ATTACHMENT B

Section F
Preparedness & Prevention
Sub-Sections 1.0 – 1.3
Security

(The contents of Attachment A have been derived from the Permit application submitted by CWM Chemical Services, L.L.C.)

[*NOTE: Attachment B is **NOT** being modified. It is presented in association with the Draft RMU-2 landfill modification since some of the requirements contained in this attachment are or may be applicable to the proposed units.*]

1.0 SECURITY [6 NYCRR 373-1.5(a)(2)(iv) and (v)], [6 NYCRR 373-2.2(f)]

1.1 24-hour Surveillance System

The primary access to the facility is via the main entrance off Balmer Road. This entrance is used by plant employees, contractors, waste haulers, suppliers, salesmen, and visitors. The main entrance gate is monitored 24 hours a day by one or more security guards who stops all trucks or other vehicles entering and leaving the facility. The guardhouse is equipped with telephone and radio communications. All hazardous waste shipments are stopped at this checkpoint.

Prior to admittance to the facility, all visitors or drivers must provide information including name, business affiliation, reason for visit, person whom visiting, and date and time of entry and exit. All plant visitors, contractors, vendors, and other nonfacility personnel are recorded by the guard in the visitor logbook prior to entry. Unauthorized access to the facility is prevented by the security guard. In addition, the entrance/exit gates may be closed and locked, if necessary.

1.2 Barrier and Means to Control Entry [6 NYCRR 373-2.2(f)(2)(ii)(a) and (b)]

In addition to the 24-hour security surveillance at the main entrance to the facility, the entire Model City Facility is enclosed with wire chain link fencing to prevent accidental or unauthorized access to active portions of the facility. The Balmer Road gate is controlled by the security guard, as described above. The alternate plant entrance is located on Balmer Road across from Lutts Road. All gates in the perimeter fence with roadway access from public thoroughfares to the active portion of the facility, except the main gate, are kept securely locked at all times when not in use. Whenever any of these gates is opened, a CWM employee or a security officer is stationed at these gates to record the name, date, and time of persons entering or leaving the facility.

Upon entry to and exit from the facility, all vehicles are required to show identification (for facility personnel) or sign in/out with the security guard. Consequently, the security guard maintains a complete and accurate record of who is on-site at any particular point in time.

1.3 Warning Signs [6 NYCRR 373-2.2(f)(3)]

Warning signs bearing the legend "DANGER - Unauthorized Personnel Keep Out" are posted at the entrance to the facility and at intervals on the fencing surrounding the facility. Warning signs are clearly legible from a distance of 25 feet and can be seen from any approach to the facility. A large sign is present at the Balmer Road entrance to the facility which describes the minimum safety precautions which must be followed at all times on-site. Facility buildings are posted with "DANGER -- Unauthorized Personnel Keep Out" signs. Required signs are posted on all appropriate tankage. Other warning signs such as "No Smoking" signs and personal protective equipment requirements are posted throughout the facility in appropriate locations. Traffic control signs are also posted throughout the facility.

ATTACHMENT C

Section C
Waste Analysis Plan

(The contents of Attachment C have been derived from the Permit application submitted by CWM Chemical Services, L.L.C.)

[*NOTE: Attachment C is **NOT** being modified. It is presented in association with the Draft RMU-2 landfill modification since some of the requirements contained in this attachment are or may be applicable to the proposed units.*]

WASTE CHARACTERISTICS

AND

ANALYSIS PLAN

FOR

CWM CHEMICAL SERVICES, LLC
1550 BALMER ROAD
MODEL CITY, NEW YORK 14107
EPA ID #NYD049836679

July 2013
Revised
November 2013

Modified: Dec. 2013

WASTE ANALYSIS PLAN

TABLE OF CONTENTS

TABLE C-4

SECTION C
WASTE CHARACTERISTICS

This section describes the chemical and physical nature of the hazardous wastes received and managed at the facility and provides the facility's Waste Analysis Plan. This information is provided in accordance with 6 NYCRR Subpart 373-2.2(e).

C-1 Chemical and Physical Characteristics

The facility receives and manages virtually every type of hazardous waste identified in 6 NYCRR Subpart 371. The waste received in bulk, drums, or other containers generally fall within the following categories of materials:

- Wastewaters - acidic, basic, or neutral solutions generally containing heavy metals and/or low levels of soluble organics. These materials are usually treated in the aqueous treatment facility, qualified in a facultative pond and then discharged to the Niagara River via the facility SPDES permit.

- Inorganic solids and sludges - frequently contain or are contaminated with heavy metals. They are managed in the secure landfill.

- Solids with organic contamination - generally consists of dirt or debris with organic contamination, suitable for landfill disposal.

- Organic solids and sludges not suitable for landfill disposal in NYS are generally managed off-site.

- Organic liquids such as halogenated and nonhalogenated solvents are generally blended and shipped to incineration facilities. PCB containing liquids are managed separately.

Each hazardous waste received by the facility has been characterized and classified with the proper EPA hazard code(s) by the generator (see Tables C-1 and C-2). A list of the EPA hazard codes, along with an indication of their hazardous characteristics and the basis for listing is presented in Table C-1. Also included in this table is a listing of the typical treatment/disposal options that may be used to process each listed waste. The actual treatment/disposal technique would depend on items such as the concentrations and quantity of the listed compound, its other waste components, physical state and the matrix (water, soil, debris, etc.). Landfill disposal limits, as outlined in the facility's landfill operating permit, includes the following restrictions:

1. The flash point must be greater than 140°F.
2. The pour point must be greater than 75°F.

3. Only Package Lab Chemicals containing non-hazardous wastes or materials that meet the LDR standards will be disposed of in the landfill. "Packaged Lab Chemicals (PLC's) containing hazardous wastes requiring treatment will be processed by decanting for WWT or fuels blending, stabilization or other treatment or they will be stored and transferred off-site for alternate disposal such as incineration. Hazardous waste PLCs with free liquids will be disposed of in the landfill in accordance with 6NYCRR 373-2.14(j) and (l). Non-hazardous PLCs will be managed in general accordance with 6NYCRR 373-2.14(j) and (l) except that the outside container will be DOT-specification in accordance with 49CFR 173.12(b).
4. No wastes containing explosives, shock sensitive, or pyrophoric substances may be disposed of in the landfill[1]. In addition, no compressed gases, compressed liquids or infectious agents may be disposed of in the landfill.
5. Wastes may not contain greater than 2% "Organic Limit", unless otherwise authorized by the Department as prescribed in condition E.1.c.i in Exhibit F of Schedule 1 of Module I of the Sitewide Part 373 Permit. Wastes containing greater than 2% of non-target organic compounds will be submitted on a case-by-case basis to the NYSDEC for land disposal approval.
6. Any wastes containing trace levels of radioactive material that reads slightly above background may not be land disposed without NYSDEC approval. Wastes with higher levels of radioactivity are prohibited from land disposal.
7. Containers containing common contaminant compounds that have a solubility in water at 25°C in excess of 10% by weight of the waste, shall be surrounded by containers with insoluble contents when placed in the landfill. Bulk loads containing >10% solubles shall be spread thin.
8. Cyanide and sulfide containing wastes characterized as reactive (D003) will not be landfilled. Wastes that yield a positive cyanide or sulfide test result, using the screening procedures in Section C-2h(1) will be tested using SW-846 method 9010 or 9030. Wastes that are found to yield values of a 1,000 ppm or greater for either "Cyanide Amenable to Chlorination", or "Total Sulfide" may not be disposed of in the landfill. Total cyanide test results of <1000 ppm may be used to approve waste streams for landfill disposal, as amenable cyanide is a subset of total cyanide.

9. All PCB wastes will be managed in accordance with 40 CFR Part 761 and 6NYCRR 371.4(e).

[1] Explosive, shock sensitive and pyrophoric substances, as defined by the following references:

- Hawley's Condensed Chemical Dictionary, eleventh edition (or most recent), Sax, N. Irving and Lewis, Richard J., Van Nostrand Reinhold Co., NY, NY, 1987.
- Dangerous Properties of Industrial Materials, sixth edition (or most recent), Sax, N. Irving, Van Nostrand Reinhold Co., NY, NY, 1984.
- Fire Protection Guide on Hazardous Materials, eighth edition (or most recent), National Fire Protection Association, Quincy, MA, 1984.
- Chemistry of Hazardous Materials, Eugene Meyer, Prentice-Hall, Inc., Englewood Cliffs, NY, 1977 (or most recent version).
- Code of Federal Regulations, 49 CFR Part 172.

10. Spent solvents and dioxins: No current production wastes or outdated products with the codes F020-F023, F026-F027 wastes shall be disposed of in the landfill. Only wastes that are derived from these codes such as a water treatment sludge from the treatment of leachate may be land disposed.

11. "All RCRA hazardous solids for which LDR Standard exist, will be managed in compliance with these treatment standards as listed in NYCRR, Part 376 and 40 CFR 268."

12. Suitability for landfill disposal will be dependent upon any future hazardous waste regulations.

13. All wastes for land disposal will be approved by the NYSDEC.

14. No material that is organic/combustible (e.g., grease) shall be designated for disposal in the acid generating/oxidizer area of the landfill. Combustibles that are part of the actual acid generating or oxidizer waste stream or its packaging (e.g., persulfate contaminated paper bags) may be designated for disposal in the acid generating/oxidizer area of the landfill, if approved by NYSDEC.

15. No electronic waste (e-waste) as defined under ECL § 27-2601 shall be disposed of in the landfill pursuant to the ban under ECL § 27-2611.

In general, for treatment, storage or disposal, the facility will not accept (except for trace levels slightly above background, approved by the NYSDEC) radioactive, shock sensitive, pyrophoric or etiologic wastes. The facility also receives and manages industrial waste which are not a hazardous waste as defined in 6 NYCRR 371.2. These waste also generally fall within one of the above-listed categories of materials and are managed in accordance with the procedures outlined in this WAP. Landfill candidate nonhazardous wastes are subject to the same landfill disposal restrictions as are hazardous waste. Analytical procedures for non-hazardous wastes may be modified on a case by case basis with the approval of the profile approval request by the NYSDEC on-site monitor.

TABLE C-1

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY (B, D, F, AND K DESIGNATION)**

NYS Hazardous Waste No.	Waste Common Name	Basis for Listing Hazardous Waste	TSD(1)(2) Option
B001	PCB Oil (concentrated)	Toxic	B
B002	Petroleum Oil or other liquids (50 to 500 ppm)	Toxic	B
B003	Petroleum Oil or other liquids (greater than 500 ppm)	Toxic	B
B004	PCB Articles (50 to 500 ppm)	Toxic	B,L
B005	PCB Articles (greater than 500 ppm)	Toxic	B,L
B006	PCB Transformers	Toxic	B,L
B007	Other PCB Wastes	Toxic	B,L

**All footnotes may be referenced at the end of Table C-2 of the Waste Analysis Plan.

TABLE C-1

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY (B, D, F AND K DESIGNATION)**

EPA Hazardous Waste No.	Waste Common Name	Basis for Listing Hazardous Waste	TSD(1)(2) Option
D001	Ignitable waste	Ignitable	L,B,AT
D002	Corrosive waste	Corrosive	L,B,AT
D003	Reactive waste	Reactive	L,T
D004	Arsenic	Toxicity Characteristic	L,AT,B
D005	Barium	Toxicity Characteristic	L,AT,B
D006	Cadmium	Toxicity Characteristic	L,AT,B
D007	Chromium	Toxicity Characteristic	L,AT,B
D008	Lead	Toxicity Characteristic	L,AT,B
D009	Mercury	Toxicity Characteristic	L,AT,B
D010	Selenium	Toxicity Characteristic	L,AT,B
D011	Silver	Toxicity Characteristic	L,AT,B
D012	Endrin	Toxicity Characteristic	T,B,L
D013	Lindane	Toxicity Characteristic	T,B,L

TABLE C-1

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY
(B, D, F AND K DESIGNATION)**

EPA Hazardous Waste No.	Waste Common Name	Basis for Listing Hazardous Waste	TSD(1)(2) Option
D014	Methoxychlor	Toxicity Characteristic	T,B,L
D015	Toxaphene	Toxicity Characteristic	T,B,L
D016	2,4-D	Toxicity Characteristic	T,B,L
D017	2,4,5-TP Silvex	Toxicity Characteristic	T,B,L
D018	Benzene	Toxicity Characteristic	B,T,L,AT
D019	Carbon Tetrachloride	Toxicity Characteristic	B,T,L,AT
D020	Chlordane	Toxicity Characteristic	B,T,L,AT
D021	Chlorobenzene	Toxicity Characteristic	B,T,L,AT
D022	Chloroform	Toxicity Characteristic	B,T,L,AT
D023	o-cresol	Toxicity Characteristic	B,T,L,AT
D024	m-cresol	Toxicity Characteristic	B,T,L,AT
D025	p-cresol	Toxicity Characteristic	B,T,L,AT
D026	Cresol	Toxicity Characteristic	B,T,L,AT

TABLE C-1

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY
(B, D, F AND K DESIGNATION)**

EPA Hazardous Waste No.	Waste Common Name	Basis for Listing Hazardous Waste	TSD(1)(2) Option
D027	1,4-Dichlorobenzene	Toxicity Characteristic	B,T,L,AT
D028	1,2-Dichloroethylene	Toxicity Characteristic	B,T,L,AT
D029	1,1-Dichloroethylene	Toxicity Characteristic	B,T,L,AT
D030	2,4-Dinitrotoluene	Toxicity Characteristic	B,T,L,AT
D031	Heptachlor	Toxicity Characteristic	B,T,L,AT
D032	Hexachlorobenzene	Toxicity Characteristic	B,T,L,AT
D033	Hexachloro-1,3-butadiene	Toxicity Characteristic	B,T,L,AT
D034	Hexachloroethane	Toxicity Characteristic	B,T,L,AT
D035	Methyl Ethyl Ketone	Toxicity Characteristic	B,T,L,AT
D036	Nitrobenzene	Toxicity Characteristic	B,T,L,AT
D037	Pentachlorophenol	Toxicity Characteristic	B,T,L,AT
D038	Pyridine	Toxicity Characteristic	B,T,L,AT
D039	Tetrachloroethylene	Toxicity Characteristic	B,T,L,AT

TABLE C-1

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY
(B, D, F AND K DESIGNATION)**

EPA Hazardous Waste No.	Waste Common Name	Basis for Listing Hazardous Waste	TSD(1)(2) Option
D040	Trichloroethylene	Toxicity Characteristic	B,T,L,AT
D041	2,4,5-Trichlorophenol	Toxicity Characteristic	B,T,L,AT
D042	2,4,6-Trichlorophenol	Toxicity Characteristic	B,T,L,AT
D043	Vinyl Chloride	Toxicity Characteristic	B,T,L,AT

TABLE C-1

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY
(B, D, F, AND K DESIGNATION)**
(Continued)

EPA Hazardous Waste No.	Waste Common Name	Basis for Listing Hazardous Waste	TSD(1)(2) Option
F001	Spent Halogenated Solvents	Toxic	B,T,L,AT
F002	Spent Halogenated	Toxic	B,T,L,AT
F003	Spent non-halogenated solvents	Ignitable	B,T,L,AT
F004	Spent non-halogenated solvents	Toxic	B,T,L,AT
F005	Spent non-halogenated solvents	Ignitable, Toxic	B,T,L,AT
F006	Wastewater treatment sludges from electroplating	Toxic	L,AT
F007	Spent cyanide plating bath; solutions from electroplating	Reactive, Toxic	AT,L
F008	Plating bath sludges	Reactive, Toxic	AT,L
F009	Spent stripping and and cleaning bath solutions from electroplating	Reactive, Toxic	AT,L

TABLE C-1

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY
(B, D, F AND K DESIGNATION)**
(Continued)

EPA Hazardous Waste No.	Waste Common Name	Basis for Listing Hazardous Waste	TSD(1)(2) Option
F010	Quenching bath sludges from oil baths from metal heat treating	Reactive, Toxic	T,L
F011	Spent cyanide solutions from salt bath cleaning from metal heat treating	Reactive, Toxic	AT,L
F012	Quenching wastewater treatment sludges from metal heat treating	Toxic	L,AT
F019	Wastewater treatment sludges	Toxic	L,AT
F020(4)	Wastes from the production or use of tri- or tetrachlorophenol	Acute Hazardous	AT,L,T
F021(4)	Wastes from the production or use of pentachlorophenol	Acute Hazardous	AT,L,T
F022(4)	Wastes from the manufacturing of tetra-, penta-, or hexachlorobenzenes	Acute Hazardous	AT,L,T

TABLE C-1

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY
(B, D, F AND K DESIGNATION)**
(Continued)

EPA Hazardous Waste No.	Waste Common Name	Basis for Listing Hazardous Waste	TSD(1)(2) Option
F023(4)	Wastes from the production of materials or equipment previously used for the production of use of tri- and tetrachlorophenols	Acute Hazardous	AT,L,T
F024	Wastes, including but not limited to distillation residues, heavy ends, tars, and reactor cleanout wastes	Toxic	B,L,T
F025	Condensed light ends and other wastes from the production of certain chlorinated aliphatic hydrocarbons	Toxic	B,L,T
F026(4)	Wastes from the production of materials on equipment previously used for the use of tetra-, penta-, or hexachlorobenzene	Acute Hazardous	AT,L,T
F027(4)	Discarded unused formulations containing tri, tetra-, or pentachlorophenol	Acute Hazardous	AT,L,T

TABLE C-1

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY
(B, D, F AND K DESIGNATION)**
(Continued)

EPA Hazardous Waste No.	Waste Common Name	Basis for Listing Hazardous Waste	TSD(1)(2) Option
F028(4)	Residues from the incineration or thermal treatment of soil with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027	Toxic	AT,L,T
F032	Wastewaters, process residuals, drippage &spent formulations from wood preserving using chlorophenolic formulations	Toxic	B, T, L
F034	Same as above, substitute creosote for chlorophenolic	Toxic	B, T, L
F035	Same as above, substitute preservatives containing arsenic or chromium	Toxic	B, T, L
F037	Petroleum refinery oil/water/ solids separation sludge	Toxic	B, T, L
F038	Petroleum refinery secondary (emulsified) oil/water/solids separation sludge	Toxic	B, T, L
F039	Multisource Leachate	Toxic	AT,B,L

TABLE C-1

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY
(B, D, F AND K DESIGNATION)**
(Continued)

EPA Hazardous Waste No.	Waste Common Name	Basis for Listing Hazardous Waste	TSD(1)(2) Option
K001	Bottom sediment sludge	Toxic	T,L
K002	Wastewater treatment sludge	Toxic	L,AT
K003	Wastewater treatment sludge	Toxic	L,AT
K004	Wastewater treatment sludge	Toxic	L,AT
K005	Wastewater treatment sludge	Toxic	L,AT
K006	Wastewater treatment sludge	Toxic	L,AT
K007	Wastewater treatment sludge	Toxic	L,AT
K008	Oven Residue	Toxic	L,AT
K009	Distillation bottoms	Toxic	B,T,L
K010	Distillation side cuts	Toxic	B,T,L
K011	Bottom stream from wastewater stripper	Reactive, Toxic	T,L

TABLE C-1

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY
(B, D, F AND K DESIGNATION)**
(Continued)

EPA Hazardous Waste No.	Waste Common Name	Basis for Listing Hazardous Waste	TSD(1)(2) Option
K013	Bottom stream from acetonitrile column	Reactive, Toxic	B,T,L
K014	Bottoms from acetonitrile purification	Toxic	B,T,L
K015	Still bottoms from distillation	Toxic	B,T,L
K016	Heavy ends or distillation residue	Toxic	B,T,L
K017	Heavy ends (still bottoms)	Toxic	B,T,L
K018	Heavy ends	Toxic	B,T,L
K019	Heavy ends	Toxic	B,T,L
K020	Heavy ends	Toxic	B,T,L
K021	Aqueous spent antimony catalyst	Toxic	L,T
K022	Distillation bottom tars	Toxic	B,T,L
K023	Distillation light ends	Toxic	B,T,L

TABLE C-1

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY (B, D, F AND K DESIGNATION)**
(Continued)

EPA Hazardous Waste No.	Waste Common Name	Basis for Listing Hazardous Waste	TSD(1)(2) Option
K024	Distillation bottoms	Toxic	B,T,L
K025	Distillation bottoms	Toxic	B,T,L
K026	Stripping still tails	Toxic	B,T,L
K027	Centrifuge and distillation residues from TDI	Reactive, Toxic	T,L
K028	Spent catalyst	Toxic	T,L
K029	Product steam stripper	Toxic	B,T,L
K030	Column bottoms or heavy ends	Toxic	B,T,L
K031	By-product salts	Toxic	T,L
K032	Wastewater treatment sludge	Toxic	AT,T,L
K033	Wastewater and scrub water	Toxic	AT,B,T,L
K034	Filter solids	Toxic	T,L
K035	Wastewater treatment sludges	Toxic	T,L

TABLE C-1

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY
(B, D, F, AND K DESIGNATION)**
(Continued)

EPA Hazardous Waste No.	Waste Common Name	Basis for Listing Hazardous Waste	TSD(1)(2) Option
K036	Still bottoms	Toxic	B,T,L
K037	Wastewater treatment washing and stripping	Toxic	L,T
K038	Wastewater from washing and stripping	Toxic	AT,B,T,L
K038	Distillation bottoms	Toxic	B,T,L
K039	Filter cake	Toxic	L,T
K040	Wastewater treatment sludge	Toxic	L,T
K041	Wastewater treatment sludge	Toxic	L,T
K042	Heavy ends or distillation residues	Toxic	B,T,L
K043	2,6 dichlorophenol waste	Toxic	B,T,L
K044	Wastewater treatment sludges	Reactive	L (if non-reactive)

TABLE C-1

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY
(B, D, F, AND K DESIGNATION)**
(Continued)

EPA Hazardous Waste No.	Waste Common Name	Basis for Listing Hazardous Waste	TSD(1)(2) Option
K045	Spent Carbon	Reactive	T,L (if non-reactive)
K046	Wastewater treatment sludges	Toxic	L
K047	Pink/redwater	Reactive	AT,B,L (if non-reactive)
K048	DAF/float	Toxic	B,AT,T,L
K049	Slop oil emulsion solids	Toxic	B,AT,T,L
K050	Heat exchanger bundle cleaning sludge	Toxic	B,AT,T,L
K051	API separator sludge	Toxic	B,AT,T,L
K052	Tank bottoms	Toxic	B,AT,T,L
K060	Ammonia still lime sludge	Toxic	L
K061	Emission control dust/sludge	Toxic	L
K062	Spent pickle liquor	Corrosive, toxic	AT,L

TABLE C-1

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY
(B, D, F, AND K DESIGNATION)**
(Continued)

EPA Hazardous Waste No.	Waste Common Name	Basis for Listing Hazardous Waste	TSD(1)(2) Option
K064	Copper Production - Acid Plant blowdown sludge from thickening	Toxic	L,T
K065	Lead Smelting - surface impoundment solids and sludges	Toxic	L,T
K066	Zinc Production - Sludge from treatment of wastewater, acid plant waste	Toxic	L,T
K069	Emission control dust/sludge	Toxic	L
K071	Brine purification muds	Toxic	L,AT
K073	Chlorinated hydro-carbon wastes	Toxic	B,T,L
K083	Aniline wastes	Toxic	B,T,L
K084	Wastewater treatment sludges	Toxic	L,T
K085	Distillation or fraction-ation column bottoms	Toxic	B,T,L
K086	Solvent washes and sludges	Toxic	B,AT,L,T

TABLE C-1

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY
(B, D, F, AND K DESIGNATION)**
(Continued)

EPA Hazardous Waste No.	Waste Common Name	Basis for Listing Hazardous Waste	TSD(1)(2) Option
K087	Decanter tank tar sludge	Toxic	B,T,L
K088	Spent Potliner	Toxic	L,T
K088	Aluminum Reduction - spent potliners from primary aluminum reduction	Toxic	L,T
K090	Ferro-Chromium Silicon Production - emission control dust or sludge	Toxic	L,T
K091	Ferro-Chromium Production-emission control dust or sludge	Toxic	L,T
K093	Distillation light ends	Toxic	B,T,L
K094	Distillation bottoms	Toxic	B,T,L
K095	Distillation bottoms	Toxic	B,T,L
K096	Heavy ends	Toxic	B,T,L
K097	Vacuum stripper discharger	Toxic	B,T,L

TABLE C-1

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY
(B, D, F, AND K DESIGNATION)**
(Continued)

EPA Hazardous Waste No.	Waste Common Name	Basis for Listing Hazardous Waste	TSD(1)(2) Option
K098	Untreated process wastewater	Toxic	AT,B,T,L
K099	Untreated wastewater	Toxic	AT,B,T,L
K100	Waste leaching solution	Toxic	AT,L
K101	Distillation tar residues	Toxic	B,T,L
K102	Residue from activated carbon	Toxic	L,T
K103	Process residues	Toxic	B,T,L
K104	Combined wastewater	Toxic	B,T,AT,L
K105	Separated aqueous stream from product washing step of chlorobenzenes	Toxic	B,T,L
K105	Separated aqueous stream	Toxic	B,T,AT,L
K106	Wastewater treatment sludge	Toxic	L,AT

TABLE C-1

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY
(B, D, F, AND K DESIGNATION)**
(Continued)

EPA Hazardous Waste No.	Waste Common Name	Basis for Listing Hazardous Waste	TSD(1)(2) Option
K107(5)	Column bottoms from 1,1-dimethyl-hydrazine production	Corrosive, Toxic	B,T,AT,L
K108(5)	Condensed column overheads from 1,1-dimethyl-hydrazine production	Ignitable, Toxic	B,T,AT,L
K109(5)	Spent filter cartridges from 1,1-dimethyl-hydrazine production	Toxic	B,T,L
K110(5)	Condensed column overheads from intermediate separation from 1,1-dimethyl-hydrazine production	Toxic	B,T,L
K111	Product washwaters of dinitrotoluene	Toxic	B,T,L
K112	Reaction by-product water of toluenediamine	Toxic	B,T,L
K113	Condensed liquid light ends of toluenediamine	Toxic	B,T,L
K114	Vicinals of toluenediamine	Toxic	B,T,L
K115	Heavy ends of toluenediamine	Toxic	B,T,L

TABLE C-1

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY
(B, D, F, AND K DESIGNATION)**
(Continued)

EPA Hazardous Waste No.	Waste Common Name	Basis for Listing Hazardous Waste	TSD(1)(2) Option
K116	Organic condensate of TDI	Toxic	B,T,L
K117	Wastewater of ethylene dibromide	Toxic	B,T,L
K118	Spent absorbent solids of ethylene dibromide	Toxic	B,T,L
K123(5)	Process wastewater from the production of Ethylene bisdi-thiocarbamic acid	Toxic	L,T
K124(5)	Reactor Vent Scrubber from ethylenebis-di-thiocarbamic acid	Toxic	L,T
K125(5)	Filter, Evaporation & Centrifuge Solids ethylenebis-dithio-carbamic acid	Toxic	L,T
K126(5)	Baghouse dust and floor sweepings from ethylenebis-dithio-carbamic acid	Toxic	L,T
K131(5)	Wastewater from methyl bromide production	Toxic	L,T

TABLE C-1

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY
(B, D, F, AND K DESIGNATION)**
(Continued)

EPA Hazardous Waste No.	Waste Common Name	Basis for Listing Hazardous Waste	TSD(1)(2) Option
K132(5)	Spent absorbent and wastewater separator solids from methyl bromide production	Toxic	L,T
K136	Still bottoms of ethylene dibromide	Toxic	B,T,L
K140	Floor sweepings, off-specification product and spent filter media from the production of 2,4,6-Tribromophenol	Toxic	B,T,L,AT
K141	Process residues from the recovery of coal tar	Toxic	L, T
K142	Tar storage tank residues from production of coke	Toxic	L,T
K143	Process residues from recovery of light oil	Toxic	L,T
K144	Wastewater sump residues from light oil refining	Toxic	L,T
K145	Residues from naphthalene collection and recovery operations	Toxic	L,T
K147	Tar storage tank residues from coal tar refining	Toxic	L,T

TABLE C-1

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY
(B, D, F, AND K DESIGNATION) ** **(Continued)**

EPA Hazardous Waste No.	Waste Common Name	Basis for Listing Hazardous Waste	TSD(1)(2) Option
K148	Residues from coal tar distillation	Toxic	L,T
K149	Distillation or fractionation bottoms from alpha or methyl chlorinated toluene, ringed chlorinated toluene, benzoyl chloride	Toxic	B,T,L
K150	Residuals from production of alpha-chlorinated toluenes	Toxic	B,T,L
K151	Wastewater treatment sludges from production of alpha-chlorinated toluenes	Toxic	B,T,L
K156	Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes	Toxic	B,T,AT,L
K157	Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes	Toxic	B,T,AT,L
K158	Bag house dust, and filter/ separation solids from the production of carbamates and carbamoyl oximes	Toxic	B,T,L
K159	Organics from the treatment of thiocarbamate wastes	Toxic	B,T,AT,L

TABLE C-1

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY
(B, D, F, AND K DESIGNATION) (Continued)**

EPA Hazardous Waste No.	Waste Common Name	Basis for Listing Hazardous Waste	TSD(1)(2) Option
K161	Purification solids (including filtration, evaporation, and centrifugation solids), bag house dust and floor sweepings from the production of dithiocarbamate acids and their salts (This does not include K125 or K126)	Toxic	B,T,L
K169	Crude oil storage tank sediment from petroleum refining operations	Toxic	B,T,L
K170	Clarified slurry oil storage tank sediment and/or in-line filter/separation solids from petroleum refining operations	Toxic	B,T,L
K171	Spent hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic units	Toxic	B,T,L
K172	Spent hydrorefining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic units	Toxic	B,T,L
K174	Wastewater treatment sludges from the production of ethylene dichloride or vinyl chloride monomer unless the sludges are landfilled in a Subtitle C or non-haz landfill permitted by federal or state government	Toxic	B,T,L
K175	Wastewater treatment sludges from the production of vinyl chloride monomer using mercuric chloride catalyst in an acetylene-based process	Toxic	B,T,L
K176	Baghouse filters from the production of antimony oxide, including filters from the production of intermediates (e.g., antimony metal or crude antimony oxide)	Toxic	B,T,L
K177	Slag from the production of antimony oxide that is speculatively accumulated or disposed, including slag from production of intermediates (e.g., antimony metal or crude antimony oxide)	Toxic	B,T,L
K178	Solids from manufacturing and manufacturing-site storage of ferric chloride from acids formed during the production of titanium dioxide using the chloride-ilmenite process	Toxic	B,T,L

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY**

The following list of materials are identified as acute hazardous wastes. The primary hazard has been identified by the following letters: R = reactive; I = ignitable, C = corrosive; T = toxic. If no letter is shown, the compound should be considered as acute hazardous waste for waste numbers beginning with a P.

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
P001	Warfarin	T,B,L
P001	3-(alpha-acetonylbenzyl)-4-hydroxycoumarin and salts	T,B,L
P002	Acetamide, N-(aminothioxomethyl)-	T,B,L
P002	1-Acetyl-2-thiourea	T,B,L
P003	2-Propenal	T,B,L
P003	Acrolein	T,B,L
P004	Isocyanic acid, methyl ester	T,L
P004	Aldrin	T,B,L
P004	1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4:5,8-endo, exo-dimethanonaphthalene	T,B,L
P005	Allyl alcohol	T,B,L
P005	2-Propen-1-ol	T,B,L
P006	Aluminumphosphide	T,L (if non-reactive)
P007	3(2H)-Isoxazolone, 5-(aminomethyl)	T,B,L
P007	5-(Aminomethyl)-3-isoxazolol	T,B,L
P008	4-Pyridinamine	T,B,L
P008	4-alpha-Aminopyridine	T,B,L

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
P009	Ammoniumpicrate (R)	L,(not handled if shock sensitive)
P009	Phenol, 2,4,6-trinitro-, ammonium salt (R)	L,(not handled if shock sensitive)
P010	Arsenic acid	L
P011	Pyrophosphoric acid, tetraethyl ester	T,B,L
P011	Arsenic (V) oxide	L
P011	Arsenic pentoxide	L
P012	Arsenic (III) oxide	L
P012	Arsenic trioxide	L
P013	Barium cyanide	L
P014	Benzenethiol	T,B,L
P014	Thiophenol	T,L
P015	Beryllium dust	L
P016	Bis(chloromethyl)ether	T,B,L
P016	Methane, oxybis(chloro-	T,B,L
P017	2-Propanone, 1-bromo-	T,B,L
P018	Brucine	T,B,L
P018	Strychnidin-10-one, 2, 3-dimethoxy-	T,B,L
P020	Phenol, 2,4-dinitro-6(1-methylpropyl)-	T,B,L

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
P020	Dinoseb	T,B,L
P021	Calcium cyanide	T,L
P022	Carbon disulfide	T,L
P022	Carbon bisulfide	T,L
P023	Chloroacetaldehyde	T,B,L
P023	Acetaldehyde, chloro-	B,T,L
P024	p-Chloroaniline	T,B,L
P024	Benzenamine, 4-chloro-	T,B,L
P026	Thiourea, (2-chlorophenyl)-	T,B,L
P026	1-(o-Chlorophenyl)thiourea	T,B,L
P027	Propanenitrile, 3-chloro-	T,B,L
P027	3-Chloropropionitrile	T,B,L
P028	Benzene, (chlormethyl)-	T,B,L
P028	Benzyl chloride	T,B,L
P029	Copper cyanides	L
P030	Cyanides (soluble cyanide salts), not elsewhere specified	L,T
P031 (5)	Cyanogen	L
P033(5)	Chlorine cyanide	L
P034	4,6-Dinitro-o-cyclohexylphenol	T,B,L
P034	Phenol, 2-cyclohexyl-4,6-dinitro-	T,B,L

[**]All footnotes may be referenced at the end of Table C-2 of the Waste Analysis Plan.

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
P036	Dichlorophenylarsine	T,B,L
P036	Phenyl dichloroarsine	T,B,L
P037	1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-endo, exo-1,4:5,8-dimethanonaphthalene	T,B,L
P037	Dieldrin	T,B,L
P038	Diethylarsine	T,B,L
P038	Arsine, diethyl-	T,B,L
P039	O,O-Diethyl S-[2-(ethylthio)ethyl] phosphorodithioate	T,B,L
P039	Disulfoton	T,B,L
P040	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	T,B,L
P040	O,O-Diethyl O-pyrazinyl phosphorothioate	T,B,L
P041	Diethyl-p-nitrophenyl phosphate	T,B,L
P041	Phosphoric acid, diethyl p-nitrophenyl ester	T,B,L
P042	1,2-Benzenediol,4-[1-hydroxy-(methylamino) ethyl]	T,B,L
P042	Epinephrine	T,B,L
P043	Diisopropyl fluorophosphate	T,B,L
P043	Phosphorofluoric acid, bis (1-methlyethyl)-ester	T,B,L

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
P044	Phosphorodithioic acid, O,O-dimethyl S-[2-(methlyamino) -2-oxoethyl]ester	T,B,L
P044	Dimethoate	T,B,L
P045	Thiofanox	T,B,L
P045	3,3-Dimethyl-1-(methylthio)-2-butanone, O-[methylamino)carbonyl]oxime	T,B,L
P046	alpha, alpha-Dimethylphenethylamine	T,B,L
P046	Ethanamine, 1,1-dimethyl-2-phenyl-	T,B,L
P047	Phenol, 2,4-dinitro-6-methyl-	T,B,L
P047	4,6-Dinitro-o-cresol and salts	T,B,L
P048	Phenol, 2,4-dinitro-	T,B,L
P048	2,4-Dinitrophenol	T,B,L
P049	Thiomidodicarbonic diamide	T,B,L
P049	2,4-Dithiobiuret	T,B,L
P050	Endosulfan	T,B,L
P050	5-Norbornane-2,3-dimethanol, 1,4,5,6,7,7-hexachloro, cyclic sulfite	T,B,L
P051	1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-endo, endo-1,4:5,8-dimethanonaphthalene	T,B,L
P051	Endrin	T,B,L
P054	Ethylenamine	T,B,L

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
P054	Aziridine	T,B,L
P056(5)	Fluorine	L
P057	Fluoroacetamide	T,B,L
P057	Acetamide, 2-fluoro-	T,B,L
P058	Acetic acid, fluoro-, sodium salt	T,B,L
P058	Fluoroacetic acid, sodium salt	T,B,L
P059	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-hep-tachloro-3a, 4,7,7a-tetrahydro	T,B,L
P059	Heptachlor	T,B,L
P060	1,2,3,4,10,10-Hexachloro-1,4,4a,8,8a-hexahydro-1,4:5,8-endo,endo-dimethan-onophthalene	T,B,L
P060	Hexachlorohexahydro-exo, exo-dimethanonaphthalene	T,B,L
P062	Hexaethyl tetraphosphate	T,B,L
P062	Tetraphosphoric acid, hexaethyl ester	T,B,L
P063(5)	Hydrogen Cyanide	L
P064	Methyl isocyanate	T,L
P065(5)	Fulmic Acid, Mercury Salt	L
P066	Acetimidic acid, N-[(methyl-carbamoyl)oxy]thio-, methyl ester	T,B,L
P066	Methomyl	T,B,L

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
P067	1,2-Propylenimine	T,B,L
P067	2-Methylaziridine	T,B,L
P068	Methyl hydrazine	T,B,L
P068	Hydrazine, methyl-	T,B,L
P069	2-Methyllactonitrile	T,B,L
P069	Propanenitrile, 2-hydroxy-2-methyl-	T,B,L
P070	Propanal, 2-methyl-2-(methlythio)-,O-[(methlyamino) carbonyl]oxime	T,B,L
P070	Aldicarb	T,B,L
P071	O,O-Dimethyl O-p-nitrophenyl phosphorothioate	T,B,L
P071	Methyl parathion	T,B,L
P072	Thiourea, 1-napthalenyl-	T,B,L
P072	alpha-Naphthylthiourea	T,B,L
P073	Nickel tetracarbonyl	L,T
P073	Nickel carbonyl	L,T
P074	Nickel(II) cyanide	L,T
P074	Nickel cyanide	L,T
P075	Pyridine, (S)-3-(1-methyl-2-pyrrolidinyl-, and salts	T,B,L
P075	Nicotine and sal	T,B,L

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
P076	Nitric oxide	L,T
P077	p-Nitroaniline	T,B,L
P077	Benzenamine, 4-nitro-	T,B,L
P078(5)	Nitrogen Dioxide	L
P081(5)	Nitroglycerine	L
P082	N-Nitrosodimethylamine	T,B,L
P082	Dimethylnitrosamine	T,B,L
P084	Ethenamine, N-methyl-N-nitroso-	T,B,L
P084	N-Nitrosomethylvinylamine	T,B,L
P085	Octamethylpyrophosphoramide	T,B,L
P085	Diphosphoramide, octamethyl-	T,B,L
P087	Osmium tetroxide	L
P087	Osmium oxide	L
P088	7-Oxabicyclo[2.2.1]heptane-2, 3dicarboxylic acid	T,B,L
P088	Endothall	T,B,L
P089	Phosphorothioic acid, O,O-diethyl O-(p-nitrophenol)ester	T,B,L
P089	Parathion	T,B,L
P092	Mercury, (acetato-O)phenyl-	T,B,L
P092	Phenylmercuric acetate	T,B,L
P093	Thiourea, phenyl-	T,B,L

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
P093	N-Phenylthiourea	T,B,L
P094	Phorate	T,B,L
P094	Phosphorothioic acid, O,O-diethyl S-(ethylthio) methyl ester	T,B,L
P095 (5)	Phosgene	L
P096 (5)	Hydrogen Phosphide	L
P097	Famphur	T,B,L
P097	Phosphorothioic acid, O,O-dimethyl O-[p-dimethylamino)-sulfonyl) phenyl]ester	T,B,L
P098	Potassium cyanide	T,L
P099	Potassium silver cyanide	L
P101	Ethyl cyanide	T,B,L
P101	Propanenitrile	T,B,L
P102	2-Propyn-1-01	T,B,L
P102	Propargyl alcohol	T,B,L
P103	Carbamimidoselenoic acid	T,B,L
P103	Selenourea	T,B,L
P104	Silver cyanide	L
P105	Sodium azide	L,(not handled if shock sensitive)

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
P106	Sodium cyanide	T,L
P108	Strychnidin-10-one, and salts	T,B,L
P108	Strychnine and salts	T,B,L
P109	Dithiopyrophosphoric acid, tetraethyl ester	T,B,L
P109	Tetraethyldithiopyrophosphate	T,B,L
P110	Plumbane, tetraethyl-	T,B,L
P110	Tetraethyl lead	T,B,L
P111	Tetraethylpyrophosphate	T,B,L
P112	Tetranitromethane (R)	L,T
P112	Methane, tetranitro-(R)	L,T
P113	Thallium(III) oxide	L
P113	Thallic oxide	L
P114	Thallium(I) selenite	L
P115	Sulfuric acid, thallium (I) salt	L
P115	Thallium(I) sulfate	L
P116	Thiosemicarbazide	T,B,L
P116	Hydrazinecarbothioamide	T,B,L
P118	Methanethiol, trichloro-	T,B,L
P118	Trichloromethanethiol	T,L

[**]All footnotes may be referenced at the end of Table C-2 of the Waste Analysis Plan.

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
P119	Vanadic acid, ammonium salt	L
P119	Ammonium vanadate	L
P120	Vanadium pentoxide	L
P120	Vanadium(V) oxide	L
P121	Zinc cyanide	L
P122	Zinc Phosphide (R,T) when present at concentration greater than 10%	T,L
P123	Toxaphene	T,B,L
P123	Camphene, octachloro-	T,B,L
P127	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate (Carbofuran)	AT,T,B,L
P128	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester) (Mexacarbate)	AT,T,B,L
P185	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-,o-[(methylamino)carbonyl]oxime (Tirpate)	AT,T,B,L
P188	Benzoic acid, 2-hydroxy, compd. with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a, 8-trimethylpyrrolo[2,3-b]indol-5-yl methlycarbamate ester (1:1) (Physostigmine salicylate)	AT,T,B,L
P189	Carbamic acid, [(dibutylamino)this] methyl-,2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester (Carbosulfan)	AT,T,B,L
P190	Carbamic acid, methyl-,3-methylphenyl ester (Metolcarb)	AT,T,B,L
P191	Carbamic acid, dimethyl-,1-[(dimethylamino)carbonyl]-5-methyl-1H-pyrazol-3-yl ester (Dimetilan)	AT,T,B,L
P192	Carbamic acid, dimethyl-,3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester (Isolan)	AT,T,B,L

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
P194	Ethanimidothioc acide, 2-(dimethylamino)-N-[[(methylamino) carbonyl]oxy]-2-oxo-,methyl ester (Oxamyl)	AT,T,B,L
P196	Manganese, bis(dimethylcarbamodithioato-S,S')-, (Manganese dimethyldithiocarbamate)	AT,T,B,L
P197	Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-[[(methylamino)carbonyl] oxy]penyl]-,(Formparanate)	AT,T,B,L
P198	Methanimidamide, N,N-dimethyl-N'-[3-[[(methylamino)carbonyl]oxy]phenyl]-, monohydrochloride (Formetanate hydrochloride)	AT,T,B,L
P199	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate (Methiocarb)	AT,T,B,L
P201	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate (Promecarb)	AT,T,B,L
P202	Phenol, 3-(1-methylethyl)-, methyl carbamate 3-Isopropylphenyl N-methylcarbamate (m-Cumenyl methylcarbamate)	AT,T,B,L
P203	Propanal, 2-methyl-2-(methysulfonyl)-, o-[(methylamino)carbonyl] oxime (Aldicarb sulfone)	AT,T,B,L
P204	Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-,methylcarbamate (ester), 3aS-cis)-(Physostigmine)	AT,T,B,L
P205	Zinc, bis(dimethylcarbamodithioato-S,S')-, (Ziram)	AT,T,B,L

The following list of materials are identified as toxic wastes. The primary hazard has been identified by the following letters: R = reactive; I = ignitable, C = corrosive; T = toxic. If no letter is shown, the compound should be considered as toxic waste for waste numbers beginning with a U.

U001	Acetaldehyde (I)	B,T,L
U001	Ethanal (I)	B,T,L
U002	Acetone (I)	B,T,L
U002	2-Propanone (I)	B,T,L

TABLE C-2
HAZARDOUS MATERIALS MANAGED AT
MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
U003	Ethanenitrile (I,T)	B,T,L
U003	Acetonitrile (I,T)	B,T,L
U004	Acetophenone	B,T,L
U004	Ethanone, 1-phenyl-	B,T,L
U005	Acetamide, N-9H-fluoren-2yl-	B,T,L
U005	2-Acetylaminofluorene	B,T,L
U006	Ethanoyl chloride (C.R.T.)	L,T
U006	Acetyl chloride (C,R,T)	L,T
U007	Acrylamide	B,T,L
U007	Benzene, 1,2,4,5-tetrachloro-	B,T,L
U007	2-Propenamide	B,T,L
U008	Acrylic acid (I)	B,T,L
U008	2-Propenoic acid (I)	B,T,L
U009	Acrylonitrile	B,T,L
U009	2-Propenenitrile	B,T,L
U010	Azirino(w',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-	B,T,L
U010	Mitomycin C	B,T,L
U011	Amitrole	B,T,L
U011	1H-1,2,4-Triazol-3-amine	B,T,L
U012	Aniline (I,T)	B,T,L
U012	Benzenamine (I,T)	B,T,L
U014	Auramine	B,T,L
U014	Benzenamine, 4,4'- carbonimidoylbis (N,N-di-methyl-	B,T,L

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
U015	Azaserine	B,T,L
U015	L-Serine, diazoacetate (ester)	B,T,L
U016	Benz[c]acridine	B,T,L
U016	3,4-Benzacridine	B,T,L
U017	Benzal chloride	B,T,L
U017	Benzene, (dichloromethyl)-	B,T,L
U018	1,2-Benzanthracene	B,T,L
U018	Benz[a]anthracene	B,T,L
U019	Benzene (I,T)	B,T,L
U020	Benzenesulfonyl chloride (C,R)	L,T
U020	Benzenesulfonic acid chloride (C,R)	L,T
U021	Benzidine	B,T,L
U021	(1,1'-Biphenyl)-4,4'-diamine	B,T,L
U022	Benzo[a]pyrene	B,T,L
U022	3,4-Benzopyrene	B,T,L
U023	Benzotrichloride (C,R,T)	T,L
U023	Benzene, (trichloromethyl)- (C,R,T)	T,L
U024	Ethane, 1,1'-[methylenebis(oxy)] bis[2-choro-	B,T,L
U024	Bis(2-chloroethoxy) methane	B,T,L
U025	Ethane, 1,1'-oxybis [2-chloro-	B,T,L
U025	Dichloroethyl ether	B,T,L
U026	Chlornaphazine	B,T,L

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
U026	2-Naphthylamine,N,N'-bis (2-chloromethyl)-	B,T,L
U027	Bis(2-chloroisopropyl) ether	B,T,L
U027	Propane, 2,2'oxybis(2-chloro-	B,T,L
U028	1,2-Benzenedicarboxylic acid, [bis(2-ethyl-hexyl)]ester	B,T,L
U028	Bis(2-ethylhexyl)phthalate	B,T,L
U029	Methyl bromide	B,T,L
U029	Methane, bromo-	B,T,L
U030	Benzene, 1-bromo-4-phenoxy-	B,T,L
U030	4-Bromophenyl phenyl ether	B,T,L
U031	1-Butanol (I)	B,T,L
U031	n-Butyl alcohol (I)	B,T,L
U032	Calcium chromate	L
U032	Chromic acid, calcium salt	L
U033 (5)	Carbon Oxyfluoride	L
U034	Acetaldehyde, trichloro-	B,T,L
U034	Chloral	B,T,L
U035	Butanoic acid, 4-[Bis(2-chloro-ethyl)amino]benzene-	B,T,L
U035	Chlorambucil	B,T,L
U036	Chlordane, technical	B,T,L

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
U036	4,7-Methanoindan, 1,2,4,5,6, 7,8,8-octa-chloro-3a,4,7,7a-tetrahydro-	B,T,L
U037	Benzene, chloro-	B,T,L
U037	Chlorobenzene	B,T,L
U038	Benzenacetic acid, 4-chloro-alpha-(4-chloro-phenyl)-alpha-hydroxy,ethyl ester	B,T,L
U038	Ethyl 4,4'-dichlorobenzilate	B,T,L
U039	4-Chloro-m-cresol	B,T,L
U039	Phenol, 4-chloro-3-methyl-	B,T,L
U041	1-Chloro-2,3-epoxypropane	B,T,L
U041	Oxirane, 2-(chloromethyl)-	B,T,L
U042	Ethene, 2-chloroethoxy-	B,T,L
U042	2-Cloroethyl vinyl ether	B,T,L
U043(5)	Vinyl Chloride	B,T,L
U044	Chloroform	B,T,L
U044	Methane, trichloro-	B,T,L
U045	Methane, chloro- (I,T)	B,T,L
U046	Chloromethyl methyl ether	B,T,L
U046	Methane, chloromethoxy-	B,T,L
U047	beta-Chloronaphthalene	B,T,L
U047	Naphthalene, 2-chloro-	B,T,L

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
U048	o-Chlorophenol	B,T,L
U048	Phenol, 2-chloro-	B,T,L
U049	Benzenamine, 4-chloro-2-methyl-	B,T,L
U049	4-Chloro-o-toluidine, hydrochloride	B,T,L
U050	1,2-Benzophenanthrene	B,T,L
U050	Chrysene	B,T,L
U051	Creosote	B,T,L
U052	Cresols	B,T,L
U052	Cresylic acid	B,T,L
U053	2-Butenal	B,T,L
U053	Crotonaldehyde	B,T,L
U055	Benzene, (1-methylethyl)-(I)	B,T,L
U055	Cumene (I)	B,T,L
U056	Benzene, hexahydro-(I)	B,T,L
U056	Cyclohexane (I)	B,T,L
U057	Cyclohexanone (I)	B,T,L
U058	Cyclophosphamide	B,T,L
U058	2H-1,3,2-Oxazaphosphorine, [bis(2-chloro-ethyl)amino] tetrahydro-, oxide 2-	B,T,L
U059	Daunomycin	B,T,L

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
U059	5,12-Naphthacenedione, (8S-cis) -8-acetyl-10[(3-amino-2,3,6-trideoxy-alpha-L-lyxo-hexopyranosyl) oxyl]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy	B,T,L
U060	Dichloro diphenyl dichloroethane	B,T,L
U060	DDD	B,T,L
U061	DDT	B,T,L
U061	Dichloro diphenyl trichloroethane	B,T,L
U062	S-(2,3-Dichloroallyl) diisopropyl-thiocarbamate	B,T,L
U062	Diallate	B,T,L
U063	Dibenz[a,h]anthracene	B,T,L
U063	1,2:5,6-Dibenzanthracene	B,T,L
U064	Dibenz[a,i]pyrene	B,T,L
U064	1,2:7,8-Dibenzopyrene	B,T,L
U066	1,2-Dibromo-3-chloropropane	B,T,L
U066	Propane, 1,2-dibromo-3-chloro-	B,T,L
U067	Ethane, 1,2-dibromo-	B,T,L
U067	Ethylene dibromide	B,T,L
U068	Methane, dibromo-	B,T,L
U068	Methylene bromide	B,T,L
U069	Dibutyl phthalate	B,T,L

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
U069	1,2-Benzenedicarboxylic acid, dibutyl ester	B,T,L
U070	Benzene, 1,2-dichloro-	B,T,L
U070	o-Dichlorobenzene	B,T,L
U071	Benzene, 1,3-dichloro-	B,T,L
U071	m-Dichlorobenzene	B,T,L
U072	p-Dichlorobenzene	B,T,L
U072	Benzene, 1,4-dichloro-	B,T,L
U073	(1,1'-Biphenyl)-4,4'-diamine, 3,3'dichloro-	B,T,L
U073	3,3'-Dichlorobenzidine	B,T,L
U074	1,4-Dichloro-2-butene (I,T)	B,T,L
U074	2-Butene, 1,4-dichloro-(I,T)	B,T,L
U075	Dichlorodifluoromethane	B,T,L
U075	Methane, dichlorodifluoro-	B,T,L
U076	Ethane, 1,1-dichloro-	B,T,L
U076	Ethylidene dichloride	B,T,L
U077	Ethane, 1,2-dichloro-	B,T,L
U077	Ethylene dichloride	B,T,L
U078	Ethene, 1,1-dichloro-	B,T,L
U078	1,1-Dichloroethylene	B,T,L

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
U079	1,2-Dichloroethylene	B,T,L
U079	Ethene, trans-1,2-dichloro-	B,T,L
U080	Methylene chloride	B,T,L
U080	Methane, dichloro-	B,T,L
U081	1,4-Dichlorophenol	B,T,L
U081	Phenol, 2,4-dichloro-	B,T,L
U082	2,6-Dichlorophenol	B,T,L
U082	Phenol, 2,6-dichloro-	B,T,L
U083	1,2-Dichloropropane	B,T,L
U083	Propylene dichloride	B,T,L
U084	1,3-Dichloropropene	B,T,L
U084	Propene, 1,3-dichloro-	B,T,L
U085	2,2'-Bioxirane (I,T)	B,T,L
U085	1,2:3,4-Diepoxybutane (I,T)	B,T,L
U086	N,N-Diethylhydrazine	B,T,L
U086	Hydrazine, 1,2-diethyl-	B,T,L
U087	O,O-Diethyl-S-methyl-dithiophosphate	B,T,L
U087	Phosphorodithioic acid, O, O-diethyl-S-methylester	B,T,L
U088	1,2-Benzenedicarboxylic acid, diethyl ester	B,T,L

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
U088	Diethyl phthalate	B,T,L
U089	Diethylstilbestrol	B,T,L
U089	4,4'-Stilbenediol, alpha,alpha'-diethyl-	B,T,L
U090	Benzene, 1,2-methylenedioxy-4-propyl-	B,T,L
U090	Dihydrosafrole	B,T,L
U091	(1,1'-Biphenyl)-4,4'diamine, 3,3'-dimethyl-	B,T,L
U091	3,3'-Dimethoxybenzidine	B,T,L
U092	Dimethylamine (I)	B,T,L
U092	Methanamine, N-methyl- (I)	B,T,L
U093	Benzenamine, N,N'-dimethyl-4-phenylazo-	B,T,L
U093	Dimethylaminoazobenzene	B,T,L
U094	7,12-Dimethylbenz[a]anthracene	B,T,L
U094	1,2-Benzanthracene 7,12-dimethyl-	B,T,L
U095	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethyl-	B,T,L
U095	3,3'-Dimethylbenzidine	B,T,L
U096	alpha,alpha-Dimethylbenzyl-hydroperoxide (R)	L,T
U096	Hydroperoxide, 1-methyl-1-phenylethyl- (R)	L,T

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
U097	Dimethylcarbamoyl chloride	T,L
U097	Carbamoyl chloride, dimethyl-	T,L
U098	1,1-Dimethylhydrazine	B,T,L
U098	Hydrazine, 1,1-dimethyl-	B,T,L
U099	1,2-Dimethylhydrazine	B,T,L
U099	Hydrazine, 1,2-dimethyl-	B,T,L
U101	2,4-Dimethylphenol	B,T,L
U101	Phenol,2,4-dimethyl-	B,T,L
U102	1,2-Benzenedicarboxylic acid, dimethyl ester	B,T,L
U102	Dimethyl phthalate	B,T,L
U103	Dimethyl sulfate	B,T,L
U103	Sulfuric acid, dimethyl ester	B,T,L
U105	Benzene, 1-methyl-1-2,4-dinitro-	T,L (not handled if explosive)
U105	2,4-Dinitrotoluene	B,T,L
U106	2,6-Dinitrotoluene	B,T,L
U106	Benzene, 1-methyl-2,6-dinitro-	B,T,L
U107	1,2-Benezenedicarboxylic acid, di-n-octyl ester	B,T,L
U107	Di-n-octylphthalate	B,T,L

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
U108	1,4-Dioxane	B,T,L
U108	1,4-Diethylene dioxide	B,T,L
U109	1,2-Diphenylhydrazine	B,T,L
U109	Hydrazine, 1,2-diphenyl-	B,T,L
U110	Dipropylamine (I)	B,T,L
U110	1-Propanamine, N-propyl- (I)	B,T,L
U111	Di-N-propylnitrosamine	B,T,L
U111	N-Nitroso-N-propylamine	B,T,L
U112	Ethyl acetate (I)	B,T,L
U112	Acetic acid, ethyl ester (I)	B,T,L
U113	Ethyl acrylate (I)	B,T,L
U113	2-Propenoic acid, ethyl ester (I)	B,T,L
U114	Ethylenebis(dithiocarbamic acid)	B,T,L
U114	1,2-Ethanediylbiscarbamodithioic acid	B,T,L
U115	Ethylene oxide (I,T)	B,T,L
U115	Oxirane (I,T)	B,T,L
U116	Ethylene thiourea	B,T,L
U116	2-Imidazolidinethione	B,T,L
U117	Ethyl ether (I)	B,T,L
U117	Ethane, 1,1'-oxybis- (I)	B,T,L

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
U118	Ethylmethacrylate	B,T,L
U118	2-Propenoic acid, 2-methyl-, ethyl ester	B,T,L
U119	Ethyl methanesulfonate	B,T,L
U119	Methanesulforic acid, ethyl ester	B,T,L
U120	Benzo[j,k]fluorene	B,T,L
U120	Fluoranthene	B,T,L
U121	Methane, trichlorofluoro-	B,T,L
U121	Methane, trichlorofluoro-	B,T,L
U121	Trichloromonofluoromethane	B,T,L
U122	Formaldehyde	B,T,L
U122	Methylene oxide	B,T,L
U123	Formic acid (C,T)	T,L,AT
U123	Methanoic acid (C,T)	B,T,L
U124	Furan (I)	B,T,L
U124	Furfuran (I)	B,T,L
U125	2-Furancarboxaldehyde (I)	B,T,L
U125	Furfural (I)	B,T,L
U126	Glycidyladehyde	B,T,L
U126	1-Propanol, 2,3-epoxy-	B,T,L
U127	Benezene, hexachloro-	B,T,L

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
U127	Hexachlorobenzene	B,T,L
U128	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	B,T,L
U128	Hexachlorobutadiene	B,T,L
U129	Hexachlorocyclohexane (gamma isomer)	B,T,L
U129	Lindane	B,T,L
U130	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	B,T,L
U130	Hexachlorocyclopentadiene	B,T,L
U131	Ethane 1,1,1,2,2,2-hexachloro-	B,T,L
U131	Hexachloroethane	B,T,L
U132	Hexachlorophene	B,T,L
U132	2,2'-Methylenebis(3,4,6-trichlorophenol)	B,T,L
U133	Diamine (R,T)	T,L
U133	Hydrazine (R,T)	T,L
U134	Hydrofluoric acid (C,T)	T,L
U134	Hydrogen fluoride (C,T)	T,L
U135(5)	Hydrogen Sulfide	T,L
U136	Cacodylic acid	B,T,L
U136	Hydroxydimethylarsine oxide	B,T,L

[**]All footnotes may be referenced at the end of Table C-2 of the Waste Analysis Plan.

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
U137	Inden[1,2,3-cd]pyrene	B,T,L
U137	1,10-(1,2-phenylene)pyrene	B,T,L
U138	Methyl iodide	B,T,L
U138	Methane, iodo-	B,T,L
U140	Isobutyl alcohol (I,T)	B,T,L
U140	1-Propanol, 2-methyl-	B,T,L
U141	Benzene, 1,2-methylenedioxy-4-propenyl-	B,T,L
U141	Isosafrole	B,T,L
U142	Decachlorooctahydro-1,3,4-metheno-2H-cyclobuta[c,d]-pentalen-2-one	B,T,L
U142	Kepone	B,T,L
U143	Lasiocarpine	B,T,L
U144	Acetic acid, lead salt	L
U144	Lead acetate	L
U145	Lead phosphate	L
U145	Phosphoric acid, Lead salt	L
U146	Lead subacetate	L
U147	Maleic anhydride	T,B,L

[**]All footnotes may be referenced at the end of Table C-2 of the Waste Analysis Plan.

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
U147	2,5-Furandione	T,B,L
U148	1,2-Dihydor-3,6-pyradizinedione	T,B,L
U148	Maleic hydrazide	T,B,L
U149	Propanedinitrile	B,T,L
U149	Malononitrile	B,T,L
U150	Alanine, 3-[p-bis(2-chlorethyl)amino] phenyl-,L-	B,T,L
U150	Melphalan	B,T,L
U151	Mercury	T,L,
U152	2-Propenenitrile, 2-methyl- (I,T)	B,T,L
U152	Methacrylonitrile (I,T)	B,T,L
U153 (5)	Methanethiol	L
U154	Methanol (I)	B,T,AT,L
U154	Methyl alcohol (I)	B,T,AT,L
U155	Pyridine, 2-[(2-dimethylamino)-2-thenylamino]-	B,T,L
U155	Methapyrilene	B,T,L
U156	Carbonochloridic acid, methyl ester (I,T)	B,T,L
U156	Methyl chlorocarbonate (I,T)	B,T,L
U157	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-,	B,T,L

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
U157	3-Methylcholanthrene	B,T,L
U158	Benzenamine, 4,4'-methylenebis (2-chlora	B,T,L
U158	4,4'-Methylenebis (2-chloroaniline)	B,T,L
U159	2-Butanone (I,T)	B,T,L
U159	Methyl ethyl ketone (I,T)	B,T,L
U160	2-Butanone peroxide (R,T)	T,L
U160	Methyl ethyl ketone peroxide (R,T)	T,L
U161	Methyl isobutyl ketone (I)	B,T,L
U161	4-Methyl-2-pentanone (I)	B,T,L
U162	Methyl methacrylate (I,T)	B,T,L
U162	2-Propenoic acid, 2-methyl-methyl ester (I,T)	B,T,L
U163	Guanidine, N-nitroso-N-methyl-N'nitro-	B,T,L
U163	N-Methyl-N'-nitro-N-nitrosoguanidine	B,T,L
U164	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	B,T,L
U164	Methylthiouracil	B,T,L
U165	Naphthalene	B,T,L

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
U166	1,4-Naphthalenedione	B,T,L
U166	1,4,Naphthaquinone	B,T,L
U167	1-Naphthylamine	B,T,L
U167	alpha-Naphthylamine	B,T,L
U168	2-Naphthylamine	B,T,L
U168	beta-Naphthylamine	B,T,L
U169	Benzene, nitro- (I,T)	B,T,L
U169	Nitrobenzene (I,T)	B,T,L
U170	Phenol, 4-nitro-	B,T,L
U170	p-Nitrophenol	B,T,L
U171	2-Nitropropane (I)	B,T,L
U171	Propane, 2-nitro- (I)	B,T,L
U172	1-Butanamine, N-butyl-N-nitroso-	B,T,L
U172	N-Nitrosodi-n-butylamine	B,T,L
U173	Ethanol, 2,2'-(nitrosoimino)bis-	B,T,L
U173	N-Nitrosodiethanolamine	B,T,L
U174	Ethanamine, N-ethyl-N-nitroso-	B,T,L
U174	N-Nitrosodiethylamine	B,T,L
U176	Carbamide, N-ethyl-N-nitroso-	B,T,L
U176	N-Nitroso-N-ethylurea	B,T,L

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
U177	Carbamide, N-methyl-N-nitroso-	B,T,L
U177	N-Nitroso-N-methylurea	B,T,L
U178	Carbamic acid, methylnitroso-, ethyl ester	B,T,L
U178	N-Nitroso-N-methylurethane	B,T,L
U179	N-Nitrosopiperidine	B,T,L
U179	Pyridine, hexahydro-N-nitroso-	B,T,L
U180	Pyrrole, tetrahydro-N-nitroso-	B,T,L
U180	N-Nitrosopyrrolidine	B,T,L
U181	Benzemamine, 2-methyl-5-nitro	B,T,L
U181	5-Nitro-o-toluidine	B,T,L
U182	Paraldehyde	B,T,L
U182	1,3,5-Trioxane,2,4,5-trimethyl-	B,T,L
U183	Benzene, pentachloro-	B,T,L
U183	Pentachlorobenzene	B,T,L
U184	Ethane, pentachloro-	B,T,L
U184	Pentachloroethane	B,T,L
U185	Benzene, pentachloro-nitro-	B,T,L
U185	Pentachloronitrobenzene	B,T,L
U186	1-Methylbutadiene (I)	B,T,L
U186	2,3-Pentadiene (I)	B,T,L

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
U187	Acetamide, N-(4-ethoxyphenyl)-	B,T,L
U187	Phenacetin	B,T,L
U188	Benzene, hydroxy-	B,T,L
U188	Phenol	B,T,L
U189 (5)	Phosphorous sulfide	L
U190	1,2-Benzenedicarboxylic acid anhydride	B,T,L
U190	Phthalic anhydride	B,T,L
U191	2-Picoline	B,T,L
U191	Pyridine, 2-methyl-	B,T,L
U192	3,5-Dichloro-N-(1,1-dimethyl-2-propynyl)benzamide	B,T,L
U192	Pronamide	B,T,L
U193	1,3-Propane sultone	B,T,L
U193	1,2-Oxathiolane, 2,2-dioxide	B,T,L
U194	1-Propanamine (I,T)	B,T,L
U194	N-Propylamine (I,T)	B,T,L
U196	Pyridine	B,T,L
U197	1,4-Cyclohexadienedione	B,T,L
U197	p-Benzoquinone	B,T,L

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
U200	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[3,4,5-trimethoxy-benzoyl)oxy]-, methyl ester	B,T,L
U200	Reserpine	B,T,L
U201	1,3-Benzenediol	B,T,L
U201	Resorcinol	B,T,L
U202	1,2-Benzisothiazolin-3-0ne, 1,1-dioxide	B,T,L
U202	Saccharin and salts	B,T,L
U203	Benzene, 1,2-methylenedioxy-4-allyl-	B,T,L
U203	Safrole	B,T,L
U204	2,4,4-D,salts and esters	B,T,L
U204	Seleniumdioxide	L
U204	Selenious acid	L
U205	Selenium disulfide (R,T)	T,L
U205	Sulfur selenide (R,T)	T,L
U206	D-Glucopyranose, 2-deoxy-2(3-methyl-3-nitro-soureido)-	B,T,L
U206	Streptozotocin	B,T,L
U207	1,2,4,5-Tetrachlorobenzene	B,T,L
U208	Ethane, 1,1,1,2-tetrachloro-	B,T,L
U208	1,1,1,2-Tetrachloroethane	B,T,L

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
U209	Ethane, 1,1,2,2-tetrachloro-	B,T,L
U209	1,1,2,2-Tetracloroethane	B,T,L
U210	Ethene, 1,1,2,2-tetrachloro-	B,T,L
U210	Tetrachloroethylene	B,T,L
U211	Carbon tetrachloride	B,T,L
U211	Methane, tetrachloro-	B,T,L
U213	Furan, tetrahydro- (I)	B,T,L
U213	Tetrachydrofuran (I)	B,T,L
U214	Acetic acid, thallium (I) salt	L
U214	Thallium (I) acetate	L
U215	Carbonic acid, dithallium (I) salt	L
U215	Thallium (I) carbonate	L
U216	Thallium (I) chloride	L
U217	Thallium (I) nitrate	L
U218	Ethanethioamide	B,T,L
U218	Thioacetamide	B,T,L
U219	Carbamide, thio-	B,T,L
U219	Thiourea	B,T,L
U220	Benzene, methyl-	B,T,L
U220	Toluene	B,T,L

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
U221	Diaminotoluene	B,T,L
U221	Toluenediamine	B,T,L
U222	Benzenamine, 2-methyl-, hydrochloride	B,T,L
U222	O-Toluidine hydrochloride	B,T,L
U223	Benzene, 1,3-diisocyanatomethyl- (R,T)	T,L
U223	Toluene diisocyanate (R,T)	B,T,L
U225	Bromoform	B,T,L
U225	Methane, tribromo-	B,T,L
U226	1,1,1-Trichloroethane	B,T,L
U226	Methylchloroform	B,T,L
U227	Ethane, 1,1,2-trichloro-	B,T,L
U227	1,1,2-Trichloroetane	B,T,L
U228	Trichloroethene	B,T,L
U228	Trichloroethylene	B,T,L
U234	Benzene, 1,3,5-trinitro- (R,T)	T,L (not handled if shock sensitive)
U234	sym-Trinitrobenzene (R,T)	T,L(not handled if shock sensi-tive)
U235	Tris(2,3-dibromopropyl)phosphate	B,T,L

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
U235	1-Propanol, 2,3-dibromo-, phosphate (3:1)	B,T,L
U236	2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-di-methyl-(1,1'-biphenyl)-4,4'diyl)]-bis (azo) bis(5-amino-4-hydroxy)-,tetra-sodium salt	B,T,L
U236	Trypan blue	B,T,L
U237	Uracil, 5(bis(2-chloromethyl) amino)-	B,T,L
U237	Uracil mustard	B,T,L
U238	Carbamic acid, ethyl ester	B,T,L
U238	Ethyl carbamate (urethan)	B,T,L
U239	Benzene, dimethyl-(I,T)	B,T,L
U239	Xylene (I)	B,T,L
U240	2,4-Dichlorophenoxyacetic acid, salts and esters	B,T,L
U243	Hexachloropropene	B,T,L
U243	1-Propene, 1,1,2,3,3,3-hexachloro-	B,T,L
U244	Bis(dimethylthiocarbamoyl) disulfide	B,T,L
U244	Thiram	B,T,L
U246	Cyanogen bromide	T,L
U246	Bromine cyanide	T,L

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
U247	Ethane, 1,1,1-trichloro-2,2-bis (p-methoxyphenyl)	B,T,L
U247	Methoxychlor	B,T,L
U248	3-(alpha-Acetonylbenzyl)-4-hydroxycovmarin and salts, when present at concentrations of 0.3% or less	T,L
U248	Warfann, when present at concentrations of 0.3% or less	T,L
U249	Zinc phosphide, when present at concentrations of 10% or less	T,L (if non-reactive)
U271	Carbamic acid, [1-[(butylamino)carbonyl]-1H-benzimidazol-2-yl]-, methyl ester (Benomyl)	AT,B,L,T
U278	1,3-Benzodioxol-4-ol,2,2-dimethyl-, methyl carbamate (Bendiocarb)	AT,B,L,T
U279	1-Naphthalenol, methylcarbamate (Carbaryl)	AT,B,L,T
U280	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester (Barban)	AT,B,L,T
U328	o-Toluidine	B,T,L,AT
U353	p-Toluidine	B,T,L,AT
U359	2-ethoxyethanol	B,T,L,AT
U364	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, (Bendiocarb phenol)	B,T,L,AT

TABLE C-2

HAZARDOUS MATERIALS MANAGED AT MODEL CITY FACILITY[**]
(continued)

EPA Hazardous Waste No.	Substance	TSD(1)(2)(3)
U367	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, (Carbofuran phenol)	B,T,L,AT
U372	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester (Carbendazim)	B,T,L,AT
U373	Carbamic acid, phenyl-, 1-methylethyl ester (Propham)	B,T,L,AT
U387	Carbamothioic acid, dipropyl-, S-(phenylmethyl)ester (Prosulfocarb)	B,T,L,AT
U389	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester (Triallate)	B,T,L,AT
U394	Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester (A2213)	B,T,L,AT
U395	Ethanol, 2,2'-oxybis-, discarbamate (Diethylene glycol, dicarbamate)	B,T,L,AT
U404	Ethanamine, N,N-diethyl-, (Triethylamine)	B,T,L,AT
U408	2,4,6-Tribromophenol	B,T,L,AT
U409	Carbamic acid, [1,2-phenylanabis(iminocarbonothioyl)]bis-, dimethyl ester (Thiophanate-methyl)	B,T,L,AT
U410	Ethanimidothioc acid, N,N'-[thiobis[(methylimimo)carbonyloxy]]bis-, dimethyl ester (Thiodicarb)	B,T,L,AT
U411	Phenol, 2-(1-methylethoxy)-, methylcarbamate (Propoxur)	B,T,L,AT

FOOTNOTES-

(1) The concentration and/or quantity of many of the cited waste constituents which may be accepted for treatment and/or disposal are limited by permit conditions and regulatory framework. The TSD Options selected for the cited materials are an estimate. Actual TSD Options will be driven by current permit conditions and current regulations, both State and Federal. Please refer to the introduction to this table for details (see pages C-1 through C-4).

(2) Disposal and/or Treatment Codes:
T-Transfer. (Transfer is always an option.)
L-Landfill.
B-Blend/Burn.
AT-Aqueous Treatment.

(3) The generator of Non-Bulk and Bulk containers must conform to the packaging requirements of:

49 CFR Subpart B - Table of Hazardous Materials and Special Provisions; specifically Part 172.101(i) Packaging Authorizations.

49 CFR Part 173 - Shippers - General Requirements for Shipments and Packagings.

49 CFR Part 178 - Specifications for Packagings.

Containers that arrive at the facility which do not meet the stated USDOT specifications shall not be shipped out of the facility unless the contents of the container are placed into a container which meets USDOT specifications. Containers that arrive at the facility which appear to have obvious signs of structural damage or deterioration, or which are found to be leaking shall either be repaired so that the containers meet RCRA & USDOT container specifications, overpacked into containers meeting RCRA & USDOT container specifications or shall be emptied and their contents placed into containers meeting RCRA & USDOT container specifications or processed immediately.

(4) These waste codes refer only to waste that may be classified as derived from F020-F023 and F026-F028 (i.e. leachate). No current production waste or out-dated products with these codes will be accepted. See Condition E.1.c.v in Exhibit F of Schedule 1 of Module I for storage and disposal requirements for these wastes.

(5) Due to the hazards posed by concentrated forms of these substances, only treatment residues and contaminated media such as soil, water, debris, etc. will be managed.

* Depends on DOT classification.

C-2 Waste Analysis Plan

In accordance with the regulatory requirements set forth in 6 NYCRR 373-1. CWM Chemical Services, L.L.C. (CWM) has developed this Waste Analysis Plan as an integral part of the 373-2 Permit Application for the Model City treatment, storage and disposal facility located in Niagara County, New York. The procedures set forth in this plan dictate that this facility will be in compliance with all requirements of 6 NYCRR 373-2.2(e). A copy of this plan will be available at the facility at all times.

C-2a Introduction

The purpose of this Waste Analysis Plan (WAP) is to identify and document the necessary sampling methodologies, analytical techniques and overall procedures which are undertaken for all wastes that enter this facility for storage, treatment or disposal. Specifically the plan delineates the following:

- Analytical Parameters, Techniques and Rationale - Section C-2b outlines the parameters and rationale CWM will utilize to determine or identify certain waste properties to ensure proper management of the waste at the site. Section C-2h outlines the analytical techniques.

- Sampling Methodology - Section C-2c outlines the proper sampling method(s) for a given waste type (solid, sludge, liquid) and containment (drum, tank, impoundment pile, etc.). CWM personnel can then obtain waste identification samples to help ensure accurate analytical results when a waste is analyzed.

- Pre-Acceptance Procedures - Section C-2d outlines the procedural steps CWM will take to evaluate the acceptability of a candidate waste stream pursuant to permit conditions and operating capabilities prior to acceptance of the waste for management at the site.

- Incoming Load Procedures - Section C-2e outlines the procedural steps CWM will take to identify the waste shipments delivered to the site.

- Process Operations Procedures - Section C-2f outlines the procedural steps CWM will take in regard to each management unit at the site.

- Quality Control Policy - Section C-2g outlines the quality control policy this site will follow to achieve high quality analytical results.

It is the policy of the Model City facility that all wastes handled by this facility will be subjected to these procedures. This is to help ensure that this facility will be in compliance with applicable permits and regulations.

In addition, the analytical results of incoming waste shipments requiring analysis as part of the incoming waste shipment identification, as well as the analysis and information developed as part of the pre-acceptance procedures, are maintained in the site's operating record.

The forms shown within this WAP are typical forms currently used by the site. These forms may require updating based upon changes in regulations, customer needs, operations or company policy dictate. Any changes in content, rather than format, will be forwarded to the NYSDEC for review.

For the purpose of sampling and testing, "CWM," means any Chemical Waste Management (CWM) laboratory or Approvals Group or CWM subsidiary laboratory or CWM approved contract laboratory.

The Approvals Manager, Laboratory Manager, Technical Manager, General Manager or designee are individually and collectively herein referred to as "site management".

The company strives to maintain, at all times, complete compliance with the hazardous waste regulations. Because new testing requirements, such as those promulgated under the land disposal restrictions, often become effective prior to the time WAP revisions can be formally made and approved by all appropriate agencies, it is impossible to have in place an approved WAP meeting all the conditions of the immediately effective regulatory requirements.

In light of these facts, the facility will have in place a written protocol specifying the new testing and frequency requirements prior to acceptance and/or processing of the regulated waste. The facility may also periodically review the protocol to reflect scientific advances or additional regulatory requirements. A permit modification of the WAP will be submitted as needed after the effective date of a promulgated change to the methods in SW-846. Also, 6NYCRR Part 373-1.7 gives rules to be followed for newly listed or identified wastes.

C-2b Analytical Rationale

A waste characterization is supplied to CWM by the generator (see Section C-2d(1) for discussion regarding the information or data to be supplied by the generator) on a Waste Profile, designed to provide all the information required by 6 NYCRR 373-2-2(e)(1). The analyses performed by CWM ensures that the waste description matches the identity of the waste designated on the accompanying manifest or shipping paper and the Waste Profile. The analysis will also help to ensure that the appropriate treatment, storage, and disposal techniques can be utilized. The parameters utilized by CWM to determine waste identity are classified into two categories:

- Mandatory Analyses - are performed on incoming load samples, except where noted herein, and when necessary on a pre-acceptance sample.

- Supplemental Analyses - are performed when necessary to augment existing information on the waste.

This tiered approach provides CWM with sufficient information to properly manage a given waste stream.

The parameters which constitute the "Mandatory Analyses" and "Supplemental Analyses" are identified below. The analytical methods which may be utilized to determine these parameters are described in Section C-2h. Analyses are identified in Section C2-h as either "unique" (developed by CWM and meet CWM performance standards) or "standard" (recognized by the U.S. EPA, ASTM or other recognized sources e.g., AOAC) analytical techniques. The analytical parameters and techniques given in this text (whether standard or developed by CWM through its operating experience) have been chosen for their ability to provide the information required to properly manage a waste.

A summary of the analytical parameters within each category and the rationale behind their usage is provided herein (also see Section C-2f). Analyses are not necessarily repeated for sequential activities or movement of the same waste within the facility unless required by changes in the waste's identity, as determined by site management. The Laboratory Manager may waive specific Mandatory or

Supplemental Analyses if performing the analysis presents a safety hazard in the laboratory (e.g., PCB extraction on an oxidizing waste).

C-2b(1) Mandatory Analyses

The "Mandatory Analyses" include screening procedures that are performed to provide a general identification of the waste, and are used to ensure that the method of management selected is suitable for that particular waste. The Mandatory Analyses are shown on Table C-3. These analyses are performed on all wastes, except on the occasions when a test is inappropriate as described below. These analyses are based on procedures and protocol formulated by CWM and meet CWM performance standards or are based on ASTM, "Standard Methods", or other sources recognized by EPA. The parameters and associated rationale of the "Mandatory Analyses" are as follows (see Section C2-h for the analytical techniques which may be utilized):

- Physical Description is used to determine the general physical characteristics of the waste. This facilitates subjective comparison of the sampled waste with prior waste descriptions or samples. It is also used to identify the presence or absence of free liquids (includes paint filter test if needed) and notes any dust potential.

- pH Screening is undertaken to indicate the pH range and the general corrosive nature of the waste. pH screening may not apply to certain waste types, e.g., organic waste, or insoluble solid waste.

- Water Mix Screening is used to determine whether the waste has a potential to vigorously react with water to form gases or other products, or whether it generates significant heat. This testing does not apply to wastes that are already in contact with excess water, or for which sufficient analytical data exist that indicate no potential reactivity with water.

- Flammability Potential Screening is used to indicate the fire-producing potential of the waste. This testing can be applied to all waste liquids, semi-solids, but need not be applied if other information (e.g., Waste Profile in conjunction with the results of the other screens, MSDS, etc.) indicates the waste is not ignitable.

TABLE C-3

Usage of "Mandatory Analyses"

(applicability of the parameters to each management option)

Parameters	Pre-Acceptance[1]	Incoming Shipment	Wastewater Treatment (Ag. Liq.)	Fuel Blending (Org. Liq.)	Landfill (Solid Sludge)
Physical Description	X	X	O	O	O
pH Screening	X	X	O	O	O
Water Mix Screening	X	X	O	O	O
Flammability Potential Screening	X	X	O	O	O
Cyanide Screening/ Quantification	X	X	O		O
Sulfide Screening/ Quantification	X	X	O		O
Radioactivity Screening	X	X	O	O	O
PCB Screening/ Quantification	X	X		O	
Suitability for Landfill	X				O

[1] The pre-acceptance sample may not always be necessary, see Section C-2d(1).
X - as outlined in text.
O - test provides waste property information which may be useful for these processes.

- Cyanides Screening is used to determine whether the waste produces hydrogen cyanide upon acidification below pH 2. It is not required if the pH of the aqueous waste is less than 6.0, or if the waste is organic. A positive screen may indicate the need for further quantitative testing to ascertain whether the waste meets the landfill cyanide limit (Section C-1, Item 8).

- Sulfides Screening is used to determine whether the waste produces hydrogen sulfide upon acidification below pH 2. It is not required if the pH of the aqueous waste is less than 6.0 or if the waste is organic. A positive screen may indicate the need for further quantitative testing to ascertain whether the waste meets the landfill sulfide limit (Section C-1, Item 8).

- Radioactivity Screening is performed to screen wastes for radioactivity above background levels.

- PCBs are run on waste targeted for fuels to indicate whether PCBs are present in oil or solvent wastes to be blended and to ascertain their concentration. It is not required on a PCB containing material that will be managed as a PCB waste.

- Suitability for landfill is a testing program that assesses the acceptability of the waste stream pre-acceptance sample, when necessary, for land disposal. Waste streams that are to be land disposed are classified into general categories. The test requirements and rationale for each of these categories is outlined below. The miscellaneous special wastes are exempt.

    1. Inorganic solids and sludges with no RCRA metals (e.g., calcium fluoride, sulfate, and phosphate mixture)
        - Mandatory analyses.

    2. Soil with inorganic contamination, no RCRA metals (e.g., small spill cleanup from a caustic type solution spill)
        - Mandatory analyses.

    3. Inorganic process sludges and solids with metals (e.g., WWT sludges with F and D codes)
        - Mandatory analyses.
        - Leachable metals assessment. If the waste exceeds the LDR limits, a stabilization evaluation may be run.
        - If incomplete organic analysis is provided by the generator, a VOC analysis or other approved organic methods may be performed to confirm LDR for hazardous waste or 2% Organic Limit compliance for non-hazardous waste.

    4. Soil or other inorganic solids with metals (e.g., fly ash with lead, D code materials)
        - Mandatory analyses.
        - Leachable metals assessment as described for in item number 3, bullet two above.

5. Inorganic solids with cyanide, may include metals (e.g., potliner)
   - o Mandatory analyses.
   - o If cyanide screening is positive, analyze for cyanides amenable to chlorination or total cyanide to determine whether the waste qualifies for land disposal.
   - o Leachable metals assessment may be performed as described in item 3, bullet two above.

6. Nonhazardous non-petroleum organic solids or sludges (e.g., latex sludge, PCBTF waste)
   - o Mandatory analyses.
   - o VOC analysis to confirm the 2% Organic Limit may apply on a case-by-case basis.

7. Soil or other solids contaminated with nonhazardous non-petroleum organics (e.g., soil with dioctyl adipate)
   - o Mandatory analyses.
   - o VOC analysis to confirm the 2% Organic Limit may apply on a case-by-case basis.

8. Soil or other solids contaminated with spent solvents (F codes), HOCs (any code) and for any other RCRA hazardous organic substance (K, U, P or D codes).
   - o Mandatory analyses.
   - o These materials are restricted wastes. A certification backed by analytical data must be provided by the waste generator or treater prior to and/or with the first shipment for many of these wastes. It is therefore expected that the generator will provide the necessary organic analytical data. If the analytical data is not provided by the generator, the analysis may be performed by CWM.

9. Soil or other nonhazardous wastes contaminated with oil or other petroleum products (e.g., oil sludge, soil contaminated with petroleum hydrocarbons)
   - o Mandatory analyses.
   - o Wastes not from a virgin single substance spill will be analyzed for PCBs if the generator does not provide data demonstrating PCBs are not present.

10. Waste materials that do not clearly fall into one of the above-defined categories will be designated as the category that most closely matches the Waste Profile description of that waste or the Waste Profile information will be used to designate a series of tests that are most appropriate for that waste.

Based upon the Waste Profile information, other tests may be necessary. The Additional Review Program, which is used to spot check incoming landfill waste shipments, is described in Section C-2f(5), Landfill Disposal.

C-2b(2) Supplemental Analyses

Supplemental Analyses are performed to further identify wastes as appropriate. The results of these analyses provide the site management with another level of confidence concerning the proper means of treatment, storage and disposal.

These analyses are based on procedures and protocol formulated by CWM and meet CWM performance standards or are based on ASTM, "Standard Methods", or other sources recognized by EPA. The parameters and associated rationale of the "Supplemental Analyses" are as follows (see Section C-2h for the analytical techniques which may be utilized):

- Ash - the percent ash is determined on a completed fuel blend if the receiving facility requests it.

- Chromate - by test kit is used to screen for the presence/absence of hexavalent chromium. Waste streams suspected of containing Cr^{+6} may be screened prior to pumping into a tank. A waste batch may be screened to ensure no Cr^{+6} is present prior to alkalization, due to the high solubility of $Cr(OH)_6$.

- Compaction Testing determines liquid loss during compaction of the waste following the structural integrity portion of the EPA toxicity method to ensure that waste meets maximum liquid loss limit of 5% specified in TSCA approval letter for certain PCB wastes.

- Compressive Strength - determines the compressive strength of wastes and treated wastes.

- Conductivity - is performed on site surface waters. It is a technique that quickly assesses general contamination. It is run on request.

- Density - indicates mass per unit volume of waste.

- Leaching Procedure - (currently called "TCLP") determines if a waste leaches any of the characteristic constituents above the specified regulatory thresholds.

- Flash Point further characterizes ignitable wastes to establish proper storage mode and conformance with permit conditions. A closed cup is used for liquids, and solids.

- Fluoride - either soluble (as a screen) or total is used to determine the fluoride concentration of a wastewater stream for species control in WWT plant. Fluoride can also be used to demonstrate compliance with an LDR standard.

- Ferrous - by test kit is used to monitor the presence of ferrous iron and estimate its concentration. Ferrous sulfate is frequently purchased and used as a reducing agent in the WWT plant.

- Free Cyanide - a test is used to determine the cyanide concentration on an aqueous waste which had a positive screen using the cyantesmo paper.

- Free Sulfide - a test is used to determine the sulfide concentration on an aqueous waste which had a positive screen using lead acetate paper.

- Heating Value - the heating value (BTU/lb) is performed to determine the suitability of a material for a fuel blend. BTU analysis (for wastes to be included in a blend that will be used as a fuel in boilers or industrial furnaces [BIF]) will only be run if the BIF does not have a Certificate of Compliance.

- Liquid Waste Compatibility - assesses the compatibility of waste shipments received with those currently stored in tanks or process units. This test is required before any material is added to the tank or unit.

- AWT Metals (e.g., Cu, Cr, Cd, Fe, Mn, Ni, Zn, Pb) is used to determine potential salt precipitation on wastewater treatment streams. When necessary (see Section C-2d(1)), a pre-acceptance wastewater treatment candidate is analyzed for these metals. The efficiency of metals removal (presence of complexing agents) may be further assessed by metals analysis after bench scale lime treatment.

- Other Metals (e.g., As, Se, Hg, Ag, etc.) may be analyzed as needed. For example, Silver is also analyzed on TCLP extracts of stabilized F006 wastes to ensure compliance with treatment standards.

- Microwave Digestion for Metals Analysis - is used to obtain a rapid sample preparation for metals analysis.

- Organic Priority Pollutants - analysis identifies and quantifies organic priority pollutants and other constituents present in a waste.

- Organics Screening - is performed in order to determine whether or not a waste contains various specific organic compounds (e.g., pesticides, herbicides, PCP, TPH, etc.).

- Oxidizer Screening - is used to indicate the presence of strong oxidizers. It may be used any time a waste is suspected of being an oxidizer.

- Liquid Determination is used to indicate if free liquid is present in a solid or semi-solid material if this is not apparent by inspection.

- PCB Screening is performed in order to determine whether or not PCBs are present in a waste.

- Percent Halogen/Sulfur - an analyses is used to determine the concentration of fluoride, chloride, bromide, and sulfur on a combusted fuel sample. These anions, as well as nitrate, nitrite, and phosphate may also be determined directly on an aqueous material using the ion chromatograph. Direct injection may be employed whenever the identity of an inorganic salt or acid needs to be confirmed.

- % Solubility - is determined gravimetrically if a solid waste destined for land disposal is suspected to be greater than 10% water soluble. This test is applied if solubility is not readily apparent from the Waste Profile description.

- pH - provides a more precise measurement of pH than pH screening. It is used to monitor various steps of the AWT process.

- Phosphate - by test kit is used to monitor the presence of phosphate in the AWT carbon beds, which is necessary to prevent bridging. It is generally checked daily during operation.

- Phenols - by test kit is used to monitor the phenols level in the influent and effluent of the WWT carbon beds.
- Pour Point - to determine whether a material is "pourable" at a specified temperature.

- Settleable Solids - are determined on the discharge of treated wastewater or on site surface waters in accordance with the facility's SPDES permit.

- TOC - may be used to determine the soluble organics concentration of a wastewater.

- Total Cyanides (Distillation with Magnesium Chloride) - quantifies the concentration of all free and most complexed cyanides. It may be used to determine compliance with an LDR standard.

- Total Sulfides is used to quantify the concentration of total sulfide. It may be used to determine compliance with an LDR standard.

- 2% Organic Limit Analyses - is used to screen wastes for the presence of unexpected organics or ensure compliance with the NYS 2% organic limit on non-hazardous wastes destined for land disposal.

- Water Content is performed to determine the amount of free water.

Other parameters not listed here may be performed as required by regulatory change, policy revision, waste matrix, etc.

C-2c Sampling Methodology

Sampling is performed at the Model City facility by CWM and by (or as directed by) the waste generator at the generator's facility. Specific sampling procedures are dependent on both the nature of the material and the type of containment. SW-846 states that, "a less comprehensive sampling approach may be appropriate if information

regarding the distribution of waste components is known or assumed." This section presents sampling methodologies to be utilized on-site by CWM personnel.

When a waste arrives at the facility for management, a determination has previously been made by the generator that the waste is either:

1. a listed hazardous waste in 6NYCRR Part 371.4, which meets or requires treatment to the LDR standards in 6 NYCRR Part 376;
2. a characteristic waste as defined in 6NYCRR Part 371.3, which meets or requires treatment to the LDR standards in 6 NYCRR Part 376; or
3. a waste material which is not a hazardous waste as defined in 6NYCRR 371.2.

The generator-supplied characterization provides CWM with information concerning both the distribution and nature of the waste components (see Section C-2d(1) for discussion regarding the information or data to be supplied by the generator). The purpose of the inspection, sampling or analysis when a waste material arrives at the site is to ensure that the shipped waste matches the description of the waste designated on the accompanying manifest or shipping paper and Waste Profile.

Therefore, CWM can often use a less comprehensive sampling approach, as described in Sections C-2c(2)(a) through C-2c(2)(d), (e.g., vertical compositing) to yield a waste identification sample (see EPA documents SW-846 "Test Methods for Evaluating Solid Waste", Third Edition, September 1986, Chapter Nine).

C-2c(1) General Methods and Equipment

As practicable, the sampling techniques used for specific types of waste correspond to those referenced in 40 CFR 261, Appendix I (6NYCRR Part 371, Appendix 19) and presented on Table C-4. Because Appendix I sampling methods have not been formally adopted by the EPA Administrator, CWM may use additional methods or may modify the technique as necessary to obtain a representative sample (see 40 CFR 261.20(c) Comment). Any changes made after final permitting will be forwarded to the NYSDEC for review and acceptance. The sampling equipment and procedures described in this WAP represent the facility's recommended sampling protocol for general types of waste material and containment. Specific waste materials or shipments may require different sampling techniques. Therefore, deviations from the recommended protocol do not constitute an excursion from acceptable sampling practices or the conditions of this WAP. All methodologies will be updated and revised as the references are updated and revised.

C-2c(2) Specific Methods and Equipment

In addition to ASTM and EPA sampling procedures, CWM has instituted specific methodologies for taking samples from various containment sources. The type of container may be transportable (e.g., such as drums), portable transport units (e.g., tanks, roll-off boxes, lugger boxes), and tanker or dump trucks; or stationary, such as tanks, in-process sources, waste piles, and containments. The sampling devices are selected depending on the size and type of containment and on the specific material involved. Detailed sampling procedures can be found in CWM's Standard Division Practices (SDPs). The device to be used in each situation is described below.

TABLE C-4

SAMPLING METHODS AND EQUIPMENT

MATERIAL (or waste type)	METHOD	EQUIPMENT
Extremely viscous liquid	ASTM D140[a]	Tubing, thief or Coliwasa
Crushed or powdered material	ASTM D346[a]	Tubing, trier, scoop, or shovel
Soil-like material	ASTM D1452[a]	Tubing, trier, auger, scoop, or shovel
Fly ash-like material	ASTM D2234[a]	Tubing, trier, auger, scoop, or shovel
Containerized liquids	ASTM-D5495	Coliwasa, tubing, weighted bottle, bomb, or tank sampling port
Additional methods:		
Industrial chemicals	ASTM E-300	
Soil & waste for VOCs	ASTM D4547	
Soil	ASTM D4700	
Liquids in pipes	ASTM D5013	
Pond Sampling	ASTM D5358	
Sampling with a trier	ASTM D5451	
Liquid in drums	ASTM D5743	
Volatile organics in soil and waste samples	Method 5035Ab	
Chapter 9	SW-846b	

[a] American Society for Testing Materials. ASTM International West Conshohocken, PA.

[b] Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, SW-846, Third Edition, U.S. Environmental Protection Agency, Office of Solid Waste, Washington, DC, September 1986, as amended by Final Update I, July 1992, or more recent update or edition.

Access to any type of container will influence the location within the container from which samples can be taken. Samples will be taken to address vertical variations in the waste because there is a much greater tendency for wastes to be heterogeneous in a vertical rather than a horizontal direction, and horizontal variations are generally easier to detect. If examination indicates strata in the waste, then each layer may be composited in proportion to its estimated volume or sampled individually.

C-2c(2)(a) Containers

A container is a portable or stationary device in which a material is stored, transported, treated, disposed of, or otherwise handled. The sampling of small containers (e.g., drums, cartons, and other small units) varies with the physical nature of the waste material. For flowable materials, the sampling device of choice is either a Coliwasa unit or open tube sampler, which is used to draw a full vertical section. Drums of aqueous and organic liquids are sampled with a four foot glass tube. A composite sample may be obtained by mixing equal portions of each container included in the sampling lot. Solids or sludges or other small containers are sampled with a scoop (disposable plastic or using the bottle itself) or a shovel if a heavy digging tool is required. If the material on top appears non-representative (e.g., "speedi-dry, "oil dry", etc.), a subsurface sample will be obtained. The top portion may be transferred to another container in order to obtain a subsurface sample. Alternately, a metal sample thief, trier or tubing (a piece of conduit or small diameter pipe) may be used to obtain a core sample of the drummed solid. An Easy Draw syringe or similar device may be used to obtain a sample of a solid waste for VOC analysis.

Large containers and tanks for flowable materials may be either stationary or mobile. The sampling device of choice for a bulk aqueous or organic liquid in a tank truck is either a Coliwasa or an open tube sampler. A tank truck is sampled with a coliwasa sampler. If a separate top sample is also desired (e.g., to obtain a sample of a thin oil skim), a sample bottle attached to a string or dipper may be employed.

Tanks containing liquids are generally not amenable to sampling via a tubing or Coliwasa sampler due to their size. If the tank has circulation capability, the contents of the tank are circulated to ensure thorough mixing, and a sample may be obtained in a container either at the pump discharge (an autosampler may be employed) or from the tank sampling port(s), or through a hatch. Tanks without circulation capability are sampled at various levels using a weighted bottle or bomb type sampler if stratification is suspected. In addition, samples may be taken from the tank sampling ports. If a top sample is desired and no sampling port is available, the top hatch is opened and a sample is obtained using a glass sample bottle attached to a dipper. Generally, top, middle, and bottom samples are obtained using a weighted bottle or bomb-type sampler. If layers are present, they may be run separately or composited depending on the information and/or analysis required (e.g., sampling may have taken place solely to identify the location and quantity of a water phase in a full tank).

Bottom sediment samples may be obtained via the bottom discharge valve on the tank.

A bulk solid or sludge in a dump truck is generally sampled using a disposable plastic scoop attached to a scoop extender rod according to the site SDP on sampling bulk solids. For inbound waste loads, a multi-point composite is taken. If a bulk load is to be sampled for VOCs to confirm compliance with the "2% Organic Limit" as part of the Additional Review Program, precaution should be taken to limit the loss of volatiles. If some horizontal stratification is suspected and is of concern (as indicated by the Waste Profile), a larger sampling tool such as a shovel may be used to dig into the waste or a core sample may be taken using a metal thief, trier or tube. If the material is fine and dusty and packaged in a large plastic envelope, a thief (grain sampler) may be used to puncture the envelope and obtain a sample. Landfill personnel are required to report to the laboratory any gross physical discrepancies in waste appearance, when a dump truck type shipment is unloaded in the landfill.

C-2c(2)(b) Process In-Line Sampling

The variability of the waste stream at any point in a treatment process is first determined from knowledge of the process producing the stream, or from the results of a preliminary investigation of the waste stream. Sampling frequency is based upon the waste stream's variability.

Process line samples are obtained via sample taps in the line. An individual sample may be obtained by flushing the tap and directly filling a sample bottle. If desired, a timed (automatic) composite sampler may be used to take samples.

C-2c(2)(c) Waste Piles

Waste accessibility, frequently a function of pile size, is a key factor in the sampling strategy for a waste pile. Piles are sampled by multiple vertical sections using triers, tubing, shovels, or similar devices. Large piles may be sampled with heavy tubing, soil augers, or through the use of excavation equipment such as a backhoe.

In cases where size impedes access to the center or bottom of a waste pile, a set of samples that is generally representative of the entire pile can be obtained by scheduling sampling to coincide with pile emplacement or removal.

C-2c(2)(d) Impoundments

The representativeness of the samples of the waste in a surface impoundment is dependent on the number of samples collected over the volume of the waste. A single sample may be collected for small surface area impoundments. Additionally, for large surface area horizontally displaced sampling may provide additional information. A weighted bottle, bomb sampler or peristaltic pump is generally used for sampling. Samples are composited if necessary. A multi-point composite is used for pond qualification for discharge.

C-2c(2)(e) LDR "Grab" Sampling

The current EPA guidance for RCRA sampling is SW-846, see 40 CFR 260.11, which specifies representative and composite sampling for waste characterization. This type of sampling provides averaged concentration values or properties. The Land Disposal Restrictions, 40 CFR 268, have specified the use of "grab" sampling for most of the compliance demonstrations to the Land Disposal Restrictions treatment standards. For a large container, more than one grab sample may be collected. For LDR compliance, none of the samples may exceed the applicable LDR standard(s).

C-2d Pre-acceptance Procedure

CWM has developed a series of control procedures to determine the acceptability of specific wastes for management at the site, referred to as the "Pre-acceptance Procedures." This acceptability decision is based on the conditions or limitations of existing permits and regulations, and capability to safely manage the waste at the site. The pre-acceptance procedures for this facility may be carried out at this facility, another CWM facility, or upon receipt of the load prior to its acceptance.

The pre-acceptance procedures include the following steps:

- Generator-supplied information is what a customer must provide to enable CWM to make a decision regarding the possible management of a candidate waste stream (see Section C-2d(1) for discussion regarding the information or data to be supplied by the generator).

- Initial review and/or analysis of the generator-supplied material allows CWM to conduct an initial evaluation for management capabilities at the facility.

- Disposal decision process is the process of reviewing all the documentation supplied by the generator and/or CWM and documenting the acceptance or rejection of the candidate waste stream.

- Re-evaluation process determines the frequency a waste stream will be re-evaluated once it has been accepted.

CWM maintains as part of it its pre-acceptance information generator supplied and CWM developed information. This information may be accessed electronically or via hard copy.

C-2d(1) Generator-Supplied Information

The waste generator will supply CWM with the following information and materials for each new candidate waste stream, except where noted herein.

- Waste Profile, (typical form shown as Figure C-1 in Section C), which will contain pertinent chemical and physical data. At a minimum, the generator supplies all the information required by 6 NYCRR 373-2.2(e)(1) needed to characterize the waste for proper treatment, storage, or disposal.

- A representative sample may not be required if CWM and NYSDEC (for landfill waste streams) determine that the pre-acceptance documentation supplied by the generator gives sufficient information to maintain compliance with the permit and operational constraints and that submittal of a sample would not aid in the disposal decision process (e.g. soil with a limited number of organic contaminates for which the generator has supplied chemical analysis). In addition, a sample may be waived if handling or obtaining a sample poses an unnecessary hazard of acute or chronic exposure of CWM employees to carcinogenic (e.g., asbestos). Also see Sections C-2d(1)(a) and C-2d(1)(b).

- Land Disposal Restriction Information and/or Data (6NYCRR 376 and 40 CFR Part 268).

- Other supporting documentation such as additional analytical results or a material safety data sheet (MSDS), as necessary to provide additional waste characterization.

C-2d(1)(a) Exceptions

No representative sample is required for the following:

- Chemical waste from a laboratory. This is limited to discarded containers of laboratory chemicals (lab packs), lab equipment, lab clothing, debris from lab spills or cleanup, and floor sweepings. Lab pack chemicals are managed in accordance with all applicable NYSDEC regulations.

- Articles, equipment, and clothing containing or contaminated with polychlorinated biphenyls (PCBs) (e.g., PCB solids, capacitors, transformers, gloves, aprons, etc.).

- PCB draining and flushing fluids (e.g., PCB articles are flushed with a substance not a hazardous waste and placed directly into transport container).

- "Empty" containers of waste materials, commercial products, or chemicals. This applies to a portable container which has been emptied, but which may hold residues of the product or chemical (e.g., portable tanks, drums, barrels, cans, bags, liners, etc.). A container shall be determined RCRA "empty" according to the criteria specified in 40 CFR Part 261.7 and 6NYCRR 371.1(f)(2).

- Asbestos-containing waste from building demolition or cleaning. This applies to asbestos bearing waste insulation material (e.g., wall board, pipe insulation, etc.).

- Discarded, unused, off-specification, or outdated commercial products (e.g., unused commercial product which has passed its allowed holding time). MSDS to be supplied or made available upon request.

- Non-hazardous soil where appropriate analytical data has been furnished.

- RCRA or RCRA/TSCA contaminated soil where analytical data that adequately characterizes the waste has been furnished.

- Residues and debris. This consists of residue and debris from cleanup of spills or releases of a single chemical substance or commercial product or a single waste which would otherwise qualify as a "miscellaneous special waste" or one or more known substances.

- Chemical-containing devices removed from service. Examples include cathode ray tubes, batteries, fluorescent light tubes, etc.

- Demolition wastes. This consists of waste produced from the demolition or dismantling of industrial process equipment or facilities contaminated with chemical from the process. (This does not include wastes drained from such equipment).

- Cartridge filters.

- Activated carbon, Ion exchange resin, molecular sieves (as adsorbed constituents cannot be readily desorbed to provide meaningful analysis).

- Contaminated debris (e.g., wood, building rubble, asphalt, concrete, tools, scrap metal, crushed glass, and plastic. This includes the last three items impregnated or coated with chemical substances).

- Waste from a remedial project whose sampling and analysis plan was approved by Federal or State agency (e.g., CERCLA, Superfund, or Potentially Responsible Party (PRP) type project).

- Debris as defined at 40 CFR 268.2 and 6 NYCRR 376.1(b)(1)(vii). These materials will be visually inspected prior to acceptance (see Section C-2e(2)) in order to ensure that the waste meets the definition of debris.

- Controlled substances regulated by the Federal Government including drugs and/or materials from clandestine labs.

Requests for approvals of wastes defined as "miscellaneous special waste" are to be based only on the waste generator's written description of the waste. A sample is not required. The generator still must supply all the information required by 40 CFR 264.13(a) and 6 NYCRR 373-2.2(e)(1) and necessary to characterize, treat, store, or dispose of the waste. When any of these "miscellaneous special wastes", other than labpacks, are received at the facility for storage or treatment, they will, at a minimum, be visually inspected. In lieu of sampling and analysis, color, texture, or other applicable physical description will be documented. The presence of free liquid or any other physical differences from the profile will be documented. Any incidental odor will also be documented.

The request for approval of a miscellaneous special waste will be initiated by a Waste Profile (typical figure shown in Figure C-1 and/or Figure C-1a). Except for the analysis of a sample, the approval process will proceed as described in Section C-2d.

C-2d(1)(b) Standard Profiles

Standard Profiles may be used for waste streams which are similar in physical and chemical characteristics, generated by a specific industry or process, consistent with the USEPA approach of assigning a listed waste code to process wastes.

An analytical data base will be developed for a specific Standard Profile based on analytical data from waste streams that are representative of wastes from the specific industry, the process or historical data. CWM will review the data base and determine whether the individual waste streams are sufficiently similar in physical and chemical characteristics to an established Standard Profile.

Specific candidate waste streams which upon review are identified as conforming to an existing approved Standard Profile will be managed under the existing disposal decision, specific for that Standard Profile.

C-2d(2) Initial Review and Analysis

Once CWM receives the generator-supplied information, and it is received and reviewed, a determination will be made if further analyses by the generator or CWM are required. All waste samples, when necessary for the pre-acceptance evaluation, will be subjected to the "Mandatory Analyses" (Section C-2b(1) as appropriate. "Supplemental Analyses" (Section C-2b(2) are performed at the direction of the waste approvals personnel. Additional testing may also be requested by the Department pursuant to the waste stream approval condition for land disposal.

If, during the pre-acceptance procedure, CWM determines that the waste information indicated by the "Mandatory Analyses" does not generally conform to the information on the Waste Profile, the generator is notified of the apparent

inconsistency. If the inconsistency is resolved, the pre-acceptance procedure continues. The waste may be rejected or accepted during this phase of the procedure.

CWM will not accept, for treatment or disposal, any current production waste or outdated products which are listed as hazardous waste by EPA because it contains, as a hazardous constituent (see 40 CFR Part 261, Appendix VII), a form of polychlorinated-dibenzo-dioxin (PCDD) or polychlorinated-dibenzo-furan (PCDF) (e.g., F020, F021, F022, F023, F026, F027, etc.). Only those waste materials that are classified as derived from F020 to F023 and F026 to F028 (e.g., leachate, filter cake from treatment of leachate, incinerator ash etc.) or media or debris contaminated with these wastes will be accepted at Model City. See Condition E.1.c.v in Exhibit F of Schedule 1 of Module I. Any pre-acceptance screening carefully reviews the Waste Profile for processes generating these wastes, waste names, and those hazard code identifications.

C-2d(3) Disposal Decision Process

The pre-acceptance procedure is concluded when the review of the generator supplied information and any appropriate mandatory analyses is complete. Figure C-2 (see Section C) presents an overview of the pre-acceptance process. At this time, CWM makes a "disposal decision" on the candidate waste.
Disposal decisions are based on:

- Management methods available.
- Conditions or limitations of existing permits and regulations.
- Capability to safely manage the waste.
- Waste Profile description of the process generating the waste.
- Knowledge of the waste generating process.
- Waste Profile description of the chemical and physical properties of the waste.
- Any additional documentation supplied by the generator.
- Results of any "Mandatory Analyses."
- Results of "Supplemental Analyses" as appropriate.
- Results of any treatability analyses
- Management's technical experience and judgement.

C-2d(4) Re-evaluation Process

In accordance with NYCRR 373-2.2(e), a waste profile re-evaluation will be conducted when one of the following occurs:

- A generator notifies CWM that the process generating the waste has changed;

- The results of inspection or analysis indicate that the waste received at the facility does not match the identity of the waste designated on the accompanying manifest (or shipping paper) or pre-acceptance documentation (See Section C-2e); or

- Every two years for wastes that are treated and/or disposed of at the site. CWM feels that a biennial waste recharacterization (or recertification by the generator), along with a vigilant incoming load screening program is sufficient to ensure that wastes are managed safely at the site and to ensure the information is accurate and up-to-date; or

- Every two years. A biennial waste profile re-evaluation along with a vigilant incoming load screening program is sufficient to ensure that wastes that are to be transferred through Model City for disposal at another CWM facility continue to be properly managed.

For bullet items one, three and four above, this re-evaluation process consists of a review of the paperwork to ascertain that the analytical data is accurate and current and that it is sufficient to properly manage the waste as intended. The procedure typically involves comparing the current waste profile to the available results of routine inspection, sampling, and analysis obtained upon receipt of an incoming load of the waste stream. To augment this review, if existing analytical is not sufficient, the generator may be asked to review the current waste profile, to supply a Profile Recertification form, to supply a new profile, and/or to submit a sample for analysis, or CWM may obtain a sample from a shipment of the waste.

C-2e Incoming Load Procedure

The incoming load procedures allow CWM to identify that a waste shipment delivered to the site matches the description on the Waste Profile referenced on the accompanying manifest and secondarily, to ensure the proper management method. This is accomplished through the following procedural steps:

- Manifest Review outlines the weight and piece count verification, manifest review, and discrepancy resolution.

- Inspection and sampling outlines the inspection and sampling of incoming waste shipments.

- Analysis outlines the analyses CWM will perform on each sample.

- Decision evaluation logic outlines the general logic utilized by CWM personnel in deciding whether to accept or reject a particular waste shipment.

Waste shipments that have arrived at the facility are considered to be in the receiving process until such time that the receiving personnel makes a final decision regarding waste acceptability; at such time the wastes are considered accepted.

In addition, the first shipment of wastes that are subject to the Land Disposal Restrictions (6NYCRR Part 376 & 40 CFR Part 268) and have been treated, exempted, varianced, or meet the appropriate treatment standard or prohibitions without treatment must be accompanied by a form from the treater or generator certifying that the treated, exempted, or varianced waste meets the appropriate treatment standard, prohibition, exemption, or variance (or that the waste naturally meets the appropriate treatment standard prohibition) and includes any applicable analytical data or reference to such data (see Section C-2d(1) third bullet) in accordance with 6NYCRR Part 376 & 40 CFR Part 268. Generators of landfill candidate wastes must be informed that a new LDR form is required if the EPA waste codes for a waste changes.

Furthermore, wastes which are subject to the Land Disposal Restrictions and require treatment must be accompanied by a form from the generator notifying the treater that the waste requires treatment and all applicable prohibitions which must be met and includes any applicable analytical data or reference to such data in accordance with 6NYCRR Part 376 & 40 CFR Part 268. For generators who ship multiple loads of the same LDR waste to the Permittee's facility, providing a notification form with the first load is sufficient, provided the Permittee confirms that each subsequent shipment matches the description on the original LDR form. LDR forms will be reviewed and maintained in accordance with facility SDP 1202.

Federal and NYS regulation states that, for containerized waste intended for landfilling where the generator (or treater) has previously identified (see Section C-2d(1)) that sorbents have been added to the waste to sorb free liquids, a determination will be made, prior to disposal that no biodegradable sorbents (as described in 40 CFR Part 264.314(e) and 6 NYCRR 373-2.14(j)) are included in the waste. For landfill candidate wastes, such certification may be provided by the generator's signature on the Waste Profile.

C-2e(1) Manifest Review

Upon arrival at a CWM facility, bulk loads normally will be weighed (gross weight) as a first step to confirm manifest quantity. The empty vehicle will be weighted (tare weight) when exiting the facility. Off-site certified weighing will be accepted. Waste shipments received in drums will be subjected to a piece count during the receiving process.

The manifest is reviewed for completeness and obvious errors (eg. DOT shipping name of "Waste Bricks, NOS"). Any incomplete items discovered or corrections made are noted on the discrepancy section of the manifest.

The generator or transporter (as appropriate) will be contacted concerning any significant manifest discrepancies (defined by 6NYCRR 373-2.5 as a variation of >10% weight for bulk loads or any variation in piece count;

discrepancies of waste type are generally discovered later during the acceptance process) and CWM will attempt to resolve the issue. Any significant manifest discrepancy will be noted in the discrepancy identification section on the manifest or will be reported to the DEC via a manifest discrepancy notification letter. If a significant discrepancy can not be resolved, the proper agency notification will be made as required by regulation.

C-2e(2) Inspection and Sampling

Each waste shipment will be inspected at a CWM site and all sampling will be done in accordance with Section C-2c. (Wastes exempted from sampling are noted in Sections C-2d(1)(a) and the last paragraph of this section.) All non-miscellaneous bulk solids will be sampled according to site SDP, unless a reduced frequency for a given profile has been approved by the DEC.

This procedure may be varied, under certain circumstances, for example, to allow CWM personnel to perform generator site inspection/sampling of large remedial actions, lagoons, impoundments, and waste piles, debris or under other circumstances as approved by NYSDEC. This variance will be on a job-specific basis or process specific basis and documentation of the sampling and analysis plan will be detailed and filed with the waste profile.

In the case of drums or portable tanks, all containers will be inspected with at least 10% of each profile solid waste containers randomly selected for sampling. For containerized liquid waste, 100% of the containers will be sampled. Container samples that are related to one generator and one process may be composited prior to analysis, providing the individual samples are similar in physical appearance. Waste stream samples may be further composited for analysis to evaluate suitability for a process or disposal. All containers destined for on-site landfill disposal shall be opened for visual inspection of their contents, with the following exception provided for asbestos containers. Sampling and interior inspection of asbestos containing containers is waived as long as the generator certifies that there is no void space present and the following procedures are performed:

- CWM will tap test all asbestos containers to confirm that there is no void space.
- All containers with debris containing asbestos requiring micro or macro encapsulation and with asbestos waste requiring stabilization, will have their contents inspected in the Mixing Pit Tanks as the material is prepared for processing.
- At least one (1) asbestos container from each generator's shipment which is destined for direct on-site landfill disposal shall be randomly selected and opened for visual inspection of its contents by asbestos qualified personnel under controlled conditions. In addition, for generator shipments greater than eighty (80) containers, one (1) out of every eighty (80) containers shall be opened for visual inspection. If wastes/materials other than those specified on the waste profile are observed in the container, the inspector shall note the waste profile identification, and arrangements shall be made to open and inspect any other asbestos containers associated with that particular waste profile shipment.

See Section C-2d(1)(a) for additional sampling exceptions.

Site management may waive the sampling and analysis of an incoming waste shipment that is only for storage at Model City and will be trans-shipped to another facility for management.

The sampling and analysis of "miscellaneous special waste" is not required, unless specifically requested by the site management. These materials are not sampled because they present extraordinary health and safety hazards, (e.g., asbestos), exhibit unusual or impractical sampling and analytical complication (e.g., lab packs) and/or are of such a nature that their contents are known in sufficient and reliable chemical and physical detail that sampling and analysis is not warranted (e.g., outdated commercial products).

C-2e(3) Analysis

Samples will generally be analyzed in accordance with Section C-2b and C-2f of this text. At a minimum, samples will be subjected to the appropriate "Mandatory Analyses" (wastes exempted from Mandatory Analyses are noted in Sections C-2d(1)(a) and C-2e(2)). "Supplemental Analyses" will be performed as directed by site management and as specified in Section C-2f. Other CWM personnel (or a CWM-approved laboratory) can provide the Mandatory and/or Supplemental Analyses required at incoming prior to or concurrent with the arrival of the shipment.

Under the Additional Review Program (ARP), for wastes to be land disposed, the on-site DEC monitor may identify additional testing to be performed on any non-miscellaneous waste destined for the landfill. This program is further defined in Section C-2f(5). Further testing may be required if the results of the mandatory analyses indicate unexpected information with respect to pre-acceptance analytical results, or if site management has reason to suspect that the waste composition has changed. CWM will conform with the quality control policy described in Section C-2g.

C-2e(4) Decision Evaluation Logic

The general logic utilized by site management in deciding whether to accept or reject a particular waste load is depicted in Figure C-3. The specific major decision points are the need for additional analyses, the actual waste identification, an evaluation of whether a waste is found to be in conformance or non-conformance, and an evaluation of whether wastes found to be in non-conformance can be accepted or should be rejected.

o The need for additional analyses. Site management decides whether additional analyses are required for a particular waste based on the following:

- Results of "Mandatory Analyses"
- Knowledge of generator and/or waste-generating process
- Results of pre-acceptance evaluation
- Knowledge of the limitations of the targeted waste management units
- Experience of site management determining the need to know more information

Further testing may be required if the results indicate unexpected characteristics with respect to pre-acceptance analytical results, or if site management has reason to suspect that the waste composition has changed.

o The actual waste identification. The effectiveness of the waste identification step is dependent on some or all of the following components:

- Inspections
- Sampling
- Analytical results
- Waste profile
- Waste manifest
- Restricted waste notification and/or certification form, where appropriate
- Pre-acceptance information and/or analytical results
- Site management's judgment

o An evaluation of whether a waste is found to be in conformance or nonconformance. CWM uses four major criteria to determine the existence of an inconsistency among the Waste Profile, the manifest, and the incoming waste load screening analysis. They are:

- For bulk wastes, variations greater than 10% in weight (6NYCRR 373-2.5)
- For batch wastes (e.g., drums, bags, etc.) any variation in piece count (6NYCRR 373-2.5)
- If inspection or analysis of any waste determines obvious differences such as waste solvent substituted for waste acid or toxic constituents not reported on the manifest or shipping paper (6NYCRR 373-2.5)
- If the inconsistency changes the originally approved method of management.

(Note: The first 3 items are considered to be significant manifest discrepancies as per 6NYCRR Part 373-2.5.)
Non-conformance that do not fall within these criteria are considered to be "minor" and are not subject to a recharacterization review unless CWM has reason to believe that the variation is a continuing deviation and that a particular waste stream indeed is different from its documented values. Significant inconsistencies in waste type, as defined by the last two criteria above, result in recharacterization only if the inconsistency cannot be reconciled with the generator or CWM has reason to believe that the waste composition has changed.

o An evaluation of whether there is a discrepancy of waste type

The results of waste inspection or analysis or a comparison of the information on the Waste Profile with that on the manifest may identify a significant manifest discrepancy of waste type (eg. a waste solvent has been substituted for a waste acid). These types of discrepancies must be handled the same as the other types of significant manifest discrepancies (piece count or weight variation) as described in section C-2e(1).

The results of the inspection/analysis or comparison of the manifest to the Waste Profile may also identify a profile discrepancy in that the waste received does not appear to match the profile and may not be suitable for the intended

treatment/disposal method. This type of discrepancy may or may not also be a significant manifest discrepancy. For example, a bulk load of lead contaminated soil is received under a Waste Profile for lead contaminated debris. The manifest information for this waste (eg. DOT shipping name, EPA code, etc.) may be the same for these two wastes, however two different treatment techniques may be required for these LDR restricted wastes. The generator or other appropriate contact is contacted for assistance in the resolution of these types of significant profile discrepancies. Recharacterization of the wastestream may be initiated if the waste appears to be substantially different than represented on the Waste Profile.

The detection of a waste constituent that was not recorded on the Waste Profile or manifest would not necessarily trigger a recharacterization of the waste stream if the inconsistency could be justified by the generator, and was not a continuing variation.

o Acceptance of waste. If no significant discrepancies of waste type are identified, the waste is accepted.

o An evaluation of whether discrepant wastes can or should be accepted or rejected. Wastes found to be discrepant as defined above may be rejected; or they may be re-evaluated for possible acceptance at the site despite the discrepancy. A profile modification may be requested from the generator. This procedure is intended to prevent the unnecessary movement of a waste material back and forth between the facility and the generator in cases where the material can be readily handled by the facility. By eliminating this unnecessary movement, CWM is attempting to reduce further possible exposure of this waste to human health or the environment. The re-evaluation procedures are designed to determine whether a waste material, in its form as identified by CWM (i.e., inconsistent with Waste Profile and/or manifest data), can be handled by the facility, and whether the generator concurs with the site's identification. The re-evaluation will be based on the following criteria:

- Permit authorization
- Discussions with the generator (as per 6NYCRR 373-2.5)
- Availability of appropriate treatment/disposal technology
- Site Management's judgment

If all of the above criteria and results of the "Supplemental Analyses," if any, indicate the waste can be accepted and the generator concurs, the waste disposal decision form is modified by CWM if the discrepancy will be a continuing variation and changes the originally approved method of management. Pursuant to 6NYCRR 373-2.5, CWM will discuss and attempt to resolve with the generator any discrepancy between the received waste and that shown in the manifest. If a discrepancy cannot be resolved within 15 days of shipment receipt, the appropriate regulatory agency will be notified, in writing, of the discrepancy and the attempts to reconcile it, including a copy of the involved manifest.

The final decision to reject all or part of a waste shipment is made by site management. Decisions are made as soon as the facility has considered all of the applicable information listed above. The facility strives to complete these decisions as early as practicable, but circumstances which prevent sampling (e.g.,frozen drums) can cause delays in obtaining the information necessary to make an informed decision on the acceptability of the waste.

Under such circumstances, the facility will take appropriate action to facilitate the decision process. During this time proper staging locations within permitted storage areas will be determined using the information provided by the generator. This information (e.g., Waste Profile, MSDSs, etc.) will provide sufficient information to ensure staging with compatible materials.

A waste may be rejected for one of the following reasons:

- The generator's/transporter's paperwork is not in order.
- A manifest discrepancy or other non-conformance cannot be resolved to the generator's and CWM's satisfaction.
- A bulk liquid shipment is incompatible (fails the liquid waste compatibility test) with wastes stored in bulk liquid storage tanks and no other management method is available.
- Adequate segregated space is not available at the container storage areas for containerized wastes and special handling cannot be used to correct the deficiency.
- No management method for the particular waste is available.

C-2f Process Operations Procedure

Each movement of a waste within the facility, during which any change in its characteristics may occur, may make it subject to additional inspection, sampling and analysis to determine appropriate handling and management of the waste. Many of the analyses needed for the storage, treatment, and disposal functions are performed during incoming load identification. These are not repeated unless it is known or believed that the waste characteristics may have changed during storage or processing and monitoring of the changes is necessary. Existing and anticipated process operations at the facility, for which current and periodic sampling and analyses is important, include the following:

o Storage;
o Treatment: consisting of aqueous waste treatment, fuels blending, stabilization, microencapsulation, macroencapsulation and
o Landfill disposal.

The analytical procedures for each of these processes is described separately below.

C-2f(1) Storage

Stored containerized liquid and solid wastes are segregated with respect to ignitability, reactivity, corrosivity, and compatibility. Liquid wastes which are transferred from drums, portable tanks or tank trucks may be bulked and placed in bulk storage prior to further treatment.

Before any wastes are placed in any storage unit, the site management will determine the compatibility of the waste with the storage unit materials of construction and with wastes already stored therein. This judgement is based upon vendor/engineering handbook data and a knowledge of the waste and its characteristics from the profile. If such data are not available, compatibility testing will be performed.

C-2f(1)(a) Waste in Containers (Drums)

Stored containerized wastes are segregated with respect to ignitability, corrosivity, reactivity, and compatibility. The U.S. DOT Hazardous Precedence List (49 CFR Part 173.2) and the Segregation and Separation Chart of Hazardous Materials (49 CFR Part 177.848) shall be employed for the initial determination of compatibility. The following table lists hazard classes with incompatible hazard classes for wastes in drum storage areas.

TABLE C-5

Incompatible Hazard Classes

Hazard Class	Incompatible Hazard Classes
Flammable Liquid	Oxidizer, Organic Peroxide
Flammable Solid	Corrosive, Oxidizers
Oxidizer or Organic Peroxide	Corrosive, Flammable Liquid, Flammable Solids
Corrosive	Oxidizer, Organic Peroxide Flammable Solids

Based on the initial hazard determination and final identification of the waste, the drummed waste is organized into segregated storage areas. Flammable, corrosive and oxidizing waste materials are kept separate from incompatible materials by storage in separated areas within the drum storage unit.

C-2f(1)(b) Waste in Tanks

All liquid wastes targeted for storage in tanks will undergo the mandatory analyses and the liquid waste compatibility test (density and flash point are performed, if required). Additional testing is based on the targeted treatment or disposal options.

Liquid wastes delivered in bulk form by tank trucks or decanted from drums or portable tanks are placed in bulk storage tanks or directly into reactors prior to further treatment. Prior to transferring any different waste(s) into a storage tank, the compatibility of the waste with the material already in the tank will be determined by the liquid waste compatibility test. Following routine preliminary screening using a chemical compatibility test, specific storage and process compatibility will be determined. The parameters that will be used to determine compatibility are as follows:

Stratification - The general miscibility of the materials will be examined. If stratification would appear to create a problem, the materials will not be combined.

Heat Generation - Materials that upon mixing would generate sufficient amounts of heat or undergo exothermic reactions strong enough to exceed the design capability of the storage unit shall not be combined.

Gas Evolution - Materials that upon mixing liberate flammable, explosive or toxic vapors, fumes or mists in quantities of concern, shall not be combined unless the storage unit is designed with appropriate engineering controls.

Undesirable Reactions - Materials that upon mixing result in the formation of a large amount of precipitate or in the solidification or gelling of the mixture shall not be combined.

C-2f(2) Treatment Operations

The proper and complete treatment of a particular waste depends upon appropriate sampling and analysis during selected phases of operation. The results of this analytical program serve to determine safety constraints, confirm treatment method selections, and identify the process parameters. The treatment sampling/analysis program may be divided into three segments, each with a specific purpose:

- Pre-treatment analysis confirm that the waste falls within the selected process design parameters and allow the fine tuning of the process operational conditions for optimum treatment. These analyses

include pre-acceptance, incoming load and any other supplemental analyses as described for each treatment operation;

- o In-process analyses are performed to control the process and to monitor progress; and

- o Post-treatment analyses confirm that treatment was successful and that the characteristics of the process effluent are such that it can be sent to the next step (discharge, disposal, or further treatment) based upon permit or process constraints. Wastes or residue(s) resulting from the treatment of land disposal restricted wastes will be analyzed and/or evaluated, as specified in the following sections against the appropriate treatment standards listed in 6 NYCRR 376.4(j). Wastes or the residues from the treatment of land disposal restricted wastes that are sent off-site for further treatment or disposal will have any appropriate notification or certification form(s).

These segments are discussed below for each of the treatment processes.

C-2f(2)(b) Aqueous Waste Treatment

Wastewater treatment operation consists of a series of modular operations: phase separation (optional), oxidation (optional), reduction (optional), alkalization, filtration for the removal of precipitated sludges, neutralization, aggressive biological treatment, clarification, sand filtration, and activated carbon adsorption. Further biological treatment may occur in the facultative ponds. Effluent is discharged via pipeline to the Niagara River in accordance with the facility's SPDES permit conditions.

The incoming waste shipment is subjected to the applicable mandatory analyses consisting of physical description, pH screen, water mix, cyanide screen and sulfide screen (for alkaline waste), and radiation screen. Compatibility of the incoming waste stream shipment with the intended receiving tank and batch blend is assessed prior to pumping the drums/tanker. Supplemental analyses may include density, pH (meter), WWT metals, hexavalent chromium (Cr^{+6}) screen, oxidizer screen, and metals removal efficiency. Any of the other parameters listed as supplemental may be performed on incoming material if the profile, sample or test results indicate these could be items of concern (i.e., off spec shipments).

In general, greater than 90 percent of the waste water processed in the Aqueous Treatment Plant is on-site generated leachate from the landfills and process areas. The untreated leachate (FO39) was sampled and analyzed for all the constituents on the F039 LDR list. This constituted the initial characterization. The untreated leachate will be sampled and analyzed for the full LDR list of constituents every four (4) years to further ensure that no changes effecting the leachate have occurred. CWM will provide a copy of the results of the characterization to the Department, along with the results of the monthly effluent sampling and analysis. Based on review of the raw leachate characterization and the

results for the parameters being routinely monitored, if CWM or NYSDEC has a concern that additional constituents should be tested for on a routine basis, CWM or NYSDEC may initiate a permit modification.

In process analysis for gate receipts includes assessing the receiving tanks for pH, percent acidity (if any excess is suspected based on density), and the presence of Cr^{+6} ,if suspected, (requires reduction). The batches containing gate receipts are sampled and checked for pH/acidity and screened for Cr^{+6} ,if suspected. The pH of the lime slurry tank is monitored to ensure that sufficient lime is being added. The filtrate from the filter press is monitored for pH. In addition, when gate receipts containing high metals concentrations are processed, the metals concentrations may be tested at this intermediate point. The specific metals to be tested would depend on the EPA codes of the materials being processed. For gate receipts, the metals generally analyzed for include those frequently found in industrial waste waters from metal finishing; cadmium, chromium, copper, iron, lead, manganese, nickel, and zinc.

In order to monitor the performance of the organic constituent removal portion of the system, COD, phosphate (by test kit) and pH will be run on a daily basis on the influent and effluent of biotower to evaluate the operating condition of the biotower and the organic removal efficiency. Volatiles, including acetone will be tested on the effluent of the carbon beds to monitor the organic removal by carbon adsorption and to determine when the bed is spent. Acetone has a low affinity for carbon at a part-per-billion concentration. It will break through the carbon bed long before the carbon adsorption capacity is spent. If any of the F039 constituents approaches or exceeds the LDR limits, corrective measures will be employed to ensure that the discharge from the holding tank to the Facultative Pond is in compliance with the LDR restrictions. Such measures will include increased monitoring of the volatiles in the carbon bed effluent and, if necessary, a change from continuous to batch discharge from the holding tank.

In order to demonstrate compliance with the F039 wastewater standards, a composite sample of effluent will be analyzed for the following key control constituents: full volatile scan by GC/MS, metals including chromium, lead and nickel, and total cyanide. As the AWT system can operate in two modes, batch and continuous with up to two effluent qualification tanks, samples may be collected at several different locations. Concentration standards for F039 wastewaters (WW) are based on the analysis of composite samples. The Clean Water Act (CWA) regulations specify that grab samples must be used for pH, cyanide and VOC analysis. A grab sample from the holding tank after the batch is completed and has been mixed/recirculated will satisfy both of these requirements. The following logic will be employed:

<u>Batch qualification and discharge</u>

- A sample representing a composite of the treated effluent in a batch will be obtained from the holding tanks (T-125 and T-58) after completion of the batch and recirculation of the tank contents. As long as the results show that the effluent meets the LDR standards, the water will be discharged.

- If the results are questionable, additional composite samples will be taken from the tank for comparison to confirm compliance with LDR standards.

- Additional composite samples will be taken from the effluent tanks in order to provide a split sample when requested by DEC.

Continuous operation

- If two holding tanks are not available to operate in the fill, test and discharge mode, continuous operations (adding and discharging at the same time) may be employed if additional sampling and analysis controls are employed.

- A daily sample of the effluent from the carbon beds is analyzed for volatiles to ensure that the water entering the tank meets the LDR standards for organics monitored and that break through has not occurred.

- A daily sample representing a composite of that day's influent is obtained from the on-line holding tank (either T-125 or T-58) and analyzed for volatiles, metals and cyanide. The results from each daily composite sample will be used to help demonstrate that the tank's effluent meets LDR standards.

- Daily monitoring of the influent from the carbon beds and the tank's contents ensures that the discharge meets the LDR standards.

- Additional composite samples will be taken from the effluent tanks in order to provide a split sample when requested by DEC.

In addition, if sufficient quantities of gate receipts containing F039 constituents not on the site indicator parameter list for F039 are managed and could cause an exceedance of the standard, these constituents will also be tested to show compliance. Once per month, a sample representing a composite of the treated effluent will also be tested for semi-volatiles, PCBs, additional metals (arsenic, barium, cadmium, mercury and selenium), and sulfide. In order to demonstrate quality assurance of the analytical data being produced, DEC may request on a semi-annual basis that split samples be taken for one or two suites of tests (VOAs, semi-vols, or metals) and sent to an outside DEC and CWM approved laboratory. DEC will select sampling date and time and has the option to be present to witness sampling and transport of samples to the laboratory.

The treated water in the effluent tanks and facultative pond is transferred as volume dictates to one of the other fac ponds.

When a pond contains sufficient liquid to justify a discharge, the pond is sampled, and then analyzed by a wastewater certified laboratory to qualify it for discharge under the CWM Chemical Services Inc. SPDEs permit. No treated

wastewater is discharged from the facility unless it meets all the limits specified on the permit and the pond discharge is approved by the NYSDEC. A general flow schematic and list of analytical procedures is shown in Figure C-4.

C-2f(2)(c) Fuels Blending/Incinerables

This operation utilizes tank trucks and pumping systems to produce a fuel product which can be used as a feedstock for thermal units. Carefully controlled decant and mixing of compatible waste streams such as solvent, waste oils, emulsions, and lean water is carried out to produce a product with limited concentrations of specific constituents. Any liquids containing 50 ppm PCB or greater are handled in a dedicated unit and are not blended into a fuel product with non-PCB fuels. PCB feedstocks are transferred to an approved incinerator for destruction.

The incoming waste shipment is subjected to the applicable mandatory analyses consisting of physical description, water mix, flammability potential screen, and radiation screen. BTU analysis will be performed for wastes to be included in a blend that will be used as a fuel in boilers or industrial furnaces [BIF], if it is suspected that the BTUs are <5000 BTU/lb. The waste solvents and oils are analyzed for PCBs. If a large unexpected peak appears in the PCB-ECD Scan for any fuels sample, chlorinated pesticides will be investigated. Incoming shipment analyses also include a mandatory compatibility check with the intended receiving blend. Supplemental analyses may include density, flash point, percent halogens, percent sulfur, and percent ash. A flash point may be run if flammability potential screening indicates the DOT information on the manifest is incorrect. As long as the material is on specification and is compatible, the waste stream may be blended as described on the disposal decision.

If a variance is found in the testing parameters, additional tests may be requested by site management in order to determine the appropriate fuel blend. In-process and post-treatment analyses must verify that the resultant fuel product going to a BIF has a minimum heating value of 5000 BTU/lb and is within the limits specified by the BIF. These parameters will include heating value and may include PCBs, % halogens, heating value, % sulfur, % ash, lead and other heavy metals. Other parameters will be run as needed to meet the receiving facility's specification. Specific parameters and concentrations are identified by the user of the blended fuel and thus, in-process and post-treatment analyses will vary accordingly. Individual feedstocks with pre-treatment or in-process analyses exceeding the specified product limits may be blended with other feedstocks to produce a specification product.

C-2f(2)(d) Transformer Decommissioning

This process drains, and when required, flushes transformers which contain PCBs. The drained liquid and spent flush solvent are incinerated at an approved incinerator. The empty transformer bodies from transformers that contained greater than or equal to 500 ppm PCB oil are disposed in a TSCA approved landfill cell as a state hazardous B006 waste. Empty transformer bodies from units that contained less than 500 ppm PCB oil may be placed in any cell. Empty transformers that are received from a generator will be inspected to ensure that they are "empty".

Incoming and pre-treatment mandatory testing only includes physical description. In process supplemental testing involves analysis of the blended mixture as required by the incineration facility. Post-treatment analyses consist of physical inspection of the emptied transformer body.

C-2f(5) Landfill Disposal

A Sampling/Analysis program is an integral part of this phase of operation. The results of this program serve to evaluate compliance with site permit constraints, confirm disposal method selection, and determine safety constraints. During incoming analyses, wastes to be landfilled will be subject to the mandatory analyses of physical description, water mix, pH screen, cyanide screen, sulfide screen, flammability potential screen and radiation screen (see Figure C-5). In addition, the "suitability for landfill" testing is performed as part of the pre-acceptance process when necessary (see Section C-2b(1)). If a positive screen is obtained on an incoming waste where no cyanide was expected, another cyanide screening method may be run. If it is positive, the off spec waste will be quantitatively analyzed for total and/or amenable cyanide or the waste will be handled as a discrepancy. A similar sequence will be performed for sulfide, first screening the waste, using a second screening method if needed and performing total sulfide analysis if both screens are positive. Supplemental Analyses on incoming shipments include flash point if a positive flammability potential is determined.

For any bulk (non-soil) waste load where a sample is undergoing testing to confirm compliance with “RMU-1 Minimum Waste Strength Curves”, but which does not require stabilization and TCLP testing to confirm compliance with Land Disposal Restrictions (LDRs), the load may be placed in Interim Storage in the landfill pending strength testing results under the following conditions:

- The load must be placed on a geosynthetic separation material or a stone layer with a minimum thickness of 2 inches, in a distinct interim storage pile, separate from other bulk waste loads and other wastes.
- Each such interim storage pile must have a flag or other marker displayed with an identifier(s) that correlates to the waste tracking information which indicates the specific waste in the pile and the date the pile was placed in the landfill.
- Daily cover must be applied to all interim storage piles on the date of their placement in the landfill and maintained for the duration of each pile’s storage period.
- If the completed strength testing indicates compliance with minimum strength requirements, the waste may be disposed of in the landfill. If the results indicate that strength requirements have not been met, the waste will be removed from the landfill for further stabilization or other appropriate management.

An Additional Review Program (ARP) is used to further monitor incoming waste shipments destined for the Model City landfill. Up to 10 non-miscellaneous shipments per month will be selected by the on-site DEC monitor as requiring additional review. In addition the DEC monitors may request additional review using the sampling and analytical protocols from the ARP listed in section C-2f(5) of this permit. Any additional request will be justified by the DEC in writing. For the bulk solids, a composite will be taken as described in Section C-2c(2)(a). The sample will be of sufficient volume to allow a split sample to be supplied to the DEC. If a shipment of containers is selected, a 10% composite of each non-miscellaneous profile destined for the Model City landfill on the load may be identified for additonal review. Further compositing of similar waste streams may be allowed with DEC approval. NOTE: miscellaneous wastes, including single source PCB soils/spill clean ups, as listed in Section C-2d(1)(a) are exempt from this program.

The Additional Review Program (ARP) samples are analyzed as follows:

RCRA HAZARDOUS WASTES WITH NUMERICAL LDR STANDARDS

- Sample will be analyzed for constituents listed for each EPA code associated with the shipment for which numerical LDR standards have been promulgated. Additional analyses may be requested by site management or NYS DEC, if justified, to address areas of concern. Examples of these analyses include:

  * TCLP metals
  * PCB
  * Volatiles
  * Semivolatiles

- Wastes that are to be stabilized on-site will have their compliance with LDR standards verified according to the frequency specified in the CWM procedure on demonstrating that stabilized residuals meet land ban standards. The post-treatment analysis procedure specifically addresses processes, frequency of analyses and corrective action, and are therefore, exempt from the ARP.

- Residues including ash from a commercial hazardous waste incinerator will be subject to reduced analytical testing. Loads destined for stabilization will be managed under site SDP for testing stabilized residuals. Loads not requiring stabilization will be tested for LDR TCLP metals and volatiles (e.g., Method 8260) with routine site detection limits. Other organics of concern will be analyzed for if requested by NYSDEC.

- Due to the extensive listing of constituents, F039 ARP samples will be tested for routine volatiles, semivolatiles and the characteristic TCLP Metals.

NON-HAZARDOUS WASTE AND WASTE WITHOUT LDR STANDARDS

- TCLP metals: lead, cadmium and chromium - these are very frequently found industrial metals and a broad random screen is justified. The other five regulated TCLP metals may be requested by site management or NYSDEC if there is a concern about their presence based on information on the waste profile.

- PCBs - will be tested on oil bearing waste as determined by a review of the waste profile.

- 2% Organic Limit (OL) – a VOC analysis using EPA SW-846 Method 8260 or other Department approved organic analysis methods, shall be used to determine the concentration of the organic constituents and confirm compliance with the 2% Organic Limit. Organic analysis to verify < 2 % is not required if DEC has authorized a higher percentage on a case-by-case basis as prescribed in condition E.1.c.i in Exhibit F of Schedule 1 of Module I of the Sitewide Part 373 Permit.

If unexpected results are obtained during the ARP testing, the generator will be contacted and we will attempt to resolve the issues. Questions will be raised as to the appropriate hazard code classification and application of LDR standards. An update of the profile and the disposal decision may be considered. If the analysis indicates that LDR standards have been exceeded for wastes that are either stabilized off-site or certified as naturally meeting the treatment standards, it shall be reported to the NYSDEC.

C-2f(6) Stabilization

a. Stabilization of Land Disposal Restricted Waste

In this process, certain Land Disposal Restricted (LDR) waste are treated to meet the appropriate LDR treatment standard or prohibition. For the purpose of this discussion, treatment will include, at a minimum, stabilization of waste, and in some instances, will include a pre-treatment step prior to stabilization. The pre-treatment may include using other reagents such as oxidizing or reducing agents to chemically convert constituents into a form more suitable for stabilization.

The pre-treatment analyses for LDR waste to be treated to meet a particular treatment standard or prohibition consists of the "Mandatory Analyses" for landfill (see Section C-2f(5)) and a bench scale development of a recipe suitable for achievement of these standards. This recipe will be analyzed using the appropriate test method (e.g. TCLP., etc.) to demonstrate that the LDR waste can be treated to meet the appropriate standard of prohibition and to establish the treatment guideline to be used on the waste. In addition, compression strength testing may be performed to

demonstrate the strength of the treated waste. The treatment guidelines, established during the procedure, demonstrated to achieve the appropriate treatment standard, will be used to treat that LDR waste. In lieu of bench scale recipe development a previously developed and established recipe may be identified for use (e.g., recipe utilized on a similar waste).

A post-treatment analysis, which includes TCLP, is conducted to assure that the process continues to be effective in meeting the treatment standards. The analysis will be performed on retained material in interim storage in containers such as roll-off boxes (see Condition E.1.f in Exhibit F of Schedule 1 of Module I). The test frequency will be that specified in the CWM procedure on demonstrating that stabilized residuals meet land ban standards. The post-treatment analysis procedure specifically addresses processes, frequency of analyses and corrective action.

Additional "Supplemental Analyses" may be requested by the Laboratory Manager to further identify a waste or confirm that the treatment standards have been met in treated waste.

Stabilization operations may involve combining multiple waste streams or shipments, i.e., to optimize treatment volume. Wastes to be combined will be selected based on their chemical matrices, EPA codes and recipe requirements. For waste tracking purposes, the treatment residue will carry all waste stream identities (profile numbers and shipment identities, i.e., work order number, manifest number, etc.). For batches with multiple EPA codes, the combined most restrictive standards will apply to the treated residue.

b. Stabilization of Other Wastes

In this operation, portland cement and/or other stabilization reagents are mixed with Non-Land Disposal Restricted waste to treat the free liquids and/or increase compression strength of the waste.

The pre-treatment analyses for these wastes include the "Mandatory Analyses" for landfill (see Section C-2f(5) and the development of a suitable recipe for increasing the compression strength. Compression strength testing may be used in order to demonstrate that the recipe works. The recipe established during this procedure will be used to treat that waste. In lieu of bench scale recipe development a previously developed and established recipe may be identified for use (e.g., recipe utilized on a similar waste).

A post-treatment evaluation ensures that the material appears well mixed, that no free liquids are present.

On occasion a non-LDR waste shipment of an ordinarily solid material may arrive containing a minimal amount of free liquids. These types of "off-spec" solid waste shipments may be stabilized or they may be rejected. If the "off-spec" shipment is to be stabilized, the stabilization reagent will be blended into the waste material until a homogeneous mixture is observed.

C-2g Quality Assurance/Quality Control

C-2g(1) Introduction

The following Quality Assurance/Quality Control (QA/QC) information for the CWM Model City Facility is being provided as required by 40 CFR 270.30(e) and 6NYCRR371, Appendix 19, 20 and 21 and in accordance with the following EPA guidance documents.

o Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, Section 10, SW-846, Third Edition, November 1986, (or most recent EPA promulgated and approved edition). Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, currently approved version.

QA/QC procedures are applicable to both sampling procedures and analytical techniques. QA/QC information for these two elements of the waste analysis program has been included in this Waste Analysis Plan (WAP) as recommended in the waste analysis plan guide manual.

This section does not provide specific performance standards or quality control procedures for individual sampling and analysis techniques. Such specifics are defined on a corporate-wide basis for all Chemical Waste Management, Inc. (CWM) facilities. The specific performance standards are dynamic and are revised as warranted to reflect technological advances in sampling and analytical techniques. CWM QA/QC policies are found in the facility's Quality Assurance Manual, portions of which have been extracted and included in the following sections. The performance standards will be available for review at the facility.

C-2g(2) Sampling Program

Sampling procedures for specific facility operations are described in Section C-2c of the WAP. The selection of the sample collection device depends on the type of sample, the sample container, and the sampling location. In general, the methodologies used for specific materials correspond to those referenced in 6NYCRR Part 371, Appendix 19. The selection and use of the sampling device is supervised by a person thoroughly familiar with both the sampling and analytical requirements. The type of device to be used in the various sampling situations is specified in Section C-2c(2), Specific Methods and Equipment.

Sampling equipment is constructed of non-reactive materials such as glass, PVC plastic, aluminum, or stainless steel. Care is taken in the selection of the sampler to prevent contamination of the sample and to ensure compatibility of materials. For example, non-fluorocarbon plastic bottles are not used to sample organic wastes and glass bottles are not used to collect hydrofluoric acid wastes. The specific material of construction to be used for each sampling activity is specified in Section C-2c(2).

Sampling is performed for each waste stream in a manner that ensures the samples are as representative as possible under the conditions of the sampling event. Full vertical sections are drawn from tanks and containers, where appropriate and where access allows, as described in Section C-2c(2)(a).

With a few exceptions, all bulk and containerized waste loads will be sampled (see Section C-2d(1)(a). Container samples that are related to one generator and one process may be composited prior to analysis, provided that individual samples are similar in physical appearance. Precautions are taken to minimize loss of volatiles.

All samples must be appropriately labelled. The following information must be included on the label:

Generator Profile Receipt # # containers container type	or	Sample Location (process or site samples)

Date:
Time:
Sampler:

An example of a suitable label is shown below:

GENERATOR:_____
PROFILE #:_____ W.O. #_____
CONTAINERS:_____ TYPE CONT._____
COMPOSITE SAMPLE: Y OR N LOT #_____
DATE:_____ TIME:_____
SAMPLER:_____
COMMENTS:_____

No field notebook is used in sampling hazardous waste shipments or process samples. Anything unusual noted during sampling would be noted in the comments area of the label. No chain of custody form is employed within the plant. The samples are turned directly into the lab. A chain-of-custody will accompany any sample being sent to a contract lab, see example on following page. Sampling information is entered into the facilities operating record.

Hazardous waste samples are generally not amenable to preservation. For samples collected at CWM for organic analysis, the preservation and holding times will be in accordance with Chapter 4 of SW-846. Samples for VOC analysis to confirm LDR or 2% Organic Limit compliance will be analyzed within 14 days. For treated wastewater samples from the AWT plant, metals aliquots are preserved by the addition of HNO_3 to pH <2 and cyanide aliquot is preserved by the addition of NaOH to pH >12 . After TCLP extraction for leachable metals an aliquot for metals is fixed by adding HNO_3 to pH <2. Other hazardous waste samples (i.e., preacceptance, incoming, and process) are not preserved. Adding a preservative such as acid can drastically change the matrix (e.g., metals may precipitate, gel, fume, etc.).

CWM CHEMICAL SERVICE, INC.
1550 Balmer Road
Model City, New York 14107

TYPICAL CHAIN OF CUSTODY FORM NO._____

SAMPLER
SIGNATURES(S):._____

SAMPLE POINT I.D. AND DESCRIPTION	DATE SAMPLED TIME	NO. OF BOTTLES	ANALYSIS REQUIRED

RELINQUISHED BY: (SIGNATURE) DATE REC'D BY: (SIGNATURE) DATE

_____

_____

_____

_____

_____

_____

RECEIVED AT LAB BY:_____

METHOD OF
SHIPMENT:._____

CONDITION OF SAMPLES REC'D:____ OK:____ NOT OK (EXPLAIN) _____

_____

_____

NOTE: APPARENT GAPS OR BREAKS IN THE "INCLUSIVE DATES" SECTION OF THE "CHAIN OF POSSESSION" SECTION ARE COVERED BY THE SITE RECEIVING/SHIPPING LOGS.

C-2g(3) Analytical Program

All analyses performed for determinations under 6NYCRR Parts 370-374 and 376 will be in accordance with 6NYCRR 370.1(f).

C-2g(4) Reserved

C-2g(5) Contract Laboratories

Contract laboratories will only be those which meet the requirements in 6NYCRR 370.1(f).

C-2g(6) Conclusion

The aforementioned sampling and analytical procedures help ensure that the data obtained are precise, accurate, and representative of the waste stream being sampled. The results of these analyses are used by the Site Management to decide whether or not to accept a particular waste and, upon acceptance, to determine the appropriate method of treatment. Proper analytical procedures are particularly important for waste treatment units. They are also important to ensure that restricted wastes are managed properly and that incompatible wastes are not inadvertently combined. For these reasons, the quality of the data and the thoroughness and care with which the sampling and analyses are performed and reported provide an important basis for day-to-day operational decisions.

C-2h Analytical Procedures

The following analytical procedures are designed to identify or screen waste. They are used by CWM, based upon its operating experience, as rapid but effective means for establishing key decision parameters pertinent to proper waste management. Analytical procedures, not listed below, may be added as necessary and will be taken from the references listed at the end of this section or other recognized sources, e.g., Association of Official Analytical Chemists (AOAC), or will be developed by CWM and meet CWM performance standards.

All analytical procedures are subject, at a minimum, to the QA/QC procedures described in Section C-2g.
It should be noted that the information presented in this appendix is generic in character. Therefore, certain test methods are discussed which may pertain to treatment or disposal processes that are excluded from the facility for which the foregoing waste analysis plan is presented.

C-2h(1) Unique Analytical Procedures

The following CWM-developed analytical procedures have been found by CWM to provide important information pertinent to certain processes. They have been developed by CWM, based upon its operating experience, as rapid but effective means for establishing key decision parameters pertinent to proper waste management. In some cases, these tests provide information not available from standard analytical procedures found in Section C-2h(2), which follows. The methods described below are based on ASTM standards or standard procedures recognized by EPA or are based on procedures and protocol formulated by CWM and meet CWM performance standards. These tests provide important operational information.

Ash - The ash content of a sample is determined by placing the sample in a muffle furnace for 2 to 4 hours.

Percent Acidity - One-tenth of the equivalent weight of the acid species to be quantified is weighted out and diluted with DI water. The sample is titrated using a pH meter and NaOH to a pH of 8.3.

Percent Alkalinity - One tenth of the equivalent weight of the basic species to be quantified is weighed out and diluted with DI water. The sample is titrated with HCl and a pH meter to a pH of 4.5.

Bench-Scale Treatment Evaluation - Samples of wastes are combined with samples of other wastes or reagents at predetermined ratios. Further testing may be required in order to confirm that the desired reaction has occurred.

Dissolved Sulfides - An aliquot of waste is mixed with distilled water. The solution/slurry is filtered through filter paper and the resultant filtrate is then analyzed for sulfide. Antimony potassium tartrate and hydrochloric acid are added and the color produced is determined to be a positive screen or is visually compared with standards.

Cyanide Screen by Cyantesmo Paper – A portion of waste is slurried with deionized water and then acidified with sulfuric acid. The sample is capped with the cyantesmo paper just above the solution. The presence of cyanide is indicated by a color change in the cyantesmo paper.

Cyanide Screen by Prussian Blue – A portion of waste is slurried with deionized water. The pH is adjusted to 12-13 with NaOH, then solutions of ferrous sulfate and ferric chloride are added. Sulfuric acid is added and the solution is observed for color. The presence of cyanide is indicated by a blue-green color.

Free Cyanide Screen/Quantification (Aqueous Waste) - NaOH is added to a portion of sampler to bring the pH to about 14. Then p-dimethylaminobenzal-rhodanine indicator solution is added to the sample and the sample is then titrated with a $AgNO_3$ solution to a salmon colored endpoint (as if for a total cyanide determination).

Free Soluble Sulfide Screen/Quantification (Aqueous Waste) - (1) An aliquot of sample is analyzed for free soluble sulfide. The level of sulfide is determined using an iodometric method which includes the addition of a measured portion of a standard iodine solution and back titration with sodium thiosulfate.

Heating Value - The heating value (BTU/lb) is determined in the isoperibol/dynamic mode using an oxygen bomb calorimeter. The combusted sample may then be analyzed for anions.

Load Bearing Strength by Pocket Penetrometer - The load bearing strength of the stabilized waste material is determined by pushing a pocket penetrometer or similar device into the sample. It is grasped by the handle and pushed into the sample at a constant rate up to the calibration mark. The load bearing strength is read from the low side of the indicator ring. This process is repeated two more times and the average of the three results is recorded in tons/square foot.

Microwave-aided Digestion - A portion of sample is weighed into an appropriate microwave digestion vessel and digested using an acid or acid mixture. The vessel is heated in a microwave oven. After cooling, the contents are diluted to volume, filtered and analyzed by appropriate methods.

Peroxide Screen - Peroxide test strips are used to determine the presence of organic peroxides or other oxygen donors (oxidizers) in solvent and aqueous wastes.

Phosphate screen - The phosphate level is monitored to ensure phosphate is present to prevent bridging in the carbon beds.

Chromate screen - the presence of hexavalent chromium (Cr^{+6}) and its concentration may be determined using accepted methods.

Ferrous screen - the presence of ferrous iron (Fe^{+2}) may be determined using a ferrous test kit. Ferrous iron is frequently used as a reducing agent in the aqueous treatment plant.

Phenol screen - the phenol level in the feed and effluent of the carbon beds may be determined using accepted methods.

Quick Leach Extraction - An amount of sample is mixed with the appropriate extraction fluid and stirred for a designated time period. After filtration, the pH and/or metals content are determined using the appropriate methods.

Radioactivity Screen - A sample of the material is passed by a geiger counter or survey meter. Radioactivity levels above background are noted, recorded and investigated.

Reagent Compatibility Screen - Equal portions of stabilization reagent and waste are mixed. The generation of any unacceptable or adverse reactions are evaluated and noted.

Percent Solubility is determined by dissolving a weighed sample aliquot in water, filtering the solution through a tarred filter paper, drying the filtered solids, and then re-weighing the dried sample and filter paper. The percent solubility is determined by subtracting the filter paper weight from the dried sample, then determining the percent sample remaining. Percent solubility equals 100 minus the percent sample remaining.

Solvent Screen - Uses standard analytical procedures tailored to cover a range of organic compound types for quick screening of common industrial organics.

Stabilization Evaluation - The waste to be stabilized is mixed with at least one combination of cement kiln dust and/or other suitable reagent(s). Heat change (as evidence of curing) which occurs is recorded as the waste/reagent(s) mixture is "setting". The occurrence of any violent reactions of reagent(s) to waste sample is noted.

2% organic Limit - VOC analysis using EPA SW-846 Method 8260 for organic priority pollutants and solvent constituents taken from the F001 through F005 solvent listings will be employed as needed.

C-2h(2) Standard Analytical Procedures

See Appendix A for a list of Standard Analytical Procedures.

SECTION C-2i
FIGURES

Figure C-1 Waste Profile

WASTE MANAGEMENT

EZ Profile™

Requested Facility: _____ ❑ Unsure Profile Number: _____

❑ Check if there are multiple generator locations. Attach locations. ❑ Renewal? Original Profile Number: _____

A. GENERATOR INFORMATION (MATERIAL ORIGIN)

1. Generator Name: _____
2. Site Address: _____
   (City, State, ZIP) _____
3. County: _____
4. Contact Name: _____
5. Email: _____
6. Phone: _____ 7. Fax: _____
8. Generator EPA ID: _____ ❑ N/A
9. State ID: _____ ❑ N/A

B. BILLING INFORMATION ❑ SAME AS GENERATOR

1. Billing Name: _____
2. Billing Address: _____
   (City, State, ZIP) _____
3. Contact Name: _____
4. Email: _____
5. Phone: _____ 6. Fax: _____
7. WM Hauled? ❑ Yes ❑ No
8. P.O. Number: _____

C. MATERIAL INFORMATION

1. Common Name: _____
   Describe Process Generating Material: ❑ See Attached

2. Material Composition and Contaminants: ❑ See Attached

1.	
2.	
3.	
4.	
	≥100%

3. State Waste Codes: _____ ❑ N/A
4. Color: _____
5. Physical State at 70°F: ❑ Solid ❑ Liquid ❑ Other: _____
6. Free Liquid Range Percentage: _____ to _____ ❑ N/A (Solid)
7. pH: _____ to _____ ❑ N/A (Solid)
8. Strong Odor: ❑ Yes ❑ No Describe: _____
9. Flash Point: ❑ <140°F ❑ 140°–199°F ❑ ≥200° ❑ N/A (Solid)

D. REGULATORY INFORMATION

1. EPA Hazardous Waste? ❑ Yes* ❑ No
   Code: _____
2. State Hazardous Waste? ❑ Yes ❑ No
   Code: _____
3. Excluded waste under 40 CFR 261.4 (a) or (b)? ❑ Yes* ❑ No
4. Contains Underlying Hazardous Constituents? ❑ Yes* ❑ No
5. Contains benzene **and** subject to Benzene NESHAP? ❑ Yes* ❑ No
6. Facility remediation subject to 40 CFR 63 GGGGG? ❑ Yes* ❑ No
7. CERCLA or State-mandated clean-up? ❑ Yes* ❑ No
8. NRC or State-regulated radioactive or NORM waste? ❑ Yes* ❑ No

***If Yes, see Addendum (page 2) for additional questions and space.**

9. Contains PCBs? → If Yes, answer a, b and c. ❑ Yes ❑ No
   a. Regulated by 40 CFR 761? ❑ Yes ❑ No
   b. Remediation under 40 CFR 761.61 (a)? ❑ Yes ❑ No
   c. Were PCB imported into the US? ❑ Yes ❑ No
10. Regulated and/or Untreated Medical/Infectious Waste? ❑ Yes ❑ No
11. Contains Asbestos? ❑ Yes: Friable ❑ Yes: Non-Friable ❑ No

E. ANALYTICAL AND OTHER REPRESENTATIVE INFORMATION

1. Analytical attached ❑ Yes
   Please identify applicable samples and/or lab reports:
2. Other information attached (such as MSDS)? ❑ Yes

F. SHIPPING AND DOT INFORMATION

1. ❑ One-Time Event ❑ Repeat Event/Ongoing Business
2. Estimated Quantity/Unit of Measure: _____
   ❑ Tons ❑ Yards ❑ Drums ❑ Gallons ❑ Other: _____
3. Container Type and Size: _____
4. USDOT Proper Shipping Name: ❑ N/A

G. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)

By signing this EZ Profile™ form, I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this material, and that all relevant information necessary for proper material characterization and to identify known and suspected hazards has been provided. Any analytical data attached was derived from a sample that is representative as defined in 40 CFR 261 - Appendix 1 or by using an equivalent method. All changes occurring in the character of the material (i.e., changes in the process or new analytical) will be identified by the Generator and be disclosed to Waste Management prior to providing the material to Waste Management.

If I am an agent signing on behalf of the Generator, I have confirmed with the Generator that information contained in this Profile is accurate and complete.

Name (Print): _____ Date: _____

Title: _____

Company: _____

Certification Signature

WASTE MANAGEMENT

EZ Profile™ Addendum

Only complete this Addendum if prompted by responses on EZ Profile™ (page 1) or to provide additional information. Sections and question numbers correspond to EZ Profile™.

Profile Number: _____

C. MATERIAL INFORMATION

Describe Process Generating Material (Continued from page 1): If more space is needed, please attach additional pages.

Material Composition and Contaminants (Continued from page 1): If more space is needed, please attach additional pages.

5.	
6.	
7.	
8.	
9.	
10.	
	≥100%

D. REGULATORY INFORMATION

Only questions with a "Yes" response in Section D on the EZ Profile™ form (page 1) need to be answered here.

1. EPA Hazardous Waste
   a. Please list all USEPA listed and characteristic waste code numbers:

   b. Is the material subject to the Alternative Debris standards (40 CFR 268.45)? ❑ Yes ❑ No
   c. Is the material subject to the Alternative Soil standards (40 CFR 268.49)? → If Yes, complete question 4. ❑ Yes ❑ No
   d. Is the material exempt from Subpart CC Controls (40 CFR 264.1083 and 265.1084)? ❑ Yes ❑ No
      → If Yes, please select one of the following:
      ❑ Waste has been determined to be LDR exempt [265.1083(c)(4) and 265.1084(c)(4)] based on the fact that it meets all applicable organic treatment standards (including UHCs for D-coded characteristic wastes) or a Specified Technology has been utilized.
      ❑ Waste does not qualify for a LDR exemption, but the average VOC at the point of origination is <500 ppmw and this determination was based on analytical testing (upload copy of analysis) or generator knowledge.
2. State Hazardous Waste → Please list all state waste codes: _____
3. Excluded Waste → Please select which of the following categories apply to your material:
   ❑ Delisted Hazardous Waste ❑ Excluded Waste under 40 CFR 261.4 → Specify Exclusion: _____
   ❑ Treated Hazardous Waste Debris ❑ Treated Characteristic Hazardous Waste → If checked, complete question 4.
4. Underlying Hazardous Constituents → Please list all Underlying Hazardous Constituents:

5. Benzene NESHAP → Please include benzene concentration and percent water/moisture in chemical composition.
   a. Are you a TSDF? → If yes, please complete Benzene NESHAP questionnaire. If not, continue.
   b. What is your facility's current total annual benzene quantity in Megagrams? ❑ <1 Mg ❑ 1–9.99 Mg ❑ ≥10 Mg
   c. Is this waste soil from remediation at a closed facility? ❑ Yes ❑ No
   d. Has material been treated to remove 99% of the benzene or to achieve <10 ppmw? ❑ Yes ❑ No
   e. Is material exempt from controls in accordance with 40 CFR 61.342? ❑ Yes ❑ No
      → If yes, specify exemption: _____
   f. Based on your knowledge of your waste and the BWON regulations, do you believe that this waste stream is subject to treatment and control requirements at an off-site TSDF? ❑ Yes ❑ No
6. 40 CFR 63 GGGGG → Does the material contain <500 ppw VOHAPs at the point of determination? ❑ Yes ❑ No
7. CERCLA or State-Mandated clean up → Please submit the Record of Decision or other documentation to assist others in the evaluation for proper disposal.
8. NRC or state regulated radioactive or NORM Waste → Please identify Isotopes and pCi/g: _____

WASTE MANAGEMENT

Additional Profile Information

Profile Number: _____

C. MATERIAL INFORMATION

Material Composition and Contaminants (Continued from page 2): If more space is needed, please attach additional pages.

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34.	
35.	
36.	
37.	
38.	
39.	
40.	
	≥100%

D. REGULATORY INFORMATION

1. EPA Hazardous Waste

a. Please list all USEPA listed and characteristic waste code numbers (Continued from page 2):

FIGURE C-2
OVERVIEW OF THE PRE-ACCEPTANCE PROCESS

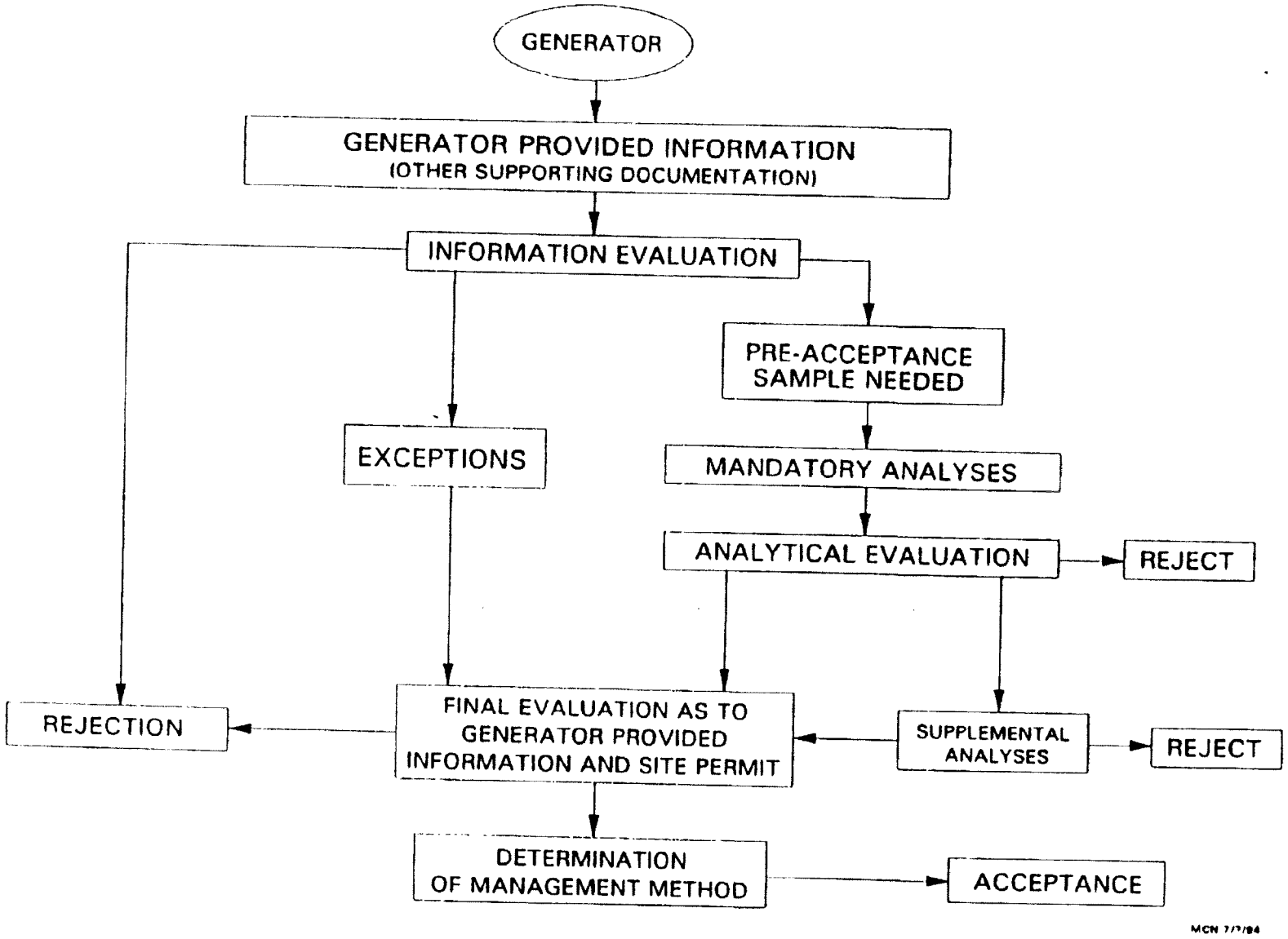


FIGURE C-3
OVERVIEW OF THE INCOMING LOAD IDENTIFICATION PROCESS

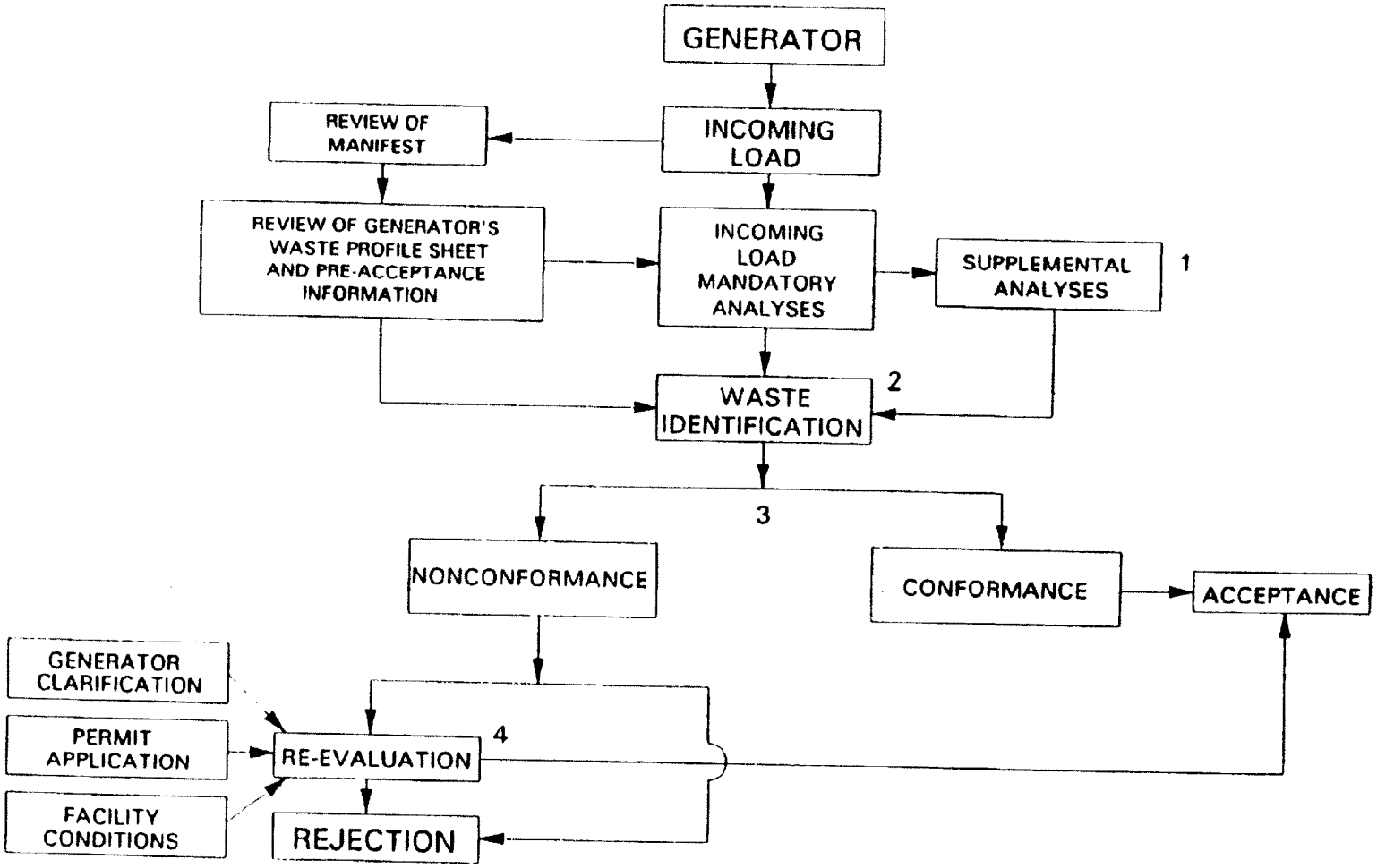


Figure C-4
Aqueous Waste Treatment

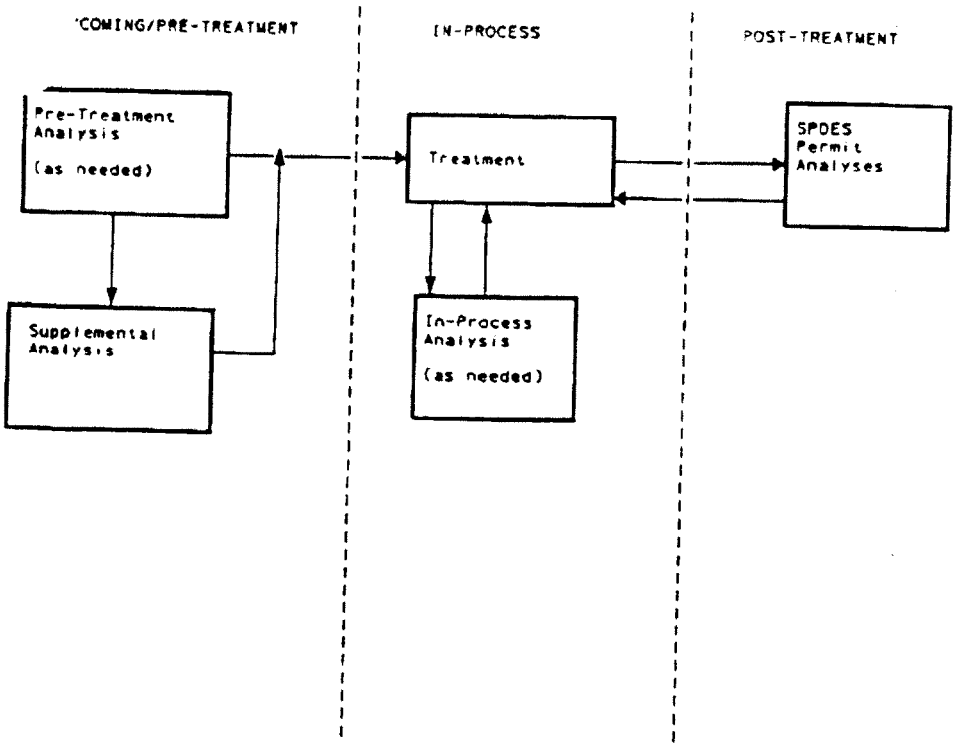
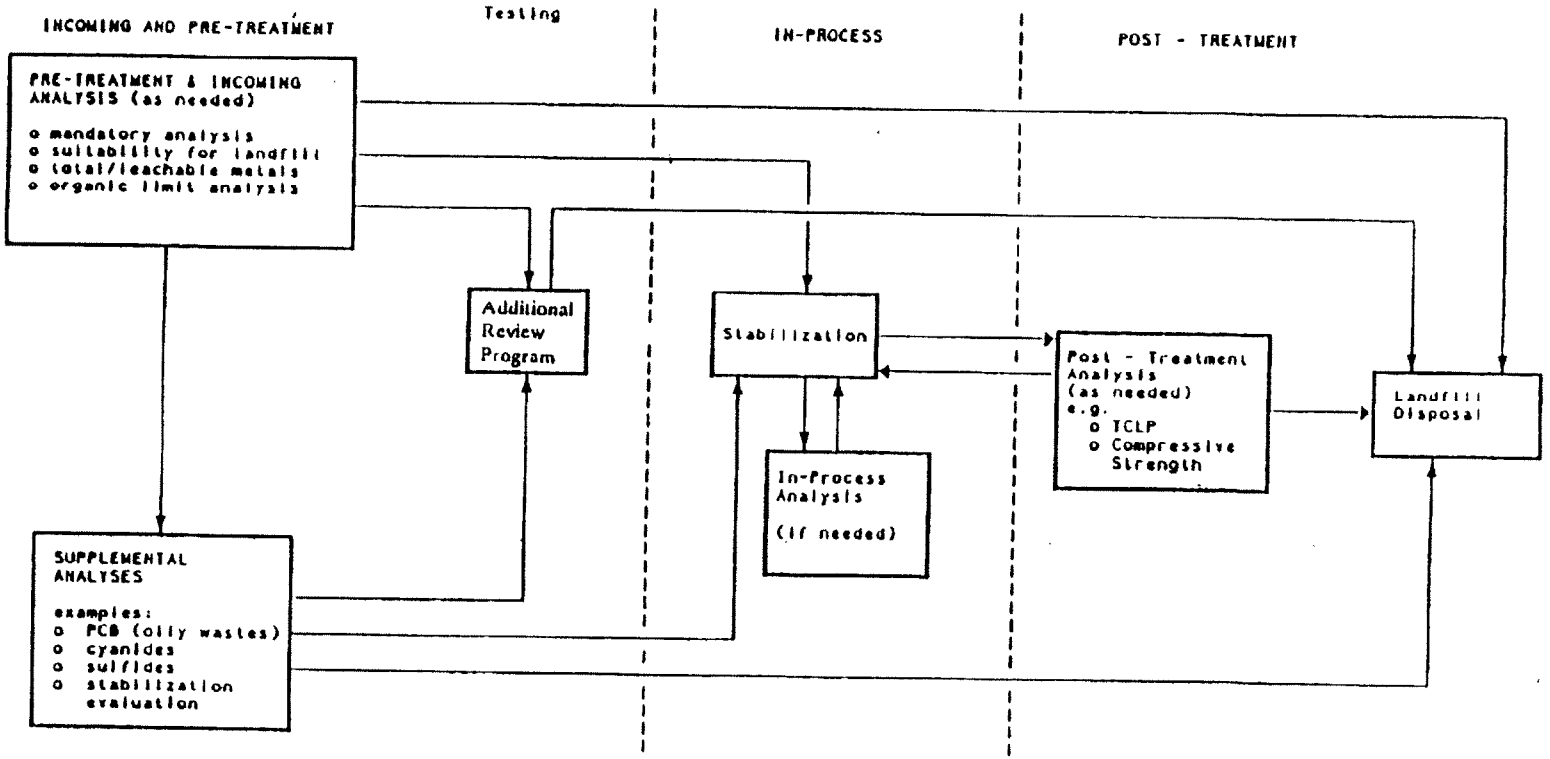


Figure C-5
LANDFILL AND STABILIZATION PROCESS



July, 2011

APPENDIX A

STANDARD ANALYTICAL PROCEDURES

Standard Analytical Procedures

PARAMETER/METHOD	SW-846[1]	EPA[2]	Std Meth[3]	ASTM[4]
Method Selection	Chap 2	Table 1B, 1C		
Extraction Procedure (EP) Toxicity Test	1310B			
Toxicity Chracteristic Leaching Procedure (TCLP)	1311			
Sample Digestion Methods:				
Acid Digestion of Waters for Total Recoverable or Dissolved	3005A			
Metals for Analysis by FLAA or ICP				
Acid Digestion of Aqueous Samples and Extracts for Total	3010A			
Metals for Analysis by FLAA or ICP				
Microwave Assisted Digestion of Aqueous Samples and Extracts	3015A			
Acid Digestions of Aqueous Samples and Extracts for	3020A			
Total Metals for Analysis by GFAA				
Acid Digestion of Oils for Metals Analysis by Atomic	3031			
Absorption or ICP				
Dissolution Procedure for Oils, Greases or Waxes	3040A			
Acid Digestion of Sediments, Sludges and Soils	3050B			
Microwave Assisted Digestion of Siliceous and Organically	3052			
Based Matrices				
Determination of Inorganic Analytes:				
Inductively Coupled Plasma-Atomic Emission Spectrometry	6010C	200.7 rev 4.4	3120B	
Flame Atomic Absorption Spectrophotometry	7000B		3111B,C,D,E	
Graphite Furnace Atomic Absorption Spectrophotometry	7010	200.9 rev 2.2	3113B	
Arsenic (Atomic Absorption Gaseous Hydride)	7061A		3114B	
Antimony and Arsenic (Atomic Absorption, Borohydride	7062			
Reduction)				
Chromium Hexavalent (Coprecipitation)	7195			
Chromium Hexavalent (Colorimetric)	7196A		3500-Cr B,C	
Chromium Hexavalent (Chelation/Extraction)	7197			
Determination of Hexavalent Chromium is Drinking Water,	7199	218.6 rev 3.3		
Groundwater and Industrial Wastewater Effluent by				
Ion Chromatograph				
Mercury in Liquid Waste (ManualCold-Vapor Technique)	7470A	245.1 rev 3.0	3112B	
Mercury in Solid Waste (ManualCold-Vapor Technique)	7471B			
Selenium (Atomic Absorption Gaseous Hydride)	7741A		3114B	
Selenium (Atomic Absorption, Borohydride Reduction)	7742			
Organic Extractions and Preparations:				
Organic Extraction and Sample Preparation	3500C			
Separatory Funnel Liquid-Liquid Extraction	3510C			
Soxhlet Extraction	3540C			
Pressurized Fluid Extraction (PFE)	3545A			
Ultrasonic Extraction	3550C			
Waste Dilution	3580A			
Waste Dilution for Volatile Organics	3585			
Sample Preparation for Volatile Organic Compounds	5000			
Volatile Organic Compounds in Soils and Other Solid	5021			
Matrices Using Equilibrium Headspace Analysis				
Purge-and-trap for Aqueous Samples	5030C			
Closed-System Purge-and-Trap and Extraction for	5035A			
Volatile Organics in Soil and Waste Samples				
Cleanup	3600C			
Florisil Cleanup	3620C			
Sulfur Cleanup	3660B			
Sulfuric Acid/Permanganate Cleanup	3665A			

Standard Analytical Procedures

Organic Analytical Methods

PARAMETER/METHOD	SW-846[1]	EPA[2]	Std Meth[3]	ASTM[4]
Determinative Chromatographic Separations	8000C			
Pesticides	8081B	608	6630B,C	
Polychlorinated Biphenyls	8082A	608	6431B	
Volatile Organic Compounds	8260C	624	6200 B &C	
		1624B		
Semivolatile Organic Compounds	8270D	625	6410B	
		1625B		
Heat of Combustion, Bomb Calorimeter Method				D240
				D2015
Chlorine (Halogen) Content	5050			D808
				D2361
				D4327
Sulfur Content				D129
				D3177
				D4327

Screening Methods

Bulk Density & Apparent Specific Gravity				D5057
Commingled Waste Compatibility				D5058 Method A
Flammability Potential/Ignitability Screen	1030			D4982
Oxidizer Screen				D4981
Paint Filter Liquids Test	9095B			
Physical Description				D4979
pH Screen	9041A			
Polymerization Potential				D5058 Method B
Sulfide Screen by Lead Acetate Paper				D4978 Method A
Water Compatibility Screen				D5058 Method C
Screening of Waste for Radioactivity				D5928

Miscellaneous Analytical Methods

Acidity			2310B	D1067
Alkalinity			2320B	D1067
Ammonia		350.3	4500-NH_3	
Ash Content				D482
				D2974
				D3174
Chemical Oxygen Demand (COD)			5220D	
Chlorine	9075			
	9076			
	9077			
Chlorine, Residual			4500-Cl G	
Compaction Test	1310A			
Conductivity/Specific Conductance	9050A	120.1	2510	D1125
Corrosivity Toward Steel	1110A			
Dermal Corrosion	1120			
Total and Amenable Cyanide	9010C	335.1	4500-CN	
	9012B			
	9013			
	9014			
Free Cyanide			4500-CN	
Flash Point, Cleveland Open Cup				D92

Standard Analytical Procedures

PARAMETER/METHOD	SW-846[1]	EPA[2]	Std Meth[3]	ASTM[4]
Miscellaneous Analytical Methods				
Flash Point, Pensky-Martens Closed-Cup	1010A			D93
Flash Point, Setaflash Closed-Cup	1020B			D3278
Flash Point, Tag Closed-Cup				D56
Fluoride			4500-F^-C	
Oil & Grease		1664A	5520B	
Oxidation/Reduction (Redox) Potential (ORP)				D1498
pH Measurement	9040C	150.1	4500H	
	9041A			E70
	9045D			
Pour Point of Petroleum Oils				D97
Radiation	9310			
	9315			
	9320			
Soil Identification				D2487
				D2488
Solids, Fixed and Volatile (500 C)		160.4	2540E,G	
Solids, Total Dissolved Solids (180 C)		160.1	2540C	
Total Solids (103/105 C)		160.3	2540B	D2974
Total Suspended Solids (103/105 C)		160.2	2540D	
Specific Gravity			2710F	D70
				D891
				D1217
				D1429
Sulfide	9030B		4500-S^{-2}	
	9031			
	9034			
	9215			
Unconsolidated, Undrained Compressive (UUC) Strength				D2850
of Cohesive Soils in Triaxial Compression				

References

1. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, SW-846, Third Edition, U.S. Environmental Protection Agency, Office of Solid Waste, Washington, DC September 1986, as amended by Final Updates I, II, III, IIIA, IIIB and IV or most recent edition or revision.
2. Tables 1B, 1C and 1D of EPA Approved Test Procedures listed in 40 CFR 136 (March 12,2007 or most recent). Full text of 600 series methods included in Appendix A. Full text of metals methods in Methods for the Determination of Metals in Environmental Samples, Supplement 1, National Exposure Risk Laboratory-Cincinnati (NERL-CI) EPA/600/R-94/111,May 1994. Full text of inorganic methods in Methods for the Determination of Inorganics in Environmental Samples, National Exposure Risk Laboratory-Cincinnati (NERL-CI) EPA/600/R-93/100,August 1993..
3. Standard Methods for the Examination of Water and Wastewater, 20th Edition (or on-line) Americal Public Health Association (APHA), American Water Works Association, Water Environment Federation, 2000 or more recent.
4. Annual Book of ASTM Standards, American Society for Testing and Materials, 1993 or more recent edition or revision.