



## **Pollution Prevention Plan (PPP)**

Pollution Prevention Act 1990

# **METHODIST UNIVERSITY**

## **Environmental Health and Safety Office**

### **Pollution Prevention Plan (PPP)**

**Pollution Prevention Act of 1990**

**Revision 5**  
**May 2018**

**Estimated time to review: 40 – 60 minutes**

## DOCUMENT REVIEW LOG

May 7, 2018.....Annual Update by Dempster  
August 20, 2016..... 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

# POLLUTION PREVENTION PLAN

*For:*

**The Methodist University**

5400 Ramsey Street

Fayetteville, NC 28311

Facility SIC: **6113** (Colleges and Universities)

EPA ID Number: **NCR000146464**

Base Year: **2016**

This Plan Covers Years: 2016 to 2019

*Original Date of Plan: 30 April. 2008*

## Table of Contents

<b>1.0</b>	<b>Certification .....</b>	<b>6</b>
<b>2.0</b>	<b>Policy Statement .....</b>	<b>7</b>
<b>2.1</b>	<b>General Policy Statement .....</b>	<b>7</b>
<b>2.2</b>	<b>Pollution Prevention Guidelines .....</b>	<b>7</b>
<b>2.3</b>	<b>National Security Policy.....</b>	<b>8</b>
<b>2.4</b>	<b>Regulatory Drivers .....</b>	<b>8</b>
<b>2.5</b>	<b>Definition of Hazardous Waste.....</b>	<b>8</b>
<b>3.0</b>	<b>General Information .....</b>	<b>8</b>
<b>3.1</b>	<b>University Organization .....</b>	<b>8</b>
<b>3.2</b>	<b>MU Hazardous Waste Generator Status .....</b>	<b>9</b>
<b>3.2.1</b>	<b>MU EPA ID Number.....</b>	<b>10</b>
<b>4.0</b>	<b>Personnel Information .....</b>	<b>10</b>
<b>5.0</b>	<b>Facility Level Information.....</b>	<b>10</b>
<b>5.1</b>	<b>Hazardous Chemicals at or above Threshold Levels .....</b>	<b>10</b>
<b>5.1.1</b>	<b>SDS for Chemicals at or above Threshold Levels .....</b>	<b>11</b>
<b>5.1.2</b>	<b>LEPC and SERC University Representatives .....</b>	<b>11</b>
<b>5.1.3</b>	<b>Tier II Reporting of Chemicals at or above Threshold Levels .....</b>	<b>11</b>
<b>5.2</b>	<b>Polychlorinated Biphenols in University Transformers .....</b>	<b>11</b>
<b>5.3</b>	<b>Biological Waste .....</b>	<b>11</b>
<b>5.4</b>	<b>Nuclear Materials.....</b>	<b>12</b>
<b>5.5</b>	<b>Production Lines.....</b>	<b>12</b>
<b>6.0</b>	<b>Annual Hazardous Waste Information .....</b>	<b>12</b>
<b>6.1</b>	<b>History of Manifested Waste Disposals .....</b>	<b>12</b>
<b>6.2</b>	<b>Policies and Training Implement to Control Manifested Wastes .....</b>	<b>12</b>
<b>6.3</b>	<b>Other Measures to Reduce and Control Manifested Wastes .....</b>	<b>13</b>
<b>6.3.1</b>	<b>Office of Environmental Health and Safety .....</b>	<b>13</b>
<b>6.3.2</b>	<b>Voluntary EPA Audits .....</b>	<b>13</b>
<b>6.3.3</b>	<b>Environmental Management System .....</b>	<b>14</b>
<b>7.0</b>	<b>Targeting.....</b>	<b>14</b>
<b>7.1</b>	<b>Federal Mandate.....</b>	<b>14</b>
<b>7.2</b>	<b>Methodist University Targeting Policy .....</b>	<b>14</b>

<b>7.3</b>	<b>2013-2014 Specific Scoping and Targeting.....</b>	<b>15</b>
<b>7.3.1</b>	<b>Targeting Goals .....</b>	<b>15</b>
<b>7.3.2</b>	<b>Methodology .....</b>	<b>15</b>
<b>8.0</b>	<b>Pollution Prevention Goal .....</b>	<b>15</b>
<b>9.0</b>	<b>Pollution Prevention Implementation Strategies.....</b>	<b>15</b>
<b>9.1</b>	<b>Enforcement of Pollution Prevention Strategies.....</b>	<b>16</b>
<b>9.1.1</b>	<b>Failure to Correct.....</b>	<b>16</b>
<b>9.2</b>	<b>Specific Recommendations forWaste Minimization .....</b>	<b>16</b>
<b>10.0</b>	<b>Expected Impact on Multimedia Releases .....</b>	<b>16</b>
<b>10.1</b>	<b>Expected Impact of Release of Oil.....</b>	<b>16</b>
<b>10.2</b>	<b>Expected Impact of Release of Chemicals above Threshold Levels ...</b>	<b>17</b>
<b>11.0</b>	<b>APPENDIX A  Acronyms .....</b>	<b>17</b>
<b>12.0</b>	<b>APPENDIX B  EPA P and U Listed Chemicals.....</b>	<b>18</b>
<b>13.0</b>	<b>APPENDIX C  MU Recycling Program .....</b>	<b>37</b>

## 1.0 Certification

### Highest Ranking Corporate Official at Facility:

"I certify under penalty of law that I have read the Pollution Prevention Plan and that the Pollution Prevention Plan is true, accurate and complete to the best of my knowledge."

Originally Signed by: Dr. Elton Hendricks - Signature on File

---

Dr. Ben Hancock  
President of Methodist University

Date

### Highest Ranking Corporate Official at Facility with Direct Operating Responsibility:

"I certify under penalty of law that I am familiar with the Pollution Prevention Plan and that it is the corporate policy of this industrial facility to achieve the goals of the Pollution Prevention Plan."

Originally Signed by: Mr. Gene Clayton – Signature on File

---

Sheila Kinsey  
Vice President for Business Affairs – Planning & Evaluation

Date

## 2.0 Policy Statement

This policy is in compliance with the Pollution Prevention Act of 1990 (Omnibus Budget Reconciliation Act of 1990, Public Law 101–508, 104 Stat. 1388–321 et seq.) (Appendix D).

This plan can be found on the EPA’s website at the following location.

<http://www.epa.gov/p2/pubs/p2policy/act1990.htm>

## 2.1 General Policy Statement

Methodist University is committed to excellence and leadership in protecting the environment. In keeping with this policy, our objective is to eliminate or reduce waste, hazardous waste and emissions and to reduce or eliminate the negative impact of these wastes on current or future generations and the environment. We strive to minimize adverse impact on the various media, air, water, and land through pollution prevention and energy conservation. By successfully preventing pollution at its source, we can achieve cost savings, increase operational efficiencies, and maintain a safe and healthy workplace for our employees, our students, our community and our environment.

## 2.2 Pollution Prevention Guidelines

Methodist University’s Pollution Prevention guidelines include the following:

- Use source reduction where-ever possible to eliminate the generation of hazardous waste.
- Control and eliminate all fugitive releases of hazardous materials.
- Prevent the accidental release of hazardous materials into the environment.
- Reduce and eliminate the generation of waste and emissions at the source is a prime consideration in research, process design, and plant operations. Methodist University is committed to identifying and implementing waste reduction opportunities through encouragement and involvement of all employees.
- Best Management Practices (BMP’s) will be employed at all times.
- Employ technologies and methods, which substitute nonhazardous materials and utilize other source reduction approaches, will be given top priority in addressing all environmental issues.
- Incorporate the reuse and recycling of hazardous waste when-ever feasible.
- Only as a last resort will we dispose of hazardous waste and then only in the safest and most environmentally friendly and regulatory compliant manner
- Demonstrate its global citizenship by adhering to all environmental regulations.



### **2.3 National Security Policy**

Furthermore in compliance with (US EPA, —Strategic Plan for Homeland Security, ll September, 2002 : White Paper on Pollution Prevention and Homeland Security National Pollution Prevention Roundtable) (Appendix E) and, as a matter of National Security, Methodist University is dedicated to preventing purposeful releases of hazardous materials by any person or persons intent upon causing harm to the USA.

### **2.4 Regulatory Drivers**

There are a variety of direct legal and policy drivers that require the implementation of Methodist University's Pollution Prevention Program and its elements. These include the following:

- RCRA 40 CFR 262, 264-265: Hazardous Waste Generator Manifest Certification
- RCRA 40 CFR 270: Hazardous Waste Part B Permit Conditions
- EPCRA 40 CFR 372: Toxic Release Inventory Reporting
- PPA 42 USC 13101: National Pollution Prevention Policy
- CAA 40 CFR 82: Protection of Stratospheric Ozone
- 40 CFR 122: Storm Water Pollution Prevention Plan
- 7 USC 136: Federal Insecticide Fungicide & Rodenticide Act

### **2.5 Definition of Hazardous Waste**

Hazardous Waste is defined as any waste that shows any of the four following characteristics: toxicity, flammability/ignitability, reactivity, corrosivity or is on the EPA List of Lists (list of regulated hazardous chemicals). For complete list of EPA regulated hazardous chemicals see Appendix C of this document.

### **3.0 General Information**

Methodist University is a small university based on a liberal arts tradition. Its primary objective is teaching and there are currently no production facilities at the university. The campus is composed of a 617 acre main campus area that includes 63 buildings, an 18-hole golf course and approximately 200 of the 617 acres are preserved as a natural area. The Methodist Development property which includes BB&T (Branch Banking and Trust) and the Physician's Assistant Program. The university is bounded on the east by US 401 (Ramsey Street) and by the Cape Fear River on the west.

### **3.1 University Organization**

The university is divided into educational and operational facilities.

The education component is composed of 5 undergraduate schools and 2 graduate schools.

The 5 undergraduate schools include:

**The School of Public Affairs** which houses, Communication, Justice Studies, Social Work, Government Studies, Leadership, Political Science, Environmental & Occupational Management, Legal Studies, Military Science, Organizational Communication, Interdisciplinary Studies of Clandestine Laboratories and the Environmental Simulation Center.

**The Reeves School of Business** which houses, Accounting, Professional Accounting, Business Administration, Finance/Economics and Marketing.

**The School of Arts and Humanities** which houses, Art, English and Writing, History, Modern Languages and Literature, Music, Philosophy and Religion, Psychology, Sociology and Theater

**The School of Science and Human Development** which house Biology, Chemistry and Physical Science, Computer Science, Mathematics, Physical Education and Exercise Science, Engineering, and Teacher Education.

**The School of Health Sciences / Graduate School** which houses, Nursing, Athletic Training, and Health Care Administration, Nursing, Physicans Assistant, Physical Therapy, Occupational Therapy.

**The School of Graduate Studies** contains 4 programs, Master of Medical Science in Physician Assistant Studies, Masters in Business Administration, Master of Justice Studies, Masters in Education.

There are also a variety of operational facilities, including: maintenance, grounds, housekeeping, golf course management, food services (managed by the Sodexo Corporation), Monarch Press (the campus print shop), photography lab, health services and administrative services.

### 3.2 **MU 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 a 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 Chemical Hygiene Officer (CHO). 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 maintained by the university's CHO.

### **3.2.1 MU EPA ID Number**

Methodist University has the assigned EPA number: *NCR-000146464*

## **4.0 Personnel Information**

Facility Name: The Methodist University Inc.

Physical Address: 5400 Ramsey St.

Fayetteville, NC 28311

Mailing Address: 5400 Ramsey St. Fayetteville, NC 28311

Phone Number: 910-630-7000

Owner / Operator of the Facility:

Name: Dr. Ben Hancock

Title: President of Methodist University

Phone: (910) 630-7005

Highest Ranking Corporate Official at the Facility:

Name: Dr. Ben Hancock

Title: President of Methodist University

Phone: (910) 630-7005

Highest Ranking Corporate Official with Direct Operating Responsibility:

Name: Sheila Kinsey

Title: Vice President for Business Affairs – Planning & Evaluation

Phone: (910) 630-7007

## **5.0 Facility Level Information**

Coverage of Hazardous Substances

### **5.1 Hazardous Chemicals at or above Threshold Levels**

There are 2 chemicals owned by Methodist University that are above Threshold Levels. The first is Formaldehyde Solution (Formalin) and the second is Sulfuric Acid.

The Formaldehyde Solution is used as a preservative for biological museum specimens and is distributed as a 1 to 2 % solution in the total volume of all of the specimens. These specimens are housed in the biological laboratories in the new and old science building. These specimens are under the care and control of the Department of Biology, School of Science and Human Development on the main campus. A total amount of 900 pounds of Formaldehyde Solution is in the museum specimens.

#### **5.1.1 SDS for Chemicals at or above Threshold Levels**

Safety Data Sheets (SDS) for both Formaldehyde Solution and Sulfuric Acid have been supplied by Methodist University to the local fire department.

#### **5.1.2 LEPC and SERC University Representatives**

Representatives from Methodist University, Janet Bird and Matthew Dempster have been named to the LEPC and the SERC.

#### **5.1.3 Tier II Reporting of Chemicals at or above Threshold Levels**

Tier II reporting has been completed for both Formaldehyde Solution and Sulfuric Acid and will be done annually between Jan 1 and April 30th of each calendar year by the Environmental Safety Officer or their duly assigned representative.

#### **5.2 Polychlorinated Biphenols in University Transformers**

All transformers on campus are owned and operated by the local utility company, Public Works Commission (PWC) of Fayetteville, NC and have been certified PCB (Polychlorinated Biphenols) free.

#### **5.3 Biological Waste**

Biological Waste is generated by the Campus Health Services, the Athletic Trainers and the Physician Assistant Program. Cadavers are used by the Physician Assistants Program in the gross anatomy lab. All biological wastes,

other than cadavers, are incinerated by a contract facility. Cadavers are cremated by a local mortuary service.

#### **5.4 Nuclear Materials**

Methodist University has in the past used and stored nuclear materials on site. The university has completely dismantled all operations that use nuclear materials and all nuclear materials have been removed from the university. The Methodist University community has no intention of using any nuclear materials in the future.

#### **5.5 Production Lines**

Methodist University does not carry out any product production lines. It does however have a variety of teaching laboratories that generate small quantities of regulated hazardous wastes, including, but not restricted to biology, chemistry, art, theater, athletic training and the physician's assistant program.

Hazardous waste is also generated as a by-product of the day-to-day operations of the university. Areas where hazardous waste is generated include: grounds, golf courses, maintenance, housekeeping, print shop, and food services.

#### **6.0 Annual Hazardous Waste Information**

Methodist University was operating as a Conditionally Exempt Small Quantity Generator (CESQG) of Hazardous Waste until Dec. of 2008. At that time Methodist University was granted Small Quantity Generator of Hazardous Waste status and was issued an EPA ID number of *NCR-000146464*.

#### **6.1 History of Manifested Waste Disposals**

All Hazardous Waste Manifests are kept on file in the Director of the Office of Environmental Health and Safety's office.

#### **6.2 Policies and Training Implement to Control Manifested Wastes**

A Methodist University, Hazardous Waste Policy was written and went into effect for all generators of hazardous waste on all properties owned by, The Methodist University, in the fall semester of 2008. This document will be reviewed and updated annually.

A Methodist University, Universal Waste Policy was written and went into effect for all generators of universal waste on all properties owned by, The Methodist University, in the fall semester of 2008. This document will be reviewed and updated as needed due to changes.

A Methodist University, Spill Prevention Control and Countermeasures (SPCC) went into effect for all properties owned by, The Methodist University in the fall semester of 2008. This document will be reviewed and updated annually.

Hazardous Waste Handlers Training and Universal Waste Handlers training was implemented in the fall semester of 2008. All handlers of universal and hazardous wastes will be trained initially and annually thereafter.

SPCC training was implemented in the spring of 2009. All appropriate personnel will receive initial and annual training.

### **6.3 Other Measures to Reduce and Control Manifested Wastes**

The following measures have been implemented at Methodist University in an effort to be environmentally friendly and compliant, while reducing the overall waste generated by the university:

#### **6.3.1 Office of Environmental Health and Safety**

Methodist University is firmly committed and dedicated to ensuring safety and environmental health, for all of our students, staff, visitors, the environment and the general public. In accordance with this policy Methodist University has instituted an Office of Environmental Health and Safety.

Methodist University believes in compliance at all levels and in accordance with EPA policies, OSHA policies and federal law, ultimate responsibility for being in compliance with all environmental laws and regulations, and all OSHA laws and regulations lies with the top administrator of a corporation, President Dr. Ben Hancock Jr..

The Director of Environmental Health and Safety, Matthew Dempster, has the overall responsibility of day to day EPA and OSHA compliance for Methodist University, Inc. and its properties. These duties include, but are not limited to, writing site specific EPA and OSHA plans, maintaining records, designing and implementing appropriate training, EPA and OSHA compliance inspections and overseeing day-to-day compliance

#### **6.3.2 Voluntary EPA Audits**

In the Fall of 2008, The Methodist University and all of its operational properties, including the gross anatomy lab at the VA hospital (which is owned by the federal government, but operated by Methodist University), and Kings Grant Golf Course underwent a complete voluntary EPA audit, under the Small Colleges and

Universities in North Carolina Peer Audit Program. A total of 46 violations were noted. All noted violations were disclosed to the EPA and all violations were corrected. A system was put in place to make sure there is no repeat violation.

### **6.3.3 Environmental Management System**

Methodist University as part of its commitment to Environmental Excellence has put in place an Environmental Management System. This system is all encompassing and will include plans, policies, inspections, training and the implementation of BMP's to ensure compliance with all EPA and OSHA rules, regulations and law. And to reduce overall wastes generated by the university and its activities.

## **7.0 Targeting**

### **7.1 Federal Mandate**

The federal government has mandated the source reduction of hazardous waste (42 USC 13101.6603(5)(a)). The term source reduction means any practice which— (i) reduces the amount of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment, or disposal; and (ii) reduces the hazards to public health and the environment associated with the release of such substances, pollutants, or contaminants. The term includes equipment or technology modifications, processor procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control. (B) The term source reduction does not include any practice which alters the physical, chemical, or biological characteristics or the volume of a hazardous substance, pollutant, or contaminant through a process or activity which itself is not integral to and necessary for the production of a product or the providing of a service.

### **7.2 Methodist University Targeting Policy**

Methodist University will target the over-all reduction of hazardous wastes generated. All areas of the university from classroom instruction through day to day operations will be examined to determine the most effective pollution reduction strategy. Methodist University targets a minimum of 90% of all hazardous waste streams even though the EPA no longer regulates that anyone targets 90% of waste generated, due to the removal of section 6604.7 of the law, in the amendments passed in 2006. Beyond that MU will examine all waste streams, whether hazardous or not for potential source reduction strategies and BMP's.

Sources of waste and reduction strategies will be identified through a variety of methods, including, but not limited to:

- Direct observation of waste streams
- Employee input
- Examination of purchasing records
- Examination of hazardous waste manifests
- Waste Minimization Audit Survey (Appendix A)

### **7.3 Specific Scoping and Targeting**

The Methodist University Environmental Compliance Team (see Appendix F: Environmental Compliance Team Members) has targeted the specific items for the 2013-2014 academic year:

#### **7.3.1 Targeting Goals**

- Identify all acutely hazardous waste streams on Methodist University Campus
- Ensure that all acutely hazardous waste disposal on M.U. campus stays with the <1 kg allowable per calendar month allowable as an SQG.

#### **7.3.2 Methodology**

- All departments/areas of Methodist University will update their online chemical inventories by 15 Dec. 2010
- The inventory will be searched by ENM majors for all acutely hazardous chemicals by 15 May 2011
- All departments/areas using/owning acutely hazardous chemicals will be specifically notified of the acutely hazardous chemicals in their possession by the EHS officer by 1 June 2011 and will be reminded of all applicable, laws, regulations and policies regarding the usage and disposal of the aforementioned chemicals.

### **8.0 Pollution Prevention Goal**

The Goal of the MU Pollution Plan is to reduce the overall end-of-pipe production of hazardous wastes, through a variety of strategies, while maintaining excellence of education and allowing the daily operations of the university to not only continue but become more efficient.

### **9.0 Pollution Prevention Implementation Strategies**

Each area of campus has been inspected and waste streams identified. Biannual inspections of each area will be completed and all waste streams verified, new waste streams will be identified during the inspections.



The campus wide initiatives for recycling initiatives have been put in place. See Appendix G: Recycling on Campus Responsibility for specific buildings fall under the environmental compliance team members, See Appendix H: Recycling Responsibilities

The following charts specify the Pollution Prevention Implementation Strategies for the campus. The areas are divided into, Maintenance, Grounds, Golf Course, House-keeping, Science, Health Services, Art Department & Print Shop, Physical Activities & Athletic Training, and AllOthers.

## **9.1 Enforcement of Pollution Prevention Strategies**

Each of the above 9 areas have listed House-keeping directives, Best- Management Practices (BMPs) and Waste Management directives. All BMP's and Waste Management Directives will be followed precisely. Any deviations will be reported or documented upon discovery, each area/department and that area/departments' chain of command will be informed of deviations from BMP's or waste management strategies and corrective measures will be implemented by that area/department. EHS team members will conduct a follow-up inspection to ensure full compliance.

### **9.1.1 Failure to Correct**

Any failure to correct noted discrepancies will be note. The EHS Officer will be immediately notified. She will then notify all members in that areas chain of command that the situation has not been rectified. A second follow-up inspection will occur within 10 work days. Failure to rectify the situation will result in progressive enforcement.

## **9.2 Specific Recommendations for Waste Minimization**

Each area of campus has included in the following list, recommendations for waste minimization, based on three areas, Housekeeping, Best Management Practices (BMPs), & Waste Management

## **10.0 Expected Impact on Multimedia Releases**

The expected impact of accidental spill or release of any chemicals from Methodist University is minimal.

## **10.1 Expected Impact of Release of Oil**

There is no expected multi-media impact on the accidental spill or release of oil from any oil storage locations on the Methodist University Campus. All oil storage

is a minimum of one half mile from any navigable body of water. All oil storage at or above 55 gallons has secondary containment and an oil spill containment and mitigation plan is in place in case of accidental release.

## 10.2 Expected Impact of Release of Chemicals above Threshold Levels

No chemicals on the Methodist University are stored at or above threshold levels therefore there is no expected impact of these chemicals.

## 11.0 APPENDIX A| Acronyms

BB&T	Branch Banking & Trust
BMP's	Best Management Practices
CAA	Clean Air Act
CESQG	Conditionally Exempt Small Quantity Generator
CFC	Chloroflouro Carbons
CFR	Code of Federal Regulations
CHO	Chemical Hygiene Officer
CHP	Chemical Hygiene Plan
CWA	Clean Water Act
EHS	Environmental Health and Safety
EPA	Environmental Protection Agency
EPA-ID	EPA Identification Plan for Hazardous Waste TSD's
EPCRA	Emergency Planning Community Right-to-Know Act
ENM	Environmental and Occupational Management
FIFRA	Federal Insecticide Fungicide & Rodenticide Act
HWMP	Hazardous Waste Management Plan
ID	Identification Number
LEPC	Local Emergency Planning Commission
LQG	Large Quantity Generator

MMS	Master of Medical Science
MSW	Municipal Solid Waste
MU	Methodist University
OPEC	Organization of the Petroleum Exporting Countries
PA	Physicians Assistant
PCB	Polychlorinated Biphenols
POTWS	Publicly Owned Treatment Works
PPA	Pollution Prevention Act
PWC	Public Works Commission
RCRA	Resource Conservation Recovery Act SERC State Emergency Response Commission
SDS	Safety Data Sheets
SPCC	Spill Prevention Control & Countermeasures
SQG	Small Quantity Generator
SVA	Security Vulnerability Assessment
TAPS	Technical Assistance Providers
TRI	Toxic Release Inventory
TSD	Transport Storage and Disposal Facility
USC	United States Code
UWMP	Universal Waste Management Plan
VA	Veterans Administration

## 12.0 APPENDIX B| EPA P and U Listed Chemicals

### 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) <sub>2</sub>
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-Dimethanonapht halene, 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-Dimethanonapht halene, 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-Dimethanonapht h[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-Dimethanonapht h [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-Dimethylphenet hylamine
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	Diphosphoramidate, 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	Ethanimidothioc 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-Methylactonitrile
P071	298-00-0	Methyl parathion
P190	1129-41-5	Metolcarb.
P128	315-18-4	Mexacarbate.
P072	86-88-4	alpha-Naphthylthiourea
P073	13463-39-3	Nickel carbonyl
P073	13463-39-3	Nickel carbonyl Ni(CO) <sub>4</sub> , (T-4)-
P074	557-19-7	Nickel cyanide
P074	557-19-7	Nickel cyanide Ni(CN) <sub>2</sub>
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 NO <sub>2</sub>
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 OsO <sub>4</sub> , (T-4)-
P087	20816-12-0	Osmium tetroxide
P088	145-73-3	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic 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 acid, O,O-dimethyl ester
P040	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
P097	52-85-7	Phosphorothioic acid, O-[4-[(dimethylamino) sulfonyl]phenyl]O,O-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 Tl <sub>2</sub> O <sub>3</sub>
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 [(H <sub>2</sub> N)C(S)] <sub>2</sub> NH
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 V <sub>2</sub> O <sub>5</sub>
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(dimethylcarbamo-dithioato-S,S )-
P121	557-21-1	Zinc cyanide
P121	557-21-1	Zinc cyanide Zn(CN) <sub>2</sub>
P122	1314-84-7	Zinc phosphide Z <sub>3</sub> P <sub>2</sub> , 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-dim ethyl-2-propy nyl)-
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 (l)
U159	78-93-3	2-Butanone (l,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- (l,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 (l)
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-ethanediybis-,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 (l,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-Chloronapht halene
U048	95-57-8	o-Chlorophenol
U049	3165-93-3	4-Chloro-o-toluidine, hydrochloride
U032	13765-19-0	Chromic acid H <sub>2</sub> CrO <sub>4</sub> , 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,5alpha,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 (l)
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-(l)
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,4,5,5a,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-methyluret hane
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 SeS <sub>2</sub> (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	Sulfuric acid, 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	Tetrahydrofuran (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 [(H <sub>2</sub> N)C(S)] <sub>2</sub> S <sub>2</sub> , 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

### 13.0 APPENDIX C| MU Recycling Program

**INSERT DIAGRAM HERE**