
U127	118-74-1	Benzene , hexachloro-
U056	110-82-7	Benzene, hexahydro- (I)
U220	108-88-3	Benzene, methyl-
U105	121-14-2	Benzene, 1-methyl-2,4-dinitro-
U106	606-20-2	Benzene, 2-methyl-1,3-dinitro-
U055	98-82-8	Benzene, (1-methylethyl)- (I)
U169	98-95-3	Benzene, nitro-
U183	608-93-5	Benzene, pentachloro-
U185	82-68-8	Benzene, pentachloronitro-
U020	98-09-9	Benzenesulfonic acid chloride (C,R)

U020	98-09-9	Benzenesulfonyl chloride (C,R)
U207	95-94-3	Benzene, 1,2,4,5-tetrachloro-
U061	50-29-3	Benzene, 1,1 -(2,2,2-trichloroethylidene)bis[4-chloro-
U247	72-43-5	Benzene, 1,1 -(2,2,2-trichloroethylidene)bis[4- methoxy-
U023	98-07-7	Benzene, (trichloromethyl)-
U234	99-35-4	Benzene, 1,3,5-trinitro-
U021	92-87-5	Benzidine
U202	fn1 81-07-2	1,2-Benzisothiazol -3(2H)-one, 1,1-dioxide, & salts
U278	22781-23-3	1,3-Benzodioxol -4-ol, 2,2-dimethyl-, methyl carbamate
U364	22961-82-6	1,3-Benzodioxol -4-ol, 2,2-dimethyl-,
U203	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-
U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-
U367	1563-38-8	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-
U090	94-58-6	1,3-Benzodioxole, 5-propyl-
U064	189-55-9	Benzo[rst_pentaphene
U248	n1 81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations of 0.3% or less
U022	50-32-8	Benzo[a_pyrene
U197	106-51-4	p-Benzoquinone
U023	98-07-7	Benzotrichloride (C,R,T)
U085	1464-53-5	2,2 -Bioxirane
U021	92-87-5	[1,1 -Biphenyl_-4,4 -diamine
U073	91-94-1	[1,1'-Biphenyl_-4,4'-diamine, 3,3'-dichloro-
U091	119-90-4	[1,1'-Biphenyl_-4,4'-diamine, 3,3'-dimethoxy-
U095	119-93-7	[1,1'-Biphenyl_-4,4'-diamine, 3,3'-dimethyl-
U225	75-25-2	Bromoform
U030	101-55-3	4-Bromophenyl phenyl ether
U128	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-
U172	924-16-3	1-Butanamine, N-butyl-N-nitroso-
U031	71-36-3	1-Butanol (I)
U159	78-93-3	2-Butanone (I,T)
U160	1338-23-4	2-Butanone, peroxide (R,T)
U053	4170-30-3	2-Butenal
U074	764-41-0	2-Butene, 1,4-dichloro- (I,T)
U143	303-34-4	2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy- 2-(1-methoxyethyl)-3-methyl-1-oxobutoxy _methyl_-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z), 7(2S*,3R*),7aalpha_-
U031	71-36-3	n-Butyl alcohol (I)
U136	75-60-5	Cacodylic acid
U032	13765-19-0	Calcium chromate

U372	10605-21-7	Carbamic acid, 1H-benzimidazol -2-yl, methyl ester.
U271	17804-35-2	Carbamic acid, [1-[(butylamino)carbonyl -1H-benzimidazol -2-yl -, methyl ester.
U280	101-27-9	Carbamic acid, (3-chlorophenyl)-, 4-chloro- 2-butynyl ester.
U238	51-79-6	Carbamic acid, ethyl ester
U178	615-53-2	Carbamic acid, methylnitroso-, ethyl ester
U373	122-42-9	Carbamic acid, phenyl -, 1-methylethyl ester.
U409	23564-05-8	Carbamic acid, [1,2-phenylenebis (iminocarbonothioyl) bis-, dimethyl ester.
U097	79-44-7	Carbamic chloride, dimethyl -
U114	111-54-6	Carbamodithioic acid, 1,2-ethanediylbis-,salts & esters
U062	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester
U389	2303-17-5	Carbamothioic acid, bis(1-methylethyl)-, S- (2,3,3-trichloro-2-propenyl) ester.
U387	52888-80-9	Carbamothioic acid, dipropyl-, S- (phenylmethyl) ester.
U279	63-25-2	Carbaryl.
U372	10605-21- 7	Carbendazim.
U367	1563-38-8	Carbofuran phenol.
U215	6533-73-9	Carbonic acid, dithallium(1+) salt
U033	353-50-4	Carbonic difluoride
U156	79-22-1	Carbonochloridic acid, methyl ester (I,T)
U033	353-50-4	Carbon oxyfluoride (R,T)
U211	56-23-5	Carbon tetrachloride
U034	75-87-6	Chloral
U035	305-03-3	Chlorambucil
U036	57-74-9	Chlordane, alpha & gamma isomers
U026	494-03-1	Chlornaphazin
U037	108-90-7	Chlorobenzene
U038	510-15-6	Chlorobenzilate
U039	59-50-7	p-Chloro-m-cresol
U042	110-75-8	2-Chloroethyl vinyl ether
U044	67-66-3	Chloroform
U046	107-30-2	Chloromethyl methyl ether
U047	91-58-7	beta-Chloronaphthalene
U048	95-57-8	o-Chlorophenol
U049	3165-93-3	4-Chloro-o-toluidine, hydrochloride
U032	13765-19-0	Chromic acid H2CrO4, calcium salt
U050	218-01-9	Chrysene
U051		Creosote
U052	1319-77-3	Cresol (Cresylic acid)
U053	4170-30-3	Crotonaldehyde

U055	98-82-8	Cumene (I)
U246	506-68-3	Cyanogen bromide (CN)Br
U197	106-51-4	2,5-Cyclohexadiene-1,4-dione
U056	110-82-7	Cyclohexane (I)
U129	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alph a,6beta)-
U057	108-94-1	Cyclohexanone (I)
U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
U058	50-18-0	Cyclophosphamide
U240	n1 94-75-7	2,4-D, salts & esters
U059	20830-81-3	Daunomycin
U060	72-54-8	DDD
U061	50-29-3	DDT
U062	2303-16-4	Diallate
U063	53-70-3	Dibenz[a,h_anthracene
U064	189-55-9	Dibenzo[a,i_pyrene
U066	96-12-8	1,2-Dibromo-3-chloropropane
U069	84-74-2	Dibutyl phthalate
U070	95-50-1	o-Dichlorobenzene
U071	541-73-1	m-Dichlorobenzene
U072	106-46-7	p-Dichlorobenzene
U073	91-94-1	3,3'-Dichlorobenzidine
U074	764-41-0	1,4-Dichloro-2-butene (I,T)
U075	75-71-8	Dichlorodifluoromethane
U078	75-35-4	1,1-Dichloroethylene
U079	156-60-5	1,2-Dichloroethylene
U025	111-44-4	Dichloroethyl ether
U027	108-60-1	Dichloroisopropyl ether
U024	111-91-1	Dichloromethoxy ethane
U081	120-83-2	2,4-Dichlorophenol
U082	87-65-0	2,6-Dichlorophenol
U084	542-75-6	1,3-Dichloropropene
U085	1464-53-5	1,2:3,4-Diepoxybutane (I,T)
U395	5952-26-1	Diethylene glycol, dicarbamate.
U108	123-91-1	1,4-Diethyleneoxide
U028	117-81-7	Diethylhexyl phthalate
U086	1615-80-1	N,N'-Diethylhydrazine
U087	3288-58-2	O,O-Diethyl S-methyl dithiophosphate
U088	84-66-2	Diethyl phthalate
U089	56-53-1	Diethylstilbesterol
U090	94-58-6	Dihydrosafrole
U091	119-90-4	3,3'-Dimethoxybenzidine
U092	124-40-3	Dimethylamine (I)
U093	60-11-7	p-Dimethylaminoazobenzene

U094	57-97-6	7,12-Dimethylbenz[a_anthracene
U095	119-93-7	3,3'-Dimethylbenzidine
U096	80-15-9	alpha,alpha-Dimethylbenzylhydroperoxide (R)
U097	79-44-7	Dimethylcarbamoyl chloride
U098	57-14-7	1,1-Dimethylhydrazine
U099	540-73-8	1,2-Dimethylhydrazine
U101	105-67-9	2,4-Dimethylphenol
U102	131-11-3	Dimethyl phthalate
U103	77-78-1	Dimethyl sulfate
U105	121-14-2	2,4-Dinitrotoluene
U106	606-20-2	2,6-Dinitrotoluene
U107	117-84-0	Di-n-octyl phthalate
U108	123-91-1	1,4-Dioxane
U109	122-66-7	1,2-Diphenylhydrazine
U110	142-84-7	Dipropylamine (1)
U111	621-64-7	Di-n-propylnitrosamine
U041	106-89-8	Epichlorohydrin
U001	75-07-0	Ethanal (1)
U404	121-44-8	Ethanamine, N,N-diethyl-
U174	55-18-5	Ethanamine, N-ethyl-N-nitroso-
U155	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'- (2-thienylmethyl)-
U067	106-93-4	Ethane, 1,2-dibromo-
U076	75-34-3	Ethane, 1,1-dichloro-
U077	107-06-2	Ethane, 1,2-dichloro-
U131	67-72-1	Ethane, hexachloro-
U024	111-91-1	Ethane, 1,1'-[methylenebis(oxy)_bis[2-chloro-
U117	60-29-7	Ethane, 1,1'-oxybis-(I)
U025	111-44-4	Ethane, 1,1'-oxybis[2-chloro-
U184	76-01-7	Ethane, pentachloro-
U208	630-20-6	Ethane, 1,1,1,2-tetrachloro-
U209	79-34-5	Ethane, 1,1,2,2-tetrachloro-
U218	62-55-5	Ethanethioamide
U226	71-55-6	Ethane, 1,1,1-trichloro-
U227	79-00-5	Ethane, 1,1,2-trichloro-
U410	59669-26-0	Ethanimidothioic acid, N,N'- [thiobis [(methylimino)carbonyloxy_bis -, dimethyl ester
U394	30558-43-1	Ethanimidothioic acid, 2-(dimethylamino)-N- hydroxy-2-oxo-, methyl ester.
U359	110-80-5	Ethanol, 2-ethoxy-
U173	1116-54-7	Ethanol, 2,2'-(nitrosoimino)bis-
U395	5952-26-1	Ethanol, 2,2 -oxybis-, dicarbamate.
U004	98-86-2	Ethanone, 1-phenyl-
U043	75-01-4	Ethene, chloro-

U042	110-75-8	Ethene, (2-chloroethoxy)-
U078	75-35-4	Ethene, 1,1-dichloro-
U079	156-60-5	Ethene, 1,2-dichloro-, (E)-
U210	127-18-4	Ethene, tetrachloro-
U228	79-01-6	Ethene, trichloro-
U112	141-78-6	Ethyl acetate (I)
U113	140-88-5	Ethyl acrylate (I)
U238	51-79-6	Ethyl carbamate (urethane)
U117	60-29-7	Ethyl ether (I)
U114	n1 111-54-6	Ethylenebisdithiocarbamic acid, salts & esters
U067	106-93-4	Ethylene dibromide
U077	107-06-2	Ethylene dichloride
U359	110-80-5	Ethylene glycol monoethyl ether
U115	75-21-8	Ethylene oxide (I,T)
U116	96-45-7	Ethylenethiourea
U076	75-34-3	Ethylidene dichloride
U118	97-63-2	Ethyl methacrylate
U119	62-50-0	Ethyl methanesulfonate
U120	206-44-0	Fluoranthene
U122	50-00-0	Formaldehyde
U123	64-18-6	Formic acid (C,T)
U124	110-00-9	Furan (I)
U125	98-01-1	2-Furancarboxaldehyde (I)
U147	108-31-6	2,5-Furandione
U213	109-99-9	Furan, tetrahydro-(I)
U125	98-01-1	Furfural (I)
U124	110-00-9	Furfuran (I)
U206	18883-66-4	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D-
U206	18883-66-4	D-Glucose, 2-deoxy-2-[[(methylnitrosoamino)- carbonyl]amino]-
U126	765-34-4	Glycidylaldehyde
U163	70-25-7	Guanidine, N-methyl-N'-nitro-N-nitroso-
U127	118-74-1	Hexachlorobenzene
U128	87-68-3	Hexachlorobutadiene
U130	77-47-4	Hexachlorocyclopentadiene
U131	67-72-1	Hexachloroethane
U132	70-30-4	Hexachlorophene
U243	1888-71-7	Hexachloropropene
U133	302-01-2	Hydrazine (R,T)
U086	1615-80-1	Hydrazine, 1,2-diethyl-
U098	57-14-7	Hydrazine, 1,1-dimethyl-
U099	540-73-8	Hydrazine, 1,2-dimethyl-
U109	122-66-7	Hydrazine, 1,2-diphenyl -

U134	7664-39-3	Hydrofluoric acid (C,T)
U134	7664-39-3	Hydrogen fluoride (C,T)
U135	6/4/7783	Hydrogen sulfide
U135	6/4/7783	Hydrogen sulfide H2S
U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl - (R)
U116	96-45-7	2-Imidazolidinethione
U137	193-39-5	Indeno[1,2,3-cd]pyrene
U190	85-44-9	1,3-Isobenzofurandione
U140	78-83-1	Isobutyl alcohol (I,T)
U141	120-58-1	Isosafrole
U142	143-50-0	Kepone
U143	303-34-4	Lasiocarpine
U144	301-04-2	Lead acetate
U146	1335-32-6	Lead, bis(acetato-O)tetrahydroxytri -
U145	7446-27-7	Lead phosphate
U146	1335-32-6	Lead subacetate
U129	58-89-9	Lindane
U163	70-25-7	MNNG
U147	108-31-6	Maleic anhydride
U148	123-33-1	Maleic hydrazide
U149	109-77-3	Malononitrile
U150	148-82-3	Melphalan
U151	7439-97-6	Mercury
U152	126-98-7	Methacrylonitrile (I, T)
U092	124-40-3	Methanamine, N-methyl- (I)
U029	74-83-9	Methane, bromo-
U045	74-87-3	Methane, chloro- (I, T)
U046	107-30-2	Methane, chloromethoxy-
U068	74-95-3	Methane, dibromo-
U080	75-09-2	Methane, dichloro-
U075	75-71-8	Methane, dichlorodifluoro-
U138	74-88-4	Methane, iodo-
U119	62-50-0	Methanesulfonic acid, ethyl ester
U211	56-23-5	Methane, tetrachloro-
U153	74-93-1	Methanethiol (I, T)
U225	75-25-2	Methane, tribromo-
U044	67-66-3	Methane, trichloro-
U121	75-69-4	Methane, trichlorofluoro-
U036	57-74-9	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro- 2,3,3a,4,7,7a-hexahydro-
U154	67-56-1	Methanol (I)
U155	91-80-5	Methapyrilene
U142	143-50-0	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-

U247	72-43-5	Methoxychlor
U154	67-56-1	Methyl alcohol (I)
U029	74-83-9	Methyl bromide
U186	504-60-9	1-Methylbutadiene (I)
U045	74-87-3	Methyl chloride (I,T)
U156	79-22-1	Methyl chlorocarbonate (I,T)
U226	71-55-6	Methyl chloroform
U157	56-49-5	3-Methylcholanthrene
U158	101-14-4	4,4'-Methylenebis(2-chloroaniline)
U068	74-95-3	Methylene bromide
U080	75-09-2	Methylene chloride
U159	78-93-3	Methyl ethyl ketone (MEK) (I,T)
U160	1338-23-4	Methyl ethyl ketone peroxide (R,T)
U138	74-88-4	Methyl iodide
U161	108-10-1	Methyl isobutyl ketone (I)
U162	80-62-6	Methyl methacrylate (I,T)
U161	108-10-1	4-Methyl-2-pentanone (I)
U164	56-04-2	Methylthiouracil
U010	50-07-7	Mitomycin C
U059	20830-81-3	5,12-Naphthacenedione, 8-acetyl-10- [(3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopy ranosyl) oxy-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-meth oxy-(8S-cis)-
U167	134-32-7	1-Naphthalenamine
U168	91-59-8	2-Naphthalenamine
U026	494-03-1	Naphthalenamine, N,N'-bis(2-chloroethyl)-
U165	91-20-3	Naphthalene
U047	91-58-7	Naphthalene, 2-chloro-
U166	130-15-4	1,4-Naphthalenedione
U236	72-57-1	2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'- dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)bis [5-amino-4-hydroxy]-, tetrasodium salt
U279	63-25-2	1-Naphthalenol, methylcarbamate.
U166	130-15-4	1,4-Naphthoquinone
U167	134-32-7	alpha -Naphthylamine
U168	91-59-8	beta-Naphthylamine
U217	10102-45-1	Nitric acid, thallium(1+) salt
U169	98-95-3	Nitrobenzene (I,T)
U170	100-02-7	p-Nitrophenol
U171	79-46-9	2-Nitropropane (I,T)
U172	924-16-3	N-Nitrosodi -n-butylamine
U173	1116-54-7	N-Nitrosodiethanolamine
U174	55-18-5	N-Nitrosodiethylamine
U176	759-73-9	N-Nitroso-N-ethylurea

U177	684-93-5	N-Nitroso-N-methylurea
U178	615-53-2	N-Nitroso-N-methylurethane
U179	100-75-4	N-Nitrosopiperidine
U180	930-55-2	N-Nitrosopyrrolidine
U181	99-55-8	5-Nitro-o-toluidine
U193	1120-71-4	1,2-Oxathiolane, 2,2-dioxide
U058	50-18-0	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide
U115	75-21-8	Oxirane (I,T)
U126	765-34-4	Oxiranecarboxyaldehyde
U041	106-89-8	Oxirane, (chloromethyl)-
U182	123-63-7	Paraldehyde
U183	608-93-5	Pentachlorobenzene
U184	76-01-7	Pentachloroethane
U185	82-68-8	Pentachloronitrobenzene (PCNB)
F027	87-86-5	Pentachlorophenol
U161	108-10-1	Pentanol, 4-methyl-
U186	504-60-9	1,3-Pentadiene (I)
U187	62-44-2	Phenacetin
U188	108-95-2	Phenol
U048	95-57-8	Phenol, 2-chloro-
U039	59-50-7	Phenol, 4-chloro-3-methyl-
U081	120-83-2	Phenol, 2,4-dichloro-
U082	87-65-0	Phenol, 2,6-dichloro-
U089	56-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-
U101	105-67-9	Phenol, 2,4-dimethyl-
U052	1319-77-3	Phenol, methyl -
U132	70-30-4	Phenol, 2,2'-methylenebis[3,4,6-trichloro-
U411	114-26-1	Phenol, 2-(1-methylethoxy)-, methylcarbamate
U170	100-02-7	Phenol, 4-nitro-
See F027	87-86-5	Phenol, pentachloro-
See F027	58-90-2	Phenol, 2,3,4,6-tetrachloro-
See F027	95-95-4	Phenol, 2,4,5-trichloro-
See F027	88-06-2	Phenol, 2,4,6-trichloro-
U150	148-82-3	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-
U145	7446-27-7	Phosphoric acid, lead(2+) salt (2:3)
U087	3288-58-2	Phosphorodithioic acid, O,O-diethyl S-methyl ester
U189	1314-80-3	Phosphorus sulfide (R)
U190	85-44-9	Phthalic anhydride
U191	109-06-8	2-Picoline

U179	100-75-4	Piperidine, 1-nitroso-
U192	23950-58-5	Pronamide
U194	107-10-8	1-Propanamine (I,T)
U111	621-64-7	1-Propanamine, N-nitroso-N-propyl-
U110	142-84-7	1-Propanamine, N-propyl- (I)
U066	96-12-8	Propane, 1,2-dibromo-3-chloro-
U083	78-87-5	Propane, 1,2-dichloro-
U149	109-77-3	Propanedinitrile
U171	79-46-9	Propane, 2-nitro- (I,T)
U027	108-60-1	Propane, 2,2'-oxybis[2-chloro-
U193	1120-71-4	1,3-Propane sultone
See F027	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-
U235	126-72-7	1-Propanol, 2,3-dibromo-, phosphate (3:1)
U140	78-83-1	1-Propanol, 2-methyl- (I,T)
U002	67-64-1	2-Propanone (I)
U007	79-06-1	2-Propenamide
U084	542-75-6	1-Propene, 1,3-dichloro-
U243	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-
U009	107-13-1	2-Propenenitrile
U152	126-98-7	2-Propenenitrile, 2-methyl- (I,T)
U008	79-10-7	2-Propenoic acid (I)
U113	140-88-5	2-Propenoic acid, ethyl ester (I)
U118	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester
U162	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester (I,T)
U373	122-42-9	Propham.
U411	114-26-1	Propoxur.
U387	52888-80-9	Prosulfocarb.
U194	107-10-8	n-Propylamine (I,T)
U083	78-87-5	Propylene dichloride
U148	123-33-1	3,6-Pyridazinedione, 1,2-dihydro-
U196	110-86-1	Pyridine
U191	109-06-8	Pyridine, 2-methyl-
U237	66-75-1	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2- chloroethyl)amino]- 4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-
U164	56-04-2	
U180	930-55-2	Pyrrolidine, 1-nitroso-
U200	50-55-5	Reserpine
U201	108-46-3	
U202	fn1 81-07-2	Saccharin, & salts
U203	94-59-7	Safrole
U204	7783-00-8	Selenious acid
U204	7783-00-8	Selenium dioxide

U205	7488-56-4	Selenium sulfide
U205	7488-56-4	Selenium sulfide SeS2 (R,T)
U015	115-02-6	L-Serine, diazoacetate (ester)
See F027	93-72-1	Silvex (2,4,5-TP)
U206	18883-66-4	Streptozotocin
U103	77-78-1	Sulfuricacid, dimethyl ester
U189	1314-80-3	Sulfur phosphide (R)
See F027	93-76-5	2,4,5-T
U207	95-94-3	1,2,4,5-Tetrachlorobenzene
U208	630-20-6	1,1,1,2-Tetrachloroethane
U209	79-34-5	1,1,2,2-Tetrachloroethane
U210	127-18-4	Tetrachloroethylene
See F027	58-90-2	2,3,4,6-Tetrachlorophenol
U213	109-99-9	Tetra hydrofuran (I)
U214	563-68-8	Thallium(I) acetate
U215	6533-73-9	Thallium(I) carbonate
U216	7791-12-0	Thallium(I) chloride
U216	7791-12-0	Thallium chloride Tlcl
U217	10102-45-1	Thallium(I) nitrate
U218	62-55-5	Thioacetamide
U410	59669-26-0	Thiodicarb.
U153	74-93-1	Thiomethanol (I,T)
U244	137-26-8	Thioperoxydicarbonic diamide [(H2N)C(S)]2S2, tetramethyl -
U409	23564-05-8	Thiophanate-methyl.
U219	62-56-6	Thiourea
U244	137-26-8	Thiram
U220	108-88-3	Toluene
U221	25376-45-8	Toluenediamine
U223	26471-62-5	Toluene diisocyanate (R,T)
U328	95-53-4	o-Toluidine
U353	106-49-0	p-Toluidine
U222	636-21-5	o-Toluidine hydrochloride
U389	2303-17-5	Triallate.
U011	61-82-5	1H-1,2,4-Triazol-3-amine
U227	79-00-5	1,1,2-Trichloroethane
U228	79-01-6	Trichloroethylene
U121	75-69-4	Trichloromonofluoromethane
See F027	95-95-4	2,4,5-Trichlorophenol
See F027	88-06-2	2,4,6-Trichlorophenol

U404	121-44-8	Triethylamine.
U234	99-35-4	1,3,5-Trinitrobenzene (R,T)
U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-
U235	126-72-7	Tris(2,3-dibromopropyl) phosphate
U236	72-57-1	Trypan blue
U237	66-75-1	Uracil mustard
U176	759-73-9	Urea, N-ethyl-N-nitroso-
U177	684-93-5	Urea, N-methyl-N-nitroso-
U043	75-01-4	Vinyl chloride
U248	n1 81-81-2	Warfarin, & salts, when present at concentrations of 0.3% or less
U239	1330-20-7	Xylene (I)
U200	50-55-5	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18- [(3,4,5-trimethoxybenzoyl) oxy]-, methyl ester,(3beta,16beta, 17alpha,18beta,20alpha)-
U249	1314-84-7	Zinc phosphide Z[3]P[2], when present at concentrations of 10% or less

21.0 APPENDIX B| Hazardous Waste HandlingSOP

Hazardous Waste Handling Standard Operating Procedure:

Note: Hazardous waste must only be stored in approved containers.

1. Always wear appropriate chemical resistant gloves when handling hazardous waste.
2. Always wear ANSI approved chemical resistant goggles when handling hazardous waste.
3. Pour hazardous waste into waste storage container using funnel.
4. Hazardous waste storage container must be labeled “CAUTION HAZARDOUS WASTE”
5. Hazardous waste storage container must have list of hazardous wastes and approximate volumes attached to the bottle.
6. Hazardous waste storage containers must be kept in chemical resistant secondary containment.
7. Hazardous waste storage containers should only be moved from point of accumulation to storage facility by authorized personnel.

22.0 APPENDIX C| Disposal of Chemical Bottles SOP

Disposal of Chemical Bottles: SOP

1. Wear appropriate chemical resistant gloves when rinsing empty chemical containers
2. Wear ANSI approved chemical resistant goggles when rinsing empty chemical containers.
3. All empty chemical bottles must be triple rinsed with clean tap water.
4. If the bottle contained a hazardous chemical the rinse water must be collected as a hazardous waste under the Hazardous Waste Collection SOP, and the bottle must be collected and stored as a hazardous waste for proper disposal.
5. If the bottle contained a non-hazardous waste then the rinse water may be poured down the drain and the triple rinsed bottle may be placed in the trash for standard municipal waste disposal.