

**Romic Environmental
Technologies Corp.
AZD 009015389**

Chandler, Arizona
TSD Facility

Section C

Waste Characteristics

January 2005

Contents

Section	Page
C	<u>WASTE CHARACTERISTICS</u>..... C-1
C1	INTRODUCTION..... C-1
C2	FACILITY PROCESSES AND ACTIVITIES..... C-1
C3	WASTE IDENTIFICATION AND CLASSIFICATION C-2
C3.1	OFF-SITE WASTES ACCEPTED..... C-2
C3.2	RESTRICTED OFF-SITE WASTES..... C-2
C3.3	TYPICAL WASTE CHARACTERISTICS..... C-2
C3.4	WASTES GENERATED ON-SITE..... C-3
C4	PROCEDURES FOR RECEIVING OFF-SITE WASTES C-3
C4.1	PRE-ACCEPTANCE PROFILE PROCEDURE..... C-3
C4.2	PRE-ACCEPTANCE SAMPLING REQUIREMENTS..... C-4
C4.3	FINAL PRE-ACCEPTANCE EVALUATION C-5
C4.4	PROFILE AMENDMENT/RENEWAL PROCESS C-6
C4.5	INCOMING WASTE ACCEPTANCE EVALUATION C-7
C4.5.1	INCOMING CONTAINER LOADS (LIQUIDS AND SOLIDS) C-7
C4.5.1.1	DOCUMENT INSPECTION C-7
C4.5.1.2	CONTAINER UNLOADING..... C-8
C4.5.1.3	SAMPLING AND ANALYSIS C-8
C4.5.1.4	WASTE DISPOSITION C-9
C4.5.2	INCOMING BULK LOADS C-9
C4.5.2.1	DOCUMENT INSPECTION C-9
C4.5.2.2	SAMPLING AND ANALYSIS C-10
C4.5.2.3	WASTE DISPOSITION C-10
C4.5.3	ACCEPTANCE OF INCOMING WASTES FOR MISCELLANEOUS MANAGEMENT PROCESSES C-11
C4.5.4	ACCEPTANCE OF UNIVERSAL WASTES..... C-11
C5	SAMPLING AND ANALYSIS C-11
C5.1	SAMPLING METHODS AND EQUIPMENT..... C-12
C5.2	FREQUENCY OF SAMPLING AND ANALYSIS..... C-12
C5.2.1	CONTAINERS..... C-13
C5.2.2	INCOMING BULK, IN-PROCESS, AND OUTGOING WASTES..... C-13
C5.2.3	INCOMING LAB-PACK WASTES..... C-13
C5.2.4	WASTES DESTINED FOR SOLIDS CONSOLIDATION..... C-14
C5.2.5	TRUCK WASH C-14
C5.3	ANALYTICAL PARAMETERS AND RATIONALE C-14
C5.3.1	WASTE VERIFICATION ANALYSIS C-15
C5.3.1.2	SUPPLEMENTAL ANALYSIS..... C-18
C5.3.2	BENCH SCALE TESTING..... C-19
C6	PROCEDURES FOR PRE-, IN-, AND POST-PROCESS OPERATIONAL CONTROLSC-19
C7	PROCEDURES FOR IGNITABLE, REACTIVE, AND INCOMPATIBLE WASTES.... C-20
C7.1	IGNITABLE WASTES C-20
C7.2	REACTIVE WASTES..... C-21
C7.3	INCOMPATIBLE WASTES C-21
C7.3.1	METHODS OF SEGREGATION C-22

Contents

C7.3.2	SAMPLING AREAS.....	C-22
C7.3.3	GENERAL CONTAINER REQUIREMENTS	C-23
C7.3.4	GENERAL TANK AND TANK SYSTEMS REQUIREMENTS	C-23
C7.3.5	SAMPLING AND ANALYSIS	C-23
C7.3.6	WASTE DISPOSITION CODE DESIGNATION.....	C-24
C7.3.7	WASTE TO VESSEL COMPATIBILITY	C-24
C7.3.8	OPERATIONS	C-25
C8	PROCEDURES TO ENSURE COMPLIANCE WITH LDR REQUIREMENTS.....	C-25
C9	RECORDKEEPING AND REPORTING	C-26

Contents

Tables, Figures, and Appendices are presented in separate sections following the main body of the text.
--

Tables

C-1	EPA Waste Codes and Facility Waste Management Options
C-3(A-K)	Waste Identification/Classification
C-4	Waste Acceptance Analysis Summary – Primary Management Processes
C-5	Storage and Process Limitations – Primary Management Processes
C-6	Storage and Process Limitations – Miscellaneous Management Processes
C-7(a-b)	Disposition Code Compatibility and Container Storage Locations
C-8	Sampling Methods and Equipment
C-9	Sample Bottle Selection
C-10	Analytical Parameters, Methods, and Rationale

Figures

C-1	Facility Waste Receiving and Sampling Locations
C-2	Primary Process Flow Chart
C-3	Miscellaneous Process Flow Chart
C-4	Sample Waste Profile Form

Appendices

C-1	Laboratory Quality Assurance Procedure Manual
-----	---

C WASTE CHARACTERISTICS

C1 INTRODUCTION

Romic has developed this Waste Analysis Plan (WAP) for the facility located in Chandler, Maricopa County, Arizona. The purpose of the WAP is to facilitate safe and effective treatment of each waste managed by the Facility and minimize the potential for adverse chemical reactions resulting from mixing and handling potentially incompatible wastes. The WAP provides procedures and controls that ensure that chemical and physical analysis is completed on a representative sample of each hazardous waste stream managed by the Facility. The WAP describes the sampling methodologies, analytical parameters and methods, hazardous waste acceptance procedures, and hazardous waste tracking system utilized for safe hazardous waste management at the Facility. Additionally, the WAP identifies specific methods for:

- The verification of off-site waste profiles
- The identification of waste compatibility and final disposition
- Process control (with respect to waste analysis)
- Ensuring compliance with Land Disposal Restriction (LDR) requirements for on-site generated wastes.

Refer to Figure C-1 (Facility Waste Receiving) for locations of existing and planned hazardous waste management areas at the Facility; sampling locations for incoming waste streams are also depicted in this figure.

C2 FACILITY PROCESSES AND ACTIVITIES

As discussed in this application, the Facility reclaims, recycles, treats, and stores hazardous waste using one or a combination of the following management options:

PRIMARY PROCESSES

Solvent Recycling
Ethylene Glycol Recycling
Fuel Blending
Wastewater Treatment
Neutralization
Inorganic Treatment
Solids Consolidation
Off-Site Transfer

MISCELLANEOUS MANAGEMENT PROCESSES

Consolidation of Small Containers
Aerosol Depressurization
Drum Crushing
Truck Wash

As depicted on Figure C-2 (Waste Process Overview), and Figure C-3 (Miscellaneous Management Processes), many of the primary and miscellaneous management waste treatment/handling processes listed above are comprised of several steps, and often cross over to one or more of the other waste management options. The analyses for each management option are presented in Section C5; the specific

operating parameters and procedures for each management option are described in detail in Sections D (Process Equipment) and E (Process Operations).

References are made within this plan regarding decisions that may be necessary regarding sampling, waste acceptance, and waste disposition. Unless specifically noted, personnel authorized to make these determinations shall be limited to the General Manager, Operations Manager, Laboratory Manager, Environmental Compliance Manager, or the Approvals Chemist.

C3 WASTE IDENTIFICATION AND CLASSIFICATION

C3.1 OFF-SITE WASTES ACCEPTED

The RCRA hazardous waste codes listed in Table C-1 may be accepted at the Facility for the indicated waste management options. This table also list the hazardous properties associated with each waste code. In summary, the Facility accepts non-hazardous wastes as well as the following hazardous wastes for storage, treatment, or transfer:

- All RCRA ignitable (D001), corrosive (D002), and toxic (D004 through D043) wastes
- RCRA reactive (D003) wastes which are described in 40 CFR 261.23(a)(1) through (a)(5)
- Most RCRA listed F, K, P, and U wastes

C3.2 RESTRICTED OFF-SITE WASTES

Any hazardous wastes not listed in Table C-1 found in containers will be rejected. Information on acceptable and non-acceptable waste types are communicated to customers by sales people, customer service, and the facility customer information (“audit”) package. In addition, the following materials are restricted from storage or treatment at the facility:

- Infectious wastes
- Radioactive wastes
- Reactive wastes (explosives as described in 40 CFR 261.23(a)(6), (a)(7), or (a)(8)
- Polychlorinated biphenyls that are regulated for disposal under the Toxic Substances Control Act (TSCA) (i.e., generally, wastes containing PCB greater than or equal to 50 ppm)

C3.3 TYPICAL WASTE CHARACTERISTICS

For each management process listed in Section C2 above, a description of the typical hazardous waste streams processed are provided in Table C-3(A-K)¹. These descriptions have been assembled based on the

¹ Please note there is no Table C-2 in this Section of the Application.

Facility's experience handling the wastes, detailed chemical and physical analysis on representative samples of the wastes, generator supplied information, and existing published or documented data on hazardous wastes generated from similar processes.

- Typical waste names
- Typical processes/activities generating the wastes
- Typical federal waste codes
- Typical physical, chemical, and hazardous characteristics

These tables are provided for illustration purposes only. Wastes may be received from other process or with different waste names and/or permit-acceptable waste codes. See Table C-1 for a complete listing of wastes that may be managed by the Facility. Records of chemical and physical analysis and other information for each waste managed by the Facility are maintained on-site. See Section C4 for a description of methods used to obtain waste characteristic data.

C3.4 WASTES GENERATED ON-SITE

Hazardous wastes deemed to be generated by the Facility include hazardous wastes generated strictly from Facility operations. See Table C-1 for a listing of typical wastes codes managed and generated by the Facility.

Hazardous waste generated at the Facility are treated on-site whenever possible. Prior to shipment off-site for further management, hazardous waste are sampled, analyzed, and/or characterized in accordance with 40 CFR 262.11.

Further, hazardous wastes will be characterized to determine applicable LDR. The Facility will prepare appropriate LDR notifications and certifications for on-site-generated hazardous waste streams to be managed off-site. Generally, hazardous waste streams derived from received wastes and destined for off-site management will be subject to the same LDR standards as the incoming hazardous wastes.

C4 PROCEDURES FOR RECEIVING OFF-SITE WASTES

The Facility has developed a series of control procedures to determine the acceptability of specific wastes for management at the facility. Pre-acceptance procedures dictate the types of information the Facility must obtain to determine the acceptability of the hazardous waste for management. At a minimum, the Facility must obtain all the information required by 40 CFR 264.13(a)(1), as well as any other information necessary to manage a hazardous waste.

C4.1 PRE-ACCEPTANCE PROFILE PROCEDURE

The generator or designated representative completes (or provides sufficient information to allow the Facility to complete) a waste characterization form (profile) and submits it to the Facility (see Figure C-4

for sample form). The waste profile describes the waste stream and its pertinent physical and chemical characteristics, the process generating the hazardous waste, and also identifies all applicable state and federal hazardous waste codes. This information shall be representative of the waste stream and may be based on 1) existing published or documented data on the hazardous waste; 2) waste generated from similar processes; 3) data obtained by analytical testing (by an independent laboratory or by the Facility); or 4) generator knowledge. It is the generator's ultimate responsibility to provide accurate information.

Before a material is accepted at the facility for treatment or storage, the generator must certify the accuracy and completeness of information on the waste profile form. The generator will have determined that the waste is either:

- a listed or characteristic hazardous waste in subpart B and C of 40 CFR 261;
- a non-hazardous waste.

Further information will be requested, if required by the waste's ultimate management method, to determine the status of the hazardous waste stream under the Land Disposal Restrictions of 40 CFR 268. Additionally, the generator will certify whether the waste stream contains greater than 500 parts per million (ppm) volatile organic compounds (VOCs) as defined by 40 CFR 264.

The profile information will assist the Facility in determining whether the waste is acceptable and if so, the appropriate waste management process. No wastes will be accepted into the Facility without a completed profile form. The profile will become part of the permanent record in the Facility's file.

C4.2 PRE-ACCEPTANCE SAMPLING REQUIREMENTS

A representative sample may be obtained from the generator and analyzed prior to the waste arriving at the Facility. Specific analyses are dependent upon the nature of the waste and the management process to be used to handle the waste. The analyses and acceptance limits for wastes managed by the Facility are summarized in Tables C-4, C-5, and C-6. In addition to conducting the analysis to determine whether a particular waste meets Facility acceptance limits, a bench-scale test may be performed by the laboratory to determine which treatment option would be appropriate to manage the waste (described further in Section C5.3.2). This is most commonly performed on new waste streams destined for solvent recycling.

Prior to submitting a sample, generators are advised to obtain the sample of their wastes in accordance with 40 CFR 261. The generator must certify on the waste profile form that the sample submitted is representative of the waste stream.

The Facility may waive some pre-acceptance sampling requirements for certain waste streams, if a.) sufficient information is presented in the waste profile form, b.) the generator has identified the waste constituents based upon the knowledge of the process generating the hazardous waste or their own analysis, or c.) the waste is included in the following list (unless such analysis is needed to properly manage the waste and/or the Land Disposal Restrictions in 40 CFR 268):

- Laboratory chemicals packaged in accordance with 40 CFR 264.316. An inventory sheet describing the contents of the lab pack will be required in lieu of analytical data for this waste stream.
- Unused commercial products (i.e., off-specification or outdated materials) that have material safety data sheet (MSDS) sufficient to ensure safe and effective management of the wastes in compliance with this permit;
- Residue and debris from the clean up of spills or releases of:
 - a single known substance;
 - a commercial product; or
 - other material for which a MSDS or waste profile can be provided.
- Equipment removed from service (i.e., ballasts, batteries, cathode ray tubes, fluorescent light bulbs, hydraulic equipment, switches, transformers, and electrical equipment) that contains hazardous waste which can be adequately identified for proper characterization and management;
- Debris from the demolition and/or dismantling of equipment from known processes and which is contaminated with hazardous waste which can be adequately identified for proper characterization and management;
- Chemical waste from laboratories. This includes the following materials from chemical laboratories or medical facilities: discarded containers of laboratory chemicals, lab equipment, lab clothing, debris from lab spills or cleanups, and lab packs.
- Empty containers of waste commercial products or chemicals. This applies to portable containers which have been emptied, but which may hold residuals of the product or chemical. Examples of containers are: portable tanks, totes, barrels, cans, bags, and liners.
- Closed Cartridge Filters (such filters being used to filter used dry-cleaning fluids or solids).
- Waste for which the past incoming waste shipment analyses have been consistent with the original paperwork submitted by the generator.
- Transfer Wastes (wastes which are accepted and stored on-site for transfer to another facility).

However, as outlined in Section C4.5, the Facility has strict receipt verification analysis procedures in place in order to screen out non-conforming waste streams.

C4.3 FINAL PRE-ACCEPTANCE EVALUATION

The pre-acceptance evaluation is concluded with documentation of the decision regarding the acceptability of the hazardous waste and the proposed method of management. Facility management's technical waste management decisions are based on the following:

- Profile description of the process generating the hazardous waste;
- Results of any analyses;
- Profile description of the chemical and physical properties of the waste;
- Any additional documentation, including information that the hazardous waste is subject to LDR standards of 40 CFR 268;
- Capability to manage the hazardous waste in a safe and environmentally sound manner;
- Hazardous waste management methods available; and
- Conditions or limitations of existing permits and regulations.

If the waste is found to be acceptable at the Facility, a profile number will be assigned. The profile numbering system includes a 5-digit profile prefix. The last digit of the prefix designates which waste management option is most likely to be used for the waste. The Facility may opt to utilize a different waste management option upon receipt of the waste based on the results of the receipt analysis of the waste, market conditions, or other factors.

If the waste is found to be unacceptable, the Facility will notify the generator that it is unable to accept the waste. A hazardous waste may be rejected during the pre-acceptance process for any of the following reasons:

- Incomplete or outdated information provided by the hazardous waste generator;
- The hazardous waste category is specifically excluded from acceptance at the Facility; or
- The hazardous waste cannot be treated, processed, or stored at the Facility.

As outlined in Section C4.5, the waste is subject to additional analytical testing and/or other type of profile verification upon arrival at the facility to ensure that the profile information is still appropriate for the waste stream.

C4.4 PROFILE AMENDMENT/RENEWAL PROCESS

At a minimum the pre-acceptance evaluation will be repeated or amended by the Facility as follows:

- when a generator notifies the Facility that the process generating the hazardous waste has changed;
- when results of inspections or analysis indicate that the hazardous waste received at the facility is significantly different from and does not match the hazardous waste designated on the accompanying manifest or pre-acceptance documentation; or
- biennially, whichever is more frequent.

A profile that is being re-certified must be accompanied by a statement, and an updated waste profile. The Facility may waive the sample requirements for re-certification of a hazardous waste if the past incoming hazardous waste shipment analysis for that particular waste have been consistent with the original paperwork submitted by the generator, or the waste stream is a solid and the generator has supplied sufficient profile information.

C4.5 INCOMING WASTE ACCEPTANCE EVALUATION

The purpose of the incoming waste acceptance evaluation procedure is to verify that the contents of each hazardous waste shipment match the identity (e.g., proper shipping name, hazard class, and waste code) of the hazardous waste as specified on the manifest and determined under the pre-acceptance process described above. This section pertains to waste shipments arriving at the Facility with an approved profile in place. If a shipment arrives at the Facility without an approved profile in place (excluding ten-day transfer wastes), the process described in Sections C4.1 through C4.3 will be followed before the waste is accepted into the Facility. In some cases, the waste shipment itself will provide the pre-acceptance sample, referred to as “Load-as-Sample” at the Facility. However, with the exception of ten-day transfer waste, a completed and approved profile form is necessary for all wastes to be treated or stored at the Facility.

The analyses for the primary waste streams managed by the Facility are listed on Table C-4, the Waste Acceptance Analysis Summary table. The analyses listed in these tables pertains to both pre-acceptance and incoming waste acceptance/verification requirements for the waste stream. Tables C-5 and C-6 list storage and process limitations for each waste stream managed by the Facility.

C4.5.1 INCOMING CONTAINER LOADS (LIQUIDS AND SOLIDS)

Incoming container loads (e.g., pails, buckets, drums, tote bins, tri-wall boxes, supersacks, or any other DOT-compliant containers) are handled according to the following steps:

C4.5.1.1 DOCUMENT INSPECTION

When trucks with containers arrive at the facility, the truck driver brings the hazardous waste manifest(s) into the hazardous waste tracking office where the documents are inspected. This inspection includes checking that:

- the manifest(s) are properly completed
- Romic is the designated facility,
- a current and valid profile number is written on the manifest,
- the manifest has the necessary signatures, and
- the Facility is permitted to handle the hazardous waste codes listed on the manifest.

Any discrepancies noted on the manifest by the Facility are resolved before the vehicle is allowed to be sampled or offloaded. This may involve contacting the generator or an authorized representative of the generator.

If the waste arrives without a profile number (excluding ten-day transfer wastes), or the number is invalid or expired, the waste will not be received by the Facility until a completed and/or updated profile form has been obtained from the generator.

C4.5.1.2 CONTAINER UNLOADING

If the manifest and profile information of the waste shipment is approved, the containers are unloaded from the truck under the canopy in front of Building #1 or moved to the sampling area (see Figure C-1). All containers are checked for proper labeling, integrity, and description listed on the manifest. Any discrepancies are noted. All discrepancies involving piece count, labeling, and/or container integrity are resolved with the generator, transporter, or an authorized representative of the generator prior to the transporter leaving the site. Containers are then moved to a designated sampling area.

All acceptable waste containers are then labeled with a unique label that links the container to the manifest and its individual line item for tracking and identification purposes. A code may also be present on the container label (e.g., “S”) indicating that the particular container is to be sampled.

C4.5.1.3 SAMPLING AND ANALYSIS

For safety reasons, the laboratory will not sample any wastes without a properly and fully completed profile. For wastes arriving without a profile number (and therefore no pre-acceptance sample, if required), the waste shipment itself may also function as a pre-acceptance sample, after a completed profile form has been obtained.

The waste in containers are sampled (if required) in accordance with the frequency and methods specified in Section C5. The analyses for the primary waste streams managed by the Facility are listed on Table C-4, the Waste Acceptance Analysis Summary table. The analyses listed in these tables pertains to both pre-acceptance and incoming waste acceptance/verification requirements for the waste stream. Tables C-5 and C-6 list storage and process limitations for each waste stream managed by the Facility.

If the sample analysis results indicate that the waste conforms to its profile and the Facility’s permitted waste acceptance parameters, the waste will be assigned a disposition code by the laboratory. The disposition code is a system used to indicate which treatment, storage, or disposal process will be utilized to handle the waste, and to address waste compatibility concerns. Example disposition codes used by the Facility for waste streams managed are listed in Tables C-7A and C-7B. The laboratory then returns the analytical results, along with the disposition code for the waste to operations personnel. Operations personnel then mark the label indicating the waste disposition code (management option) on the container.

If the sample analysis results indicate that the waste does not conform to the Facility's permitted waste acceptance parameters, the waste will not be accepted into the Facility. If the sample analysis results indicate that the waste does not conform to its profile (but does conform to the Facility's permitted waste acceptance parameters), the generator may be contacted at the discretion of Facility management. At this point, the generator will be given the option to update the profile form and/or to obtain approval for any waste change in management option to be used to handle the waste.

Discrepancies involving the analysis of the containers are typically resolved after the transporter leaves the site. Potential resolutions of discrepancies may include but are not limited to:

- Affixing proper labels on containers
- Placing a drum into an 85 gallon overpack
- Rejecting a container and returning it to the generator, and/or
- Correcting the manifest to correspond to container label and/or determined waste type

Unacceptable wastes are placed in an isolation area (see Figure C-1) when analysis indicates a problem. These wastes may be re-sampled and analyzed to confirm the initial test results. If the confirmation analysis indicates that the waste is still unacceptable, the generator is contacted to resolve the disposition of the unacceptable material.

C4.5.1.4 WASTE DISPOSITION

Based on the assigned disposition codes, the accepted containers are transferred to the appropriate storage buildings for storage prior to processing, or are transferred directly into the appropriate treatment process. Table C-7 includes a listing of example container storage locations by disposition codes. Section D includes detailed descriptions of waste handling methods for containerized waste and storage building descriptions; Section E includes descriptions of processes and associated equipment.

C4.5.2 INCOMING BULK LOADS

All incoming bulk loads (e.g., tanker trucks) are handled according to the following steps:

C4.5.2.1 DOCUMENT INSPECTION

When bulk trucks arrive at the facility, the truck driver brings the hazardous waste manifest(s) into the hazardous waste tracking office where the documents are inspected. This inspection includes checking that:

- the manifest(s) are properly completed
- Romic is the designated facility,
- a current and valid profile number is written on the manifest,

- the manifest has the necessary signatures, and
- the Facility is permitted to handle the hazardous waste codes listed on the manifest.

Any discrepancies noted on the manifest by the Facility are resolved before the vehicle is allowed to be sampled or offloaded. This may involve contacting the generator or an authorized representative of the generator.

If the waste arrives without a profile number, or the number is invalid or expired, the waste will not be allowed into the Facility until a completed and/or updated profile form has been obtained from the generator.

C4.5.2.2 SAMPLING AND ANALYSIS

For safety reasons, the laboratory will not sample waste until a profile has been fully and properly filled out by the generator. For wastes arriving without a profile number (and therefore no pre-acceptance sample, if required), the waste shipment itself may also function as a pre-acceptance sample. If the manifest and profile information on the waste shipment is approved, the truck will be instructed to move to a sampling area (if required). The locations of the bulk sampling areas are shown on Figure C-1.

The bulk waste is sampled (if required) in accordance with the frequency and methods specified in Section C5. The analyses for the primary waste streams managed by the Facility are listed on Table C-4, the Waste Acceptance Analysis Summary table. The analyses listed in these tables pertain to both pre-acceptance and incoming waste acceptance/verification requirements for the waste stream. Tables C-5 and C-6 list storage and process limitations for each waste stream managed by the Facility.

After the bulk waste sample is obtained, the truck will be instructed to move to the designated truck staging area immediately south of Storage Building #1 (See Figure C-1) until the sample analysis results are released from the Laboratory.

C4.5.2.3 WASTE DISPOSITION

If the sample analysis results indicate that the waste conforms to its profile and the Facility's permitted waste acceptance parameters, the waste will be assigned a disposition code by the laboratory (see Table C-7 for example disposition codes). The laboratory will then provide the analytical results along with the waste's disposition code to the Facility's operations manager or designee. The operations manager (or designee) will then instruct the truck driver to proceed to the appropriate off-loading area for the particular waste stream. See Section E for a description of the Facility's bulk truck off-loading procedures.

If the sample analysis results indicate that the waste does not conform to the Facility's permitted waste acceptance parameters, the waste will not be accepted into the Facility. If the sample analysis results indicate that the waste does not conform to its profile (but does conform to the Facility's permitted waste acceptance parameters), the generator may be contacted at the discretion of Facility management. At this

point, the generator will be given the option to update the profile form and/or to obtain approval for any waste change in management option to be used to handle the waste.

Discrepancies involving the analysis of bulk wastes are resolved before the transporter leaves the site. Potential resolutions of discrepancies may include but are not limited to:

- Rejecting the bulk load and returning it to the generator, and/or
- Correcting the manifest and updating the profile (if instructed by the generator) to correspond to waste type received

If initial analytical results of the hazardous waste identify the hazardous waste as unacceptable, the hazardous wastes may be re-sampled and analyzed to confirm the initial test results. If the confirmation analysis indicates that the hazardous waste is still unacceptable, the generator is contacted to resolve the disposition of the unacceptable material. Hazardous wastes will not be offloaded from bulk containers until the matter is resolved.

C4.5.3 ACCEPTANCE OF INCOMING WASTES FOR MISCELLANEOUS MANAGEMENT PROCESSES

Wastes destined for the Consolidation of Small Containers, Can Crushing, Aerosol Depressurization, and Drum Crushing Facility management options are visually inspected upon arrival at the Facility. If the physical appearance, label/inventory sheet information, color, and/or other physical properties do not conform to the profile information, the generator will be contacted to attempt to resolve the discrepancy. These wastes may be sampled by the Facility, rejected, or routed to an alternate treatment option or off-site facility.

C4.5.4 ACCEPTANCE OF UNIVERSAL WASTES

Universal wastes as defined by 40 CFR 273.9, received at the Facility will not be sampled for analysis. If the universal wastes are received by the Facility under a hazardous waste manifest, the Facility may re-characterize the waste (to universal waste) based on a visual observation of the waste and/or through contacting the generator of the waste to update the profile information.

C5 SAMPLING AND ANALYSIS

The Facility's sampling and analysis procedures are designed to obtain representative information used to evaluate a hazardous waste. A representative sample of a material is analyzed to:

- Verify generator supplied hazardous waste stream information on manifests and/or waste profile sheets;
- Determine safe and appropriate treatment or disposal processes based on waste characteristics; and
- Determine treatment process control information.

C5.1 SAMPLING METHODS AND EQUIPMENT

The Facility uses sampling methods presented in SW-846 (*Test Methods for Evaluating Solid Waste, 2nd edition, July 1982 and subsequent updates and revisions*) and ASTM (American Society for Testing Materials) methods. Romic-developed analytical methods are included in the Facility's Quality Assurance Procedure Manual, included as Appendix C-1 to this Section.

Sampling is performed by Facility personnel who are properly trained in representative sampling methodology and in accordance with established Standard Operating Procedures (SOPs). Personnel training is outlined in Section H, Training Plan.

During the sampling process, technicians make visual observations of the physical nature of the wastes, and note these observations. Sampler observations will typically include physical state, whether the waste exhibits multiple phases, whether the waste is comprised of a variety of different types of materials (e.g., rags, wipes, grease, pieces of wood) or is homogeneous, and other physical aspects of the waste.

The sampling devices are selected according to size and type of container and the specific material matrix involved. The sampling methods and equipment used for the various materials and types of containment vessels are presented in Table C-8, Sampling Methods and Equipment. Since the type of containers are variable, such as drums and various transport units (i.e., tanker trucks, roll-off boxes), the sampling devices selected are dependent on the size and type of container and the specific hazardous waste involved.

Samples are stored in containers that are compatible with the sampled material. All samples are stored in glass or plastic containers, except chlorinated solvents or chlorinated solvent-contaminated materials which are stored in glass or metal containers only; hydrofluoric acid is stored in plastic only. Solid samples and oils can be stored in plastic, glass, or metal containers. Containers are liquid-tight and range in size from 4 oz. to 1 gallon. Sample/container compatibility is summarized in Table C-9.

Once analysis is complete, samples are stored according to DOT hazard classification and segregated/consolidated into compatible groups. Final disposition of the consolidated samples is determined by the most suitable treatment process or off-site disposal option for the waste. For example, hazardous waste acid samples analyzed at the facility would typically be returned to the waste acid storage tank.

C5.2 FREQUENCY OF SAMPLING AND ANALYSIS

The frequency for sampling and analysis for both waste streams in containers and bulk waste shipments are outlined in this Section. For management processes that have unique sampling requirements, the sampling frequencies for these wastes are also described here.

C5.2.1 CONTAINERS

A minimum of 10 percent of all containers of each hazardous waste manifest line item received from off-site shall be randomly sampled. Exceptions include readily identifiable, common waste streams such as household hazardous wastes, paint and paint-related materials, aerosol cans, spray cleaners and lubricants. However, these materials are also sampled and evaluated for the appropriate management method after consolidation. Containers are randomly selected for sampling by the technician who checks the containers into the facility. As the containers are unloaded, each receives a waste receipt number. The technician chooses at least one out of every ten containers (lot) for sampling, based on the waste receipt number. When less than ten containers of a hazardous waste stream are received, at least one container is randomly selected for sampling by the technician assigning the waste receipt numbers. The Facility may also choose to composite samples from a maximum of ten containers from one manifest line item for analysis.

C5.2.2 INCOMING BULK, IN-PROCESS, AND OUTGOING WASTES

Each incoming bulk hazardous waste shipment (e.g., tanker, vacuum trucks), is sampled and analyzed before off-loading. At least one sample is collected for receipt analysis from each bulk shipment. If a bulk shipment arrives at the Facility in a multi-compartment tanker/vacuum truck with the same material in each compartment, and the shipment is indicated as one material from the same generator on the shipping papers (e.g., manifest), one discreet sample will be collected from each compartment and may be composited into one sample for analysis. If the compartments contain different types of wastes, both compartments will be sampled and analyzed individually. No separate tankers/vacuum trucks are composited together.

Storage and treatment tanks are sampled as needed before and/or during treatment, consolidation, transfer of materials, and permitted discharge to the sewer. Prior to treatment, consolidation, blending, and/or transfer, a representative sample may be obtained using an appropriate sampling device, or samples may be obtained from the circulating lines or sampling ports on each tank. During treatment, consolidation or transfer, representative samples are obtained from the circulating lines or sampling ports as needed.

Hazardous wastes sent off-site for treatment and/or disposal are sampled as required by the receiving facility, and as necessary to comply with the Land Disposal Restrictions in 40 CFR 268.

C5.2.3 INCOMING LAB-PACK WASTES

Incoming lab-pack wastes are not normally sampled, and are primarily placed in at the Northwest side bays of Storage Building #2 after shipment paperwork is approved. As with other containerized waste, a waste tracking number is assigned to the container, which links the container to its manifest, profile, and lab-pack inventory sheet. Additionally, as no sampling of lab-pack wastes is normally performed prior to managing this waste stream, the assigned tracking number also links the waste in the over-pack container immediately to the lab-pack disposition code. Therefore, a process-specific disposition code label is not required for lab-pack wastes.

After a thorough review of all profile, manifest, lab-pack inventory sheet, and container labeling information, lab-pack wastes are removed from the container for consolidation and/or re-packaging. This activity occurs in the consolidation area, and is further described in Section E. If the information on the label of any lab-packed waste does not appear to conform to the information on the inventory sheet, or the waste is otherwise questionable (e.g., missing label, additional containers not identified on the inventory sheet), the Facility will contact the generator to attempt to resolve the discrepancy. Some analysis (e.g., pH, cyanide screen, radiation screen) may be performed at the discretion of the laboratory manager to confirm information given by the generator; the lab-pack waste in question may also be subject to rejection or re-routing to an alternate facility.

Prior to transferring any consolidated lab-pack wastes to the final on- or off-site waste management method to be used, the wastes will be sampled for laboratory analysis. The sample is analyzed to ensure that the waste conforms to the acceptance parameters of the ultimate management method. The laboratory will then assign a disposition code to the consolidated wastes based on the sample analysis results.

C5.2.4 WASTES DESTINED FOR SOLIDS CONSOLIDATION

Non-homogenous wastes such as mixed debris, PPE, or other solid materials will be visually examined to the maximum extent practical. Samples may also be collected for analysis, at the discretion of the laboratory manager or designee. If a representative sample can be obtained from the full depth of the container, and the waste considered homogenous, the waste material will be sampled in accordance with Section C5.1 and C5.2.1 prior to consolidation. During the debris consolidation process, the drum is slowly emptied out into the hopper to enable the contents to be visually inspected. These procedures enable Facility personnel to properly determine the contents of the container prior to processing.

C5.2.5 TRUCK WASH

Residue remaining in tankers that contained waste that had previously been accepted at the Facility will not require additional sampling. Each tanker arriving at the Facility solely for the purpose of removing residues will be sampled and analyzed in accordance with Section C4.5.3.

C5.3 ANALYTICAL PARAMETERS AND RATIONALE

The usage and applicability of waste analyses are described herein. The analytical procedures and methods described or referred to in this text, whether standard procedures or procedures developed by the Facility through its operating experience, were selected to provide hazardous waste identification and provide the information required to properly and safely manage hazardous wastes. In each case, Facility management selects the appropriate parameters from those listed below according to the needs and requirements specified for profile analysis, incoming shipment identification analysis, and process analytical testing. The analytical parameters, methods, and rationale are identified in Table C-10. Additional parameters not listed may be added as required (by changes in regulations, processes, hazardous waste streams).

All incoming hazardous waste samples collected in accordance with C5.2 are subjected to waste receipt verification analysis, except as excluded in C4.2. Facility management may select additional supplemental analyses and/or bench-scale testing of the waste to obtain information required for efficient process control or to further evaluate a positive result from a mandatory screening test.

C5.3.1 WASTE VERIFICATION ANALYSIS

Waste verification analysis include basic screening procedures or “fingerprints” that provide a general identification of the hazardous waste, verify that the hazardous waste received is as described in pre-acceptance paperwork, and determine the management scenario that is most suitable. The results of the analysis also provide facility management with a level of confidence concerning the proper means of treatment, storage, and disposal.

The waste verification analysis for the primary waste streams managed by the Facility are listed on Table C-4; waste storage/process limits are listed on Tables C-5 and C-6. After characterization, hazardous waste that carries more than one characteristic or listed waste code will be treated to the most stringent treatment requirement for each hazardous waste constituent of concern.

The parameters and associated rationale for both waste acceptance and any supplemental analyses are described below (also refer to Table C-10, Analytical Parameters, Methods, and Rationale). Supplemental analyses provide additional information to assist Facility operations in determining the appropriate management option for a particular waste shipment, and are not required for waste acceptance purposes.

The rationale for performing all of the following analyses is first and foremost to determine conformance with the approved waste profile for the waste to provide for safe and compliant waste handling purposes.

Waste Acceptance Analysis

- Physical Description is used for wastes received destined for each of the waste management options to determine the general properties of the hazardous waste (color, physical state, layering, odor). This facilitates subjective comparison of the sampled waste with prior waste descriptions or samples. It applies to all incoming hazardous wastes and is used to identify any obvious change in the waste’s physical properties.
- pH is used to indicate the pH and, in general, the corrosive nature of the hazardous waste. Results will be used to ensure that corrosive wastes are handled in areas, containers, and/or tanks suitable for storage and treatment of these types of hazardous wastes, and to assist in determining compatibility of wastes, when necessary.

The pH test may not apply to certain hazardous wastes, such as organic solvents, waste oil, or insoluble solid wastes, but will be performed on most incoming wastes such as wastes destined for solvent recovery, ethylene glycol recovery, fuel blending, waste water treatment, neutralization, inorganic treatment, and off-site transfer. For miscellaneous management options, a physical pH test will routinely be performed on wastes destined for the tanker truck wash management option only.

pH values for wastes destined for the other miscellaneous management options will be based on profile information; physical pH testing may be performed if labeling, shipping papers, or physical observations of the waste deviate from the information on the waste's profile.

- Specific Gravity provides information regarding the general chemical composition of a waste and is used to compare and identify differences between the hazardous waste and prior hazardous waste descriptions. Specific gravity is performed on liquids that are to be stored and/or processed in onsite tanks or other process vessels to determine the suitability of the receiving vessel according to its engineering certification limits.

With the exception of the tanker truck wash miscellaneous management option, the specific gravity analysis is not routinely performed on waste destined for a miscellaneous management option, but is based on profile information. However, the analysis may be performed if labeling, shipping papers, or physical observations of the waste deviate from the information on the waste's profile.

- Radiation Screen is used to detect the presence of radioactive constituents in a waste. This screen applies to all incoming solid and liquid hazardous wastes destined for the Facility's primary management options. With the exception of the tanker truck wash miscellaneous management option, the radiation screen is not routinely performed on waste destined for a miscellaneous management option, but is based on profile information. However, the analysis may be performed if labeling, shipping papers, or other physical observations of the waste indicate the possible presence of radiation.

Solvent Composition/Screen determines the solvent composition of materials to be reclaimed or blended for alternate fuels or incineration. In addition, this test can be used to determine whether a liquid hazardous waste contains land disposal restricted organic components. This test also establishes a fingerprint of the hazardous waste that is compared to subsequent hazardous waste shipments to confirm the identity of the waste.

The rationale for performing a solvent composition screen on wastes destined for the following Facility primary management options are as follows:

- Solvent Recovery: to determine solvent recovery suitability/treatment parameters;
- Ethylene Glycol Recovery: to indicate possible presence of solvents, and if present, to determine possible management options for solvents presence (i.e., recovery);
- Fuel Blending: may be performed in lieu of BTU analysis;
- Waste Water Treatment: to set treatment parameters;
- Neutralization: to avoid potential flammability concerns in a unit where we are doing an acid-base neutralization reaction, which may generate heat;
- Inorganic Treatment: to avoid potential interference with the treatment process;
- Off-Site Transfer: to meet off-site facility receiving requirements, and/or to determine presence of land disposal restricted compounds.

For miscellaneous management options, the solvent composition analysis will routinely be performed only on wastes destined for the tanker truck wash management option. The solvent composition analysis is not performed on solid materials or inorganic liquids.

- Cyanide Screen is used to indicate the presence of cyanide in a hazardous waste. Should the screen indicate the presence of cyanide, further analysis may be performed to safely handle the waste and to meet regulatory requirements (see Total Cyanide analysis rational below). The screen is performed if the wastes profile indicates the possible presence of cyanides.
- Oxidizer Screen is used to determine if water-based hazardous wastes have the potential to exhibit the characteristic of an oxidizer. Wastes with this characteristic are known to be incompatible with ignitable wastes, and are therefore managed separately. This test applies to all water-based hazardous waste streams destined for the Facility primary management options and for the tanker truck wash miscellaneous management option. The presence of oxidizing components for wastes destined for the other miscellaneous management options will be based on profile information; physical oxidizer screening may be performed if labeling, shipping papers, or physical observations of the waste deviate from the information on the waste's profile.
- Sulfide Screen is used to determine the presence of sulfide in hazardous waste. Should the screen indicate the presence of sulfides, further analysis may be performed to safely handle the waste and to meet regulatory requirements (see Total Sulfide analysis rational below). The screen is performed if the wastes profile indicates the possible presence of sulfides.
- Heat of Combustion (BTU) is used for wastes to be blended for use as waste-derived fuel in cement kilns managed under the fuel blending, solids consolidation, off-site transfer, small container consolidation, can crushing, aerosol depressurization management options.
- Total Metals is used to quantify the concentration of specified metals in a hazardous waste in order to determine treatment parameters and/or to meet off-site receiving facility receiving requirements.
- The rational for performing total metals analysis on wastes destined for the following Facility primary management options are as follows:
 - Fuel Blending: to meet off-site facility receiving requirements;
 - Waste Water Treatment: to set treatment parameters (see Section E4.1.3.1)
 - Inorganic Treatment: to set treatment parameters;
 - Solids Consolidation: based on profile information, to meet off-site facility receiving requirements;
 - Off-Site Transfer: to meet off-site facility receiving requirements, and/or to determine presence of LDR compounds.
- Total Halogens is used to quantify the concentration of halogens as necessary to comply with off-site receiving facility criteria for wastes managed under the fuel blending, solids consolidation, debris shredding, off-site transfer, and small container consolidation management options.

- PCBs is used to determine the concentration of polychlorinated biphenyls in a hazardous waste; the presence of which may have environmental, health, and safety consequences, and also may trigger other regulatory requirements Toxic Substance Control Act (TSCA). It is performed on any hazardous wastes suspected of containing PCBs, usually those that are oil containing.
- Total Cyanides is used to quantify cyanides as necessary to comply with LDR's and off-site receiving facility criteria for the solids consolidation, off-site transfer, and small container consolidation management options. Total cyanides is performed for wastes destined for the wastewater treatment and neutralization management options in order to determine acceptability of the waste and treatment parameters.
- Total Sulfides is used to quantify sulfides as necessary to comply with LDRs and off-site receiving facility criteria for the solids consolidation, debris shredding, off-site transfer, and small container consolidation management options. Total cyanides are performed for wastes destined for the wastewater treatment and neutralization management options in order to determine acceptability of the waste and treatment parameters.
- Flash Point is performed as necessary on wastes destined for ethylene glycol recycling, wastewater treatment, neutralization, inorganic treatment, off-site transfer, and small container consolidation management options to further characterize ignitable liquid hazardous wastes to establish proper storage modes and conformance with permit conditions.
- Compatibility Screen is used to determine the compatibility and potential reactivity of bulk shipments to be consolidated with other hazardous wastes in a tank.
- Ammonia is used to determine and quantify the presence of ammonia in a hazardous waste. This analysis is performed as necessary on wastes destined for ethylene glycol recycling, wastewater treatment, neutralization, and tanker truck management options in order to assist the Facility to meet POTW discharge requirements. This analysis may be performed on off-site transfer wastes in order to meet off-site facility receiving requirements.

C5.3.1.2 SUPPLEMENTAL ANALYSIS

Though generator knowledge is accepted, if the analysis is determined necessary, the following may be performed:

- Water Content provides information that the facility uses to determine blending requirements.
- Solids Content provides information that the facility uses to grade aqueous streams to be managed in the wastewater treatment process. Solids content also affects material handling (e.g., whether to place material in agitated tank).
- Viscosity provides material handling information (e.g., ability to pump material).
- Total Organic Constituents provides information that the facility uses to determine blending requirements and treatability.

- Volatile Organic Concentration provides information on applicability of air emission requirements. Primarily evaluated through review of profiles/chemical composition.
- Vapor Pressure provides information on applicability of air emission requirements. Primarily evaluated through process knowledge and review of profiles/chemical composition.
- Dioxins/Vinyl Chloride Screen provides information relating to status under LDR standards.

C5.3.2 BENCH SCALE TESTING

The Facility's laboratory may perform bench-scale testing on a sample of an incoming waste in order to determine the appropriate waste management option. For example, the bench-scale test would assist the Facility in determining the feasibility of recycling a particular waste through a thin film evaporator, fractionation column, vacuum distillation unit, or a combination of these processes (described in Section E). Small pilot units are used in the lab to represent the operating conditions of the facilities process equipment. The sample is "processed" through the pilot unit, and the treatment efficiency of the particular method is assessed through analytical testing of the waste, waste residuals, effluents, and/or by-products at various stages of treatment.

Bench-scale testing also allows the Facility to determine optimal treatment chemicals for processes such as wastewater treatment and inorganic treatment. Bench-scale testing is an integral and important step taken by the Facility to ensure that the appropriate treatment option is chosen, and the treatment of the waste is effective and safe.

C6 PROCEDURES FOR PRE-, IN-, AND POST-PROCESS OPERATIONAL CONTROLS

Romic will conduct sampling and analysis at various stages of the waste management processes for each waste stream to ensure incoming wastes are acceptable, determine waste compatibility, determine process option, monitor and verify the effectiveness of the management process, and to ensure any treatment effluents/emissions are within permitted discharge limits. A general description of the sampling and analysis operational controls for each waste stream managed by the Facility is presented in this section. Examples are listed below outlining the rationale behind performing the analysis at various stages of processing. The specific rationale for each type of physical and chemical analysis is presented in Section C5.3.

Pre-Process Analysis includes the acceptance analysis outlined in Section C4.5, and may also consist of additional analyses conducted on consolidated waste streams to ensure the feedstock to a process can be managed by that process. Appropriate disposition of the waste and the resulting treatment/storage locations (i.e., storage buildings, tanks, etc.) are determined by the pre-process analysis procedures. The pre-process analysis may also include bench-scale testing. Additionally, the pre-process analysis procedures assist in screening out wastes that cannot (by permit conditions) be accepted at the Facility,

and assist Facility personnel in determining if there are any compatibility issues for each waste stream. Finally, the pre-process also enables the Facility to set process operational parameters.

- Example: The results of pre-acceptance analytical testing are used to determine the feasibility of solvent recovery versus fuel blending, the compatibility of the waste stream with any wastes that it may be mixed with, the type of equipment to be used, and operating parameters for the distillation/fuel blending equipment.

In-Process Analysis enables the Facility to determine the progress of a treatment process, and whether and when certain changes need to be made during the process. Analyses may also be used during waste management processes to determine when the target product has been made and/or when alternate products are produced so that they can be sent to an appropriate disposition.

- Example: During ethylene glycol recovery, two different types of wastewater are produced that require further treatment, along with the target ethylene glycol product, and a bottoms residual (See Section E2).

Post-Process Analysis confirms successful treatment of a waste, and verifies that the properties of the resulting material are suitable for the next management step. Residuals from a process treating wastes to meet land disposal restriction standards may undergo verification testing to ensure those standards are met. Other residuals are analyzed for appropriate disposition on-site or off-site.

- Example: Post-process analysis is conducted to verify that wastewater resulting from on-site treatment methods does not exceed the Facility's wastewater discharge permit limits.

C7 PROCEDURES FOR IGNITABLE, REACTIVE, AND INCOMPATIBLE WASTES

In addition to the procedures outlined in this section, employees that perform job duties applicable to the management of ignitable, reactive, and incompatible wastes are trained in the proper handling, operational methods, and emergency procedures for safe management (see Section H, Personnel Training).

Also, tanks and containers are separated, based on compatibility, by secondary containment systems and appropriate distances according to UFC spacing and DOT requirements. Tanks at the facility are labeled according to the National Fire Protection Association (NFPA) placard system and the Hazardous Materials Information System (HMIS). See Sections D1 and D2 for a detailed discussion of tank and secondary containment areas at the Facility and some of the physical measures taken to ensure the safe handling of ignitable, reactive, and incompatible wastes.

C7.1 IGNITABLE WASTES

Potential ignitability characteristics will be assessed through the profiling process, or for on-site generated wastes, using process knowledge. The Setaflash closed cup apparatus may be used to determine the

flashpoint of a given liquid hazardous waste. Operating procedures and specialized equipment are in place at the Facility to ensure the safe handling of ignitable wastes, such as:

- Fingerprint analysis upon receipt of all wastes to determine conformance with the profile information
- Use of the disposition code system to indicate the waste type and ultimate management option to be used to handle the waste
- Grounding and bonding of transfers of ignitable wastes between containers, trucks, and tanks
- The use of non-sparking tools (bung wrenches, etc.)
- Strict no smoking policies
- Any welding work performed at the Facility requires a “Hot Work” permit and established precautionary procedures

C7.2 REACTIVE WASTES

Potential reactivity characteristics will be assessed through the profiling process for off-site generated wastes, or for on-site generated wastes, using process knowledge. The review of the waste profile (and shipping papers for off-site generated wastes), includes an inspection for the presence of any of the following:

- Wastes dangerous when wet/water reactives
- Organic peroxides
- Vinyl benzyl chloride
- Unreacted monomers, resins, isocyanates (e.g., TDI/Toluene diisocyanate, MDI, epoxy Part A), with the potential to cause exothermic polymerization reactions
- Reactive wastes
- Wastes with reactive constituents

C7.3 INCOMPATIBLE WASTES

The Facility takes many precautions to ensure that incompatible wastes are not mixed together. The adverse consequences of mixing incompatible wastes include heat generation, fires, pressure in closed containers, explosions, generation of toxic or flammable gases, and/or polymerization.

Waste-to-waste and waste-to-vessel compatibility is addressed by the Facility at three separate points, during the pre-acceptance waste profiling stage, during the receipt analysis stage, and at the operations level. During the pre-acceptance profiling stage, a thorough review of the waste profile is conducted specifically for the presence of any possible incompatible wastes, and whether the chemical composition

of the waste is appropriate for the management method to be used. During the receipt analysis stage, the laboratory evaluates all wastes for compatibility using physical and chemical analysis information.

Facility compatibility guidelines and references include the following:

- DOT Segregation Table (from 49CFR)
- Hawley's Condensed Chemical Dictionary
- Sax's Dangerous Properties of Industrial Materials
- OSHA regulations

Disposition codes are then assigned by the laboratory indicating to operations personnel which storage and/or processing options to use, and to ensure incompatible wastes do not mix and cause adverse reactions. See Section C7.3.5 and C7.3.7 for additional information regarding waste disposition codes.

C7.3.1 METHODS OF SEGREGATION

There are many methods of segregating incompatibles including:

- Separation by a distance of more than 20 feet.
- Separation by wall, berm, spill pallet, or other confinement devices.
- Placing small containers inside larger containers (e.g., overpacks, lab packs, etc.)

It is assumed that if potential incompatible chemicals have been mixed within a container by the generator without adverse consequences that the chemicals are compatible with each other inside the container, and with similar chemicals outside the container. As an example, a container with an acid and an organic solvent mixed together without an adverse reaction would be compatible enough to be stored with other containers of acids or organic solvents.

C7.3.2 SAMPLING AREAS

- Facility personnel will inspect the integrity of the containers as they are being unloaded off the transport vehicle and placed in the container unloading or sampling areas.
- If Facility personnel see the following DOT labels on the side of the container, they will be placed in designated sampling areas (see section D2, D9). If the containers are lab packs (chemical inventories will be attached to the containers) and they are not required to be placed on the spill pallets.

DOT 4.3 Dangerous When Wet

DOT 5.1 Oxidizers

DOT 5.2 Organic Peroxides

DOT 8 Corrosive (liquids only)

- Once the above containers are sampled and dispositioned by the lab, the warehouse personnel will move the containers to the appropriate storage areas.

C7.3.3 GENERAL CONTAINER REQUIREMENTS

Incompatible wastes or incompatible wastes and other materials will not be placed in the same container, unless the requirements of 40 CFR 264.17 (b and c) are complied with. Hazardous waste will not be placed in an unwashed container that previously held an incompatible waste or material.

C7.3.4 GENERAL TANK AND TANK SYSTEMS REQUIREMENTS

Incompatible waste, or incompatible wastes or materials, will not be placed in the same tank system, unless the requirements of 40 CFR 264.17 (b and c) are complied with. Similarly, hazardous waste will not be placed in a tank system that has not been decontaminated and that previously held an incompatible waste or material, unless compliant with the requirements of 40 CFR 264.17 (b and c).

C7.3.5 SAMPLING AND ANALYSIS

Trained technicians sample and analyze incoming wastes in accordance with Sections C4, C5, C6, and established Facility SOPs. As outlined in Section C4, sampling and analysis for compatibility purposes may be required or may be conducted if profile information or incidental observations (color, odor, labeling or manifest information) indicate possible presence of incompatible materials. When necessary, laboratory personnel are trained to conduct the specific compatibility reviews listed below.

Liquids

Potentially incompatible liquids (and semi-solid materials, if enough liquid present to conduct tests) that are to be consolidated may undergo the following testing for compatibility purposes:

- pH (either direct measurement using pH paper or measurement of prepared 1:1 mixture of waste and water)
- Oxidizer screen (test strip)
- Cyanide screen (test strip)
- Waste compatibility test (if wastes to be mixed into a tank and the wastes are not known to be compatible). Sample of waste is mixed with sample from target tank; if temperature rise of 10 °C or greater or a violent reaction is observed, material deemed incompatible with material in target tank.

Solids

Although no specific compatibility tests are conducted for solids, a thorough review of the waste profile is conducted for solid wastes to be consolidated specifically for the presence of any of the following:

- Oxidizers
- Wastes dangerous when wet/water reactives
- Organic peroxides
- Mineral acids
- Vinyl benzyl chloride
- Unreacted monomers, resins, isocyanates (e.g., TDI/Toluene diisocyanate, MDI, epoxy Part A), with the potential to cause exothermic polymerization reactions
- Batteries with corrosive liquids
- Reactive wastes
- Wastes with reactive constituents
- DOT Flammable solids (DOT Hazard Class 4.1) other than those with a proper shipping name of “Solids containing flammable liquids”
- Facility personnel also perform a physical observation of solid waste samples specifically for the presence of the following:
- Containers suspected of containing any of the chemicals noted above
- Solid wastes with free liquids
- Glass chemical containers (broken or intact)

C7.3.6 WASTE DISPOSITION CODE DESIGNATION

The assignment of disposition codes is another method used at the Facility to ensure that incompatible wastes are not mixed. As outlined in Section C4.5, and based on storage and process limitations (Tables C-5 and C-6), compatibility results, customer preferences, and Facility compatibility guidelines, the Facility assigns a waste disposition code to each waste received. This disposition code will then accompany the waste (via a marking for wastes in containers, or via paperwork for bulk waste shipments). Containers making up a single waste shipment may show sufficient variability to require differing management methods. In this case, different containers received under the same profile may be assigned and labeled with different disposition codes; however all wastes will be treated to the most stringent applicable requirement. Example disposition codes are shown in Table C-7.

C7.3.7 WASTE TO VESSEL COMPATIBILITY

Romic considers waste-to-vessel compatibility when assigning disposition codes. Vessel compatibility corresponds closely to the overall process types individual disposition codes fall under. Waste-to-vessel compatibility by process type is outlined in Section D1 and D2.

C7.3.8 OPERATIONS

Disposition codes provide information to operations personnel regarding general waste compatibility characteristics via the designated management methods, segregation, and appropriate storage areas.

Certain storage areas are designated for the storage of materials posing specific compatibility concerns. Building #2 (See Figure C-1) has storage bays separated by a seven-foot high concrete wall. Bays of Storage Building #2 are used in segregating incompatible materials. See Section D for more details.

C8 PROCEDURES TO ENSURE COMPLIANCE WITH LDR REQUIREMENTS

Romic treats hazardous wastes onsite with the primary goal to recover materials for sale (e.g., solvent recovery) or to produce a hazardous waste fuels or incinerable materials. Some wastes are also sent for off-site landfilling. Generally, hazardous waste streams derived from received wastes and destined for off-site management will be subject to the same LDR standards as the incoming hazardous wastes.

When products are made, the materials exit the LDR requirements. When Romic sends other materials off-site as RCRA fuels, incinerable waste, or to be landfilled the waste codes and LDR requirements are passed through the facility to the ultimate disposal location. Incoming RCRA wastewater and wastewater treatment residuals from other processing on-site exit the LDR requirements when they are placed into the discharge to the POTW under a permit. Romic performs testing of the wastewater discharge in accordance with their POTW permit conditions.

Residuals from a process treating wastes for off-site disposal may in some cases undergo verification testing to determine whether the LDR standards of 40 CFR 268 are met. Testing would be done to certify that no further treatment is required to meet LDRs or that the waste was treated by the prescribed technology.

The Facility will prepare appropriate LDR notifications, certifications, and records for on-site generated hazardous waste streams to be managed off-site. In addition to the LDR notification, any additional data for the waste stream (e.g., waste profile sheets, analytical data), as required by the receiving facility, will be provided to the designated treatment facility.

Special requirements apply to lab packs, F001-F005 waste streams, leachate, recycled materials, and contaminated soils. The Facility will prepare a one-time notice to accompany the first shipment of any lab pack streams subject to the alternative treatment standards of 40 CFR 268.42(c) to any off-site facility. The notice will contain EPA waste codes applying to the lab pack stream, the manifest number of the initial shipment, and the certification language in 40 CFR 268.7(a)(9)(A). The Facility will list constituents of concern on any notices for F001-F005 and F039 wastes, unless the waste will be treated and monitored for all constituents.

The Facility will prepare a one-time notice to accompany the first shipment of any contaminated soil waste stream to any off-site facility. The notice, in addition to standard LDR information, will include certification language in accordance with 40 CFR 268.7(a)(2)(A).

C9 RECORDKEEPING AND REPORTING

This section describes the recordkeeping procedures for hazardous waste analysis. All records of test results, hazardous waste analyses, or other determinations performed for the purpose of identifying, treating, storing, or disposing of hazardous waste are kept in the operating record until final facility closure. Manifests of on-site generated hazardous waste signed by the initial transporter are kept at least 3 years, or until a signed copy is received from the receiving facility. The signed facility copy is kept at least 5 years. Original copies of waste profiles are filed at the Facility site, and electronic versions of profiles are available to plant personnel. Records required by this WAP may be kept in either paper or electronic format.

The facility will also keep records of the name and location of each entity receiving a recycled hazardous waste-derived product per 40 CFR 268.7(b)(6).

TABLES

**TABLE C-1
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS**

EPA WASTE CODE	WASTE TYPE (see note 3)	PROCESS SYSTEM HANDLING WASTE															
		Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Can Crushing	Aerosol Depressurization	Drum Wash	Truck Wash	Off-Site Transfer	Generated Onsite
D001	Ignitable (I)	X	X	X	X	X			X	X	X	X	X	X	X	X	X
D002	Corrosive (C)	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
D003	Reactive (R)					X	X	X		X		X	X	X		X	X
D004	Arsenic	X		X	X	X	X	X	X	X	X		X	X	X	X	X
D005	Barium	X		X	X	X	X	X	X	X	X		X	X	X	X	X
D006	Cadmium	X		X	X	X	X	X	X	X	X		X	X	X	X	X
D007	Chromium	X		X	X	X	X	X	X	X	X		X	X	X	X	X
D008	Lead	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X
D009	Mercury	X		X	X	X	X	X	X	X	X		X	X	X	X	X
D010	Selenium	X		X	X	X	X	X	X	X	X		X	X	X	X	X
D011	Silver	X		X	X	X	X	X	X	X	X		X	X	X	X	X
D012	Endrin			X	X	X			X	X			X	X	X	X	X
D013	Lindane			X	X	X			X	X			X	X	X	X	X
D014	Methoxychlor			X	X	X			X	X			X	X	X	X	X
D015	Toxaphene			X	X	X			X	X			X	X	X	X	X
D016	2,4-D					X			X	X			X	X	X	X	X
D017	2,4,5-TP (Silvex)					X			X	X			X	X	X	X	X
D018	Benzene	X		X	X	X	X	X	X	X			X	X	X	X	X
D019	Carbon Tetrachloride	X		X	X	X			X	X			X	X	X	X	X
D020	Chlordane	X		X	X	X			X	X			X	X	X	X	X
D021	Chlorobenzene	X		X	X	X			X	X			X	X	X	X	X
D022	Chloroform	X		X	X	X			X	X			X	X	X	X	X
D023	o- Cresol	X		X	X	X			X	X	X	X	X	X	X	X	X
D024	m- Cresol	X		X	X	X			X	X	X	X	X	X	X	X	X
D025	p- Cresol	X		X	X	X			X	X	X	X	X	X	X	X	X
D026	Cresol	X		X	X	X			X	X	X		X	X	X	X	X
D027	1, 4- Dichlorobenzene	X		X	X	X			X	X			X	X	X	X	X
D028	1, 2- Dichloroethane	X		X	X	X			X	X			X	X	X	X	X

"X" = waste code is managed in the indicated process system

TABLE C-1
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS

EPA WASTE CODE	WASTE TYPE (see note 3)	PROCESS SYSTEM HANDLING WASTE															
		Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Can Crushing	Aerosol Depressurization	Drum Wash	Truck Wash	Off-Site Transfer	Generated Onsite
D029	1, 1- Dichloroethylene			X	X	X			X		X			X	X	X	X
D030	2, 4- Dinitrotoluene			X	X	X			X		X			X	X	X	X
D031	Heptachlor (and its epoxide)			X	X	X								X	X	X	X
D032	Hexachlorbenzene	X		X	X	X			X	X	X			X	X	X	X
D033	Hexachlorobutadiene	X		X	X	X			X	X	X			X	X	X	X
D034	Hexachloroethane	X		X	X	X			X	X				X	X	X	X
D035	Methyl Ethyl Ketone	X		X	X	X				X	X			X	X	X	X
D036	Nitrobenzene	X		X	X	X			X	X	X			X	X	X	X
D037	Pentachlorophenol			X	X	X			X		X			X	X	X	X
D038	Pyridine	X		X	X	X			X	X	X	X		X	X	X	X
D039	Tetrachloroethylene	X		X	X	X			X	X	X	X		X	X	X	X
D040	Trichloroethylene	X		X	X	X			X	X	X	X		X	X	X	X
D041	2,4,5-Trichlorophenol	X		X	X	X			X	X				X	X	X	X
D042	2,4,6-Trichlorophenol	X		X	X	X			X	X				X	X	X	X
D043	Vinyl Chloride	X		X	X	X			X	X				X	X	X	X
F001	Spent halogenated solvents used in degreasing (see list in 40 CFR 261.31)	X		X	X	X			X	X	X			X	X	X	X
F002	Spent halogenated solvents (see list in 40 CFR 261.31)	X		X	X	X			X	X	X			X	X	X	X
F003	Spent non-halogenated solvents (see list in 40 CFR 261.31) that are ignitable but not toxic	X		X	X	X			X	X	X			X	X	X	X
F004	Spent non-halogenated solvents (see list in 40 CFR 261.31)	X		X	X	X			X	X	X			X	X	X	X
F005	Spent non-halogenated solvents (see list in 40 CFR 261.31) that are ignitable and toxic	X		X	X	X			X	X	X			X	X	X	X
F006	Wastewater treatment sludges from electroplating operations			X	X	X	X	X	X		X			X	X	X	X
F007	spent cyanide plating bath solutions from electroplating operations (R,T)			X	X	X	X	X	X		X			X	X	X	X
F008	plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process (R,T)			X	X	X	X	X	X		X			X	X	X	X

"X" = waste code is managed in the indicated process system

**TABLE C-1
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS**

EPA WASTE CODE	WASTE TYPE (see note 3)	PROCESS SYSTEM HANDLING WASTE															
		Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Can Crushing	Aerosol Depressurization	Drum Wash	Truck Wash	Off-Site Transfer	Generated Onsite
F009	spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process (R, T)			X	X	X	X	X	X		X			X	X	X	X
F010	Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process.			X	X	X			X		X			X	X	X	X
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations.			X	X	X					X			X	X	X	X
F012	Quenching waste water treatment sludges from metal heat treating operations where cyanides are used in the process.			X	X	X			X		X			X	X	X	X
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process			X	X	X			X		X			X	X	X	X
F020	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of Hexachlorophene from highly purified 2,4,5-trichlorophenol.)					X					X			X	X	X	X
F021	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives.					X					X			X	X	X	X
F022	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions.					X					X			X	X	X	X

"X" = waste code is managed in the indicated process system

**TABLE C-1
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS**

		PROCESS SYSTEM HANDLING WASTE															
EPA WASTE CODE	WASTE TYPE (see note 3)	Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Can Crushing	Aerosol Depressurization	Drum Wash	Truck Wash	Off-Site Transfer	Generated Onsite
F023	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of Hexachlorophene from highly purified 2,4,5-trichlorophenol.)					X			X		X			X	X	X	X
F024	Process wastes, including but not limited to distillation, residues, heavy ends, tars, and reactor clean-out wastes, from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes.					X			X		X			X	X	X	X
F025	Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.			X	X	X			X		X			X	X	X	X
F026	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions.					X			X		X			X	X	X	X
F027	discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols (H)					X			X		X			X	X	X	X
F028	Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027.					X			X		X			X	X	X	X

"X" = waste code is managed in the indicated process system

**TABLE C-1
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS**

EPA WASTE CODE		WASTE TYPE (see note 3)	PROCESS SYSTEM HANDLING WASTE															
			Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Can Crushing	Aerosol Depressurization	Drum Wash	Truck Wash	Off-Site Transfer	Generated Onsite
F032		Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use or have previously used chlorophenolic formulations.			X	X	X			X				X	X	X	X	X
F034		Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.			X	X	X			X				X	X	X	X	X
F035		Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.			X	X	X			X				X	X	X	X	X
F037		Petroleum refinery primary oil/water/solids separation sludge			X	X	X		X	X	X			X	X	X	X	X
F038		oil/water/solids separation sludge - any sludge and/or float generated from the physical and/or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries.			X	X	X		X	X	X			X	X	X	X	X
F039		Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted hazardous waste classified as hazardous under article 4 of this chapter.			X	X	X		X	X	X			X	X	X	X	X
K001		Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol.			X	X	X			X				X	X	X	X	X
K002		Wastewater treatment sludge from the production of chrome yellow and orange pigments.			X	X	X			X				X	X	X	X	X

"X" = waste code is managed in the indicated process system

**TABLE C-1
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS**

EPA WASTE CODE	WASTE TYPE (see note 3)	PROCESS SYSTEM HANDLING WASTE															
		Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquelaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Can Crushing	Aerosol Depressurization	Drum Wash	Truck Wash	Off-Site Transfer	Generated Onsite
K003	Wastewater treatment from the production of molybdate orange pigments.....			X	X	X			X		X			X	X	X	X
K004	Wastewater treatment sludge from the production of zinc yellow pigments.....			X	X	X			X		X			X	X	X	X
K005	Wastewater treatment sludge from the production of chrome green pigments.....			X	X	X			X		X			X	X	X	X
K006	Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated).			X	X	X			X		X			X	X	X	X
K007	Wastewater treatment sludge from the production of iron blue pigments.....			X	X	X			X		X			X	X	X	X
K008	Oven residue from the production of chrome oxide green pigments.....			X	X	X			X		X			X	X	X	X
K035	Wastewater treatment sludges generated in the production of creosote.....			X	X	X			X		X			X	X	X	X
K048	dissolved air flotation (DAF) float from the petroleum refining industry	X		X	X	X		X	X		X			X	X	X	X
K049	slop oil emulsion solids from the petroleum refining industry	X		X	X	X			X		X			X	X	X	X
K050	heat exchanger bundle cleaning sludge from the petroleum refining industry	X		X	X	X		X	X		X			X	X	X	X
K051	API separator sludge from the petroleum refining industry	X		X	X	X		X	X		X			X	X	X	X
K052	tank bottoms (lead) from the petroleum refining industry	X		X	X	X		X	X		X			X	X	X	X
K061	Emission control dust/sludge from the primary production of steel in electric furnaces			X	X	X			X		X			X	X	X	X
K062	Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332).			X	X	X			X		X			X	X	X	X
K064	Acid plant blowdown slurry/sludge resulting from the thickening of blowdown slurry from primary copper production.			X	X	X			X		X			X	X	X	X
K065	Surface impoundment solids contained in and dredged from surface impoundments at primary lead smelting facilities.			X	X	X			X		X			X	X	X	X

"X" = waste code is managed in the indicated process system

**TABLE C-1
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS**

EPA WASTE CODE		PROCESS SYSTEM HANDLING WASTE															
		Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Can Crushing	Aerosol Depressurization	Drum Wash	Truck Wash	Off-Site Transfer	Generated Onsite
K066	WASTE TYPE (see note 3) Sludge from treatment of process wastewater and/or acid plant blowdown from primary zinc production.			X	X	X			X		X			X	X	X	X
K069	Emission control dust/sludge from secondary lead smelting. (Note: This listing is stayed administratively for sludge generated from secondary acid scrubber systems. The stay will remain in effect until further administrative action is taken. If EPA takes further action effecting this stay, EPA will publish a notice of the action in the Federal Register.)			X	X	X			X		X			X	X	X	X
K084	Wastewater treatment sludges generated in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.			X	X	X			X		X			X	X	X	X
K086	solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead;	X		X	X	X	X	X	X		X			X	X	X	X
K087	decanter tank tar sludge from coking operations.			X	X	X			X		X			X	X	X	X
K088	Spent polimers from primary aluminum reduction.....			X	X	X			X		X			X	X	X	X
K090	Emission control dust or sludge from ferrochromium/silicon production....			X	X	X			X		X			X	X	X	X
K091	Emission control dust or sludge from ferrochromium production....			X	X	X			X		X			X	X	X	X
K100	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting.					X			X		X			X	X	X	X
K102	Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds			X	X	X			X		X			X	X	X	X
K156	Organic hazardous waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes. (This listing does not apply to hazardous wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)			X	X	X			X		X			X	X	X	X

"X" = waste code is managed in the indicated process system

**TABLE C-1
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS**

EPA WASTE CODE	WASTE TYPE (see note 3)	PROCESS SYSTEM HANDLING WASTE															
		Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Can Crushing	Aerosol Depressurization	Drum Wash	Truck Wash	Off-Site Transfer	Generated Onsite
K157	Hazardous wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes			X	X	X			X		X			X	X	X	X
K158	Bag house dusts and filter/separation solids from the production of carbamates and carbamoyl oximes.			X	X	X		X	X		X			X	X	X	X
K159	Organics from the treatment of thiocarbamate hazardous wastes.			X	X	X			X		X			X	X	X	X
K160	Solids (including filter wastes, separation solids, and spent catalysts) from the production of thiocarbamates and solids from the treatment of thiocarbamate wastes.			X	X	X			X		X			X	X	X	X
K161	Purification solids (including filtration, evaporation, and centrifugation solids), bag house dust and floor sweepings from the production of dithiocarbamate acids and their salts.			X	X	X			X		X			X	X	X	X
K169	Crude oil storage tank sediment from petroleum refining operations			X	X	X			X		X			X	X	X	X
K170	Clarified slurry oil storage tank sediment and/or in-line filter/separation solids from petroleum refining operations			X	X	X			X		X			X	X	X	X
K171	Spent hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (excludes inert support media) (L,T)			X	X	X			X		X			X	X	X	X
K172	Spent hydro refining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (excludes inert support media) (L,T)			X	X	X			X		X			X	X	X	X
P001	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts, when present at concentrations greater than 0.3%			X	X	X			X		X			X	X	X	X
P002	1-Acetyl-2-thiourea			X	X	X			X		X			X	X	X	X
P003	Acrolein			X	X	X			X		X			X	X	X	X
P004	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa- chloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha, 4alpha, 4abeta, 5alpha, 8alpha, 8abeta)- (OR) Aldrin (H)			X	X	X			X		X			X	X	X	X
P005	2-Propen-1-ol (OR) Allyl alcohol (H)	X		X	X	X			X		X			X	X	X	X

"X" = waste code is managed in the indicated process system

**TABLE C-1
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS**

EPA WASTE CODE	WASTE TYPE (see note 3)	PROCESS SYSTEM HANDLING WASTE															
		Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquifaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Can Crushing	Aerosol Depressurization	Drum Wash	Truck Wash	Off-Site Transfer	Generated Onsite
P006	Aluminum phosphide (R,T)			X	X	X			X		X			X	X	X	X
P007	5-(Aminomethyl)-3-isoxazolol			X	X	X			X		X			X	X	X	X
P008	4-Aminopyridine (OR) 4-Pyridinamine (H)			X	X	X			X		X			X	X	X	X
P010	Arsenic acid H3AsO4 (H)			X	X	X		X	X		X			X	X	X	X
P011	Arsenic oxide As2O5 (OR) Arsenic pentoxide (H)					X		X	X		X			X	X	X	X
P012	Arsenic oxide As2O3 (OR) Arsenic trioxide (H)			X	X	X		X	X		X			X	X	X	X
P013	Barium cyanide			X	X	X			X		X			X	X	X	X
P014	Benzenethiol (OR) Thiophenol (H)			X	X	X			X		X			X	X	X	X
P015	Beryllium (H)					X			X		X			X	X	X	X
P016	Dichloromethyl ether (OR) Methane, oxybis-chloro- (H)			X	X	X			X		X			X	X	X	X
P017	Bromoacetone			X	X	X			X		X			X	X	X	X
P018	Brucine (OR) Strychnidin-10-one, 2,3-dimethoxy- (H)			X	X	X			X		X			X	X	X	X
P020	Dinoseb			X	X	X			X		X			X	X	X	X
P021	Calcium cyanide					X			X		X			X	X	X	X
P022	Carbon disulfide (H)			X	X	X			X		X			X	X	X	X
P023	Acetaldehyde, chloro-			X	X	X			X		X			X	X	X	X
P024	Benzenamine, 4-chloro- (OR) p-Chloroaniline (H)			X	X	X			X		X			X	X	X	X
P026	1-(o-Chlorophenyl)thiourea (OR) Thiourea, (2-chlorophenyl)- (H)			X	X	X			X		X			X	X	X	X
P027	3-Chloropropionitrile			X	X	X			X		X			X	X	X	X
P028	Benzene, (chloromethyl)- (OR) Benzyl chloride (H)			X	X	X			X		X			X	X	X	X
P029	Copper cyanide			X	X	X			X		X			X	X	X	X
P030	Cyanides (soluble cyanide salts), not otherwise specified			X	X	X			X		X			X	X	X	X
P031	Cyanogen					X			X		X			X	X	X	X
P033	Cyanogen chloride (CN)Cl					X			X		X			X	X	X	X
P034	2-Cyclohexyl-4,6-dinitrophenol			X	X	X			X		X			X	X	X	X
P036	Dichlorophenylarsine					X			X		X			X	X	X	X

"X" = waste code is managed in the indicated process system

TABLE C-1
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS

EPA WASTE CODE	WASTE TYPE (see note 3)	PROCESS SYSTEM HANDLING WASTE															
		Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Can Crushing	Aerosol Depressurization	Drum Wash	Truck Wash	Off-Site Transfer	Generated Onsite
P037	2,7,3,6-Dimethanonaphth<2,3-b>oxirene, 3,4,5,6,9,9- hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha, 2beta, 2aalpha, 3beta, 6beta, 6aalpha, 7beta, 7aalpha)- (OR) Dieldrin (H)			X	X	X		X		X			X	X	X	X	X
P038	Arsine, diethyl- (OR) Diethylarsine (H)			X	X	X		X		X			X	X	X	X	X
P039	Disulfoton			X	X	X		X		X			X	X	X	X	X
P040	O,O-Diethyl O-pyrazinyl phosphorothioate			X	X	X		X		X			X	X	X	X	X
P041	Diethyl-p-nitrophenyl phosphate			X	X	X		X		X			X	X	X	X	X
P042	Epinephrine			X	X	X		X		X			X	X	X	X	X
P043	Diisopropylfluorophosphate (DFP)			X	X	X		X		X			X	X	X	X	X
P044	Dimethoate			X	X	X		X		X			X	X	X	X	X
P045	2-Butanone, 3,3-dimethyl-1-(methylthio)-, o-(methylamino)carbonyl oxime			X	X	X		X		X			X	X	X	X	X
P046	alpha, alpha-Dimethylphenethylamine			X	X	X		X		X			X	X	X	X	X
P047	4,6-Dinitro-o-cresol, & salts			X	X	X		X		X			X	X	X	X	X
P048	2,4-Dinitrophenol			X	X	X		X		X			X	X	X	X	X
P049	Dithiobiuret			X	X	X		X		X			X	X	X	X	X
P050	6,9-Methano-2,4,3 benzodioxathiepin,6,7,8,9,10, 10- hexachloro-1,5,5a,6,9,9a-hexahydro-,3-oxide (OR) Endosulfan (H)			X	X	X		X		X			X	X	X	X	X
P051	2,7,3,6-Dimethanonaphth<2,3-b>oxirene, 3,4,5,6,9,9- hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha, 2beta, 2alpha, 3alpha, 6alpha, 6abeta, 7beta, 7aalpha)- & metabolites (OR) Endrin (OR) Endrin, & metabolites (H)			X	X	X		X		X			X	X	X	X	X
P054	Aziridine (OR) Ethyleneimine (H)			X	X	X		X		X			X	X	X	X	X
P056	Fluorine					X		X		X			X	X	X	X	X
P057	Fluoroacetamide			X	X	X		X		X			X	X	X	X	X
P058	Acetic acid, fluoro-, sodium salt (OR) Fluoroacetic acid, sodium salt (H)			X	X	X		X		X			X	X	X	X	X
P059	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro- 3a,4,7,7a-tetrahydro-(OR) Heptachlor (H)			X	X	X		X		X			X	X	X	X	X

"X" = waste code is managed in the indicated process system

**TABLE C-1
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS**

EPA WASTE CODE	WASTE TYPE (see note 3)	PROCESS SYSTEM HANDLING WASTE															
		Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Can Crushing	Aerosol Depressurization	Drum Wash	Truck Wash	Off-Site Transfer	Generated Onsite
P060	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa- chloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha, 4alpha, 4beta, 5beta, 8beta, 8beta)- (OR) Isodrin (H)			X	X	X		X		X			X	X	X	X	X
P062	Hexaethyl tetraphosphate			X	X	X		X		X			X	X	X	X	X
P063	Hydrocyanic acid			X	X	X		X		X			X	X	X	X	X
P063	Hydrogen cyanide			X	X	X		X		X			X	X	X	X	X
P064	Methane, isocyanato-					X		X		X			X	X	X	X	X
P066	Methomyl			X	X	X		X		X			X	X	X	X	X
P067	1,2-Propylenimine (OR) Aziridine, 2-methyl- (H)			X	X	X		X		X			X	X	X	X	X
P068	Hydrazine, methyl- (OR) Methyl hydrazine (H)			X	X	X		X		X			X	X	X	X	X
P069	2-Methylacetonitrile			X	X	X		X		X			X	X	X	X	X
P070	Aldicarb			X	X	X		X		X			X	X	X	X	X
P071	Methyl parathion (OR) Phosphorothioic acid, O,O,-dimethyl O-(4-nitrophenyl) ester (H)			X	X	X		X		X			X	X	X	X	X
P072	alpha-Naphthylthiourea (OR) Thiourea, 1-naphthalenyl- (H)			X	X	X		X		X			X	X	X	X	X
P073	Nickel carbonyl (OR) Nickel carbonyl Ni(CO)4, (T-4)- (H)			X	X	X		X		X			X	X	X	X	X
P074	Nickel cyanide					X		X		X			X	X	X	X	X
P075	Nicotine, & salts (OR) Pyridine, 3-(1-methyl-2-pyrrolidinyl)-,(S)-, & salts (H)			X	X	X		X		X			X	X	X	X	X
P076	Nitric oxide (OR) Nitrogen oxide NO (H)			X	X	X		X		X			X	X	X	X	X
P077	p-Nitroaniline			X	X	X		X		X			X	X	X	X	X
P078	Nitrogen dioxide (OR) Nitrogen oxide NO2 (H)			X	X	X		X		X			X	X	X	X	X
P082	N-Nitrosodimethylamine			X	X	X		X		X			X	X	X	X	X
P084	N-Nitrosomethylvinylamine			X	X	X		X		X			X	X	X	X	X
P085	Octamethylpyrophosphoramide			X	X	X		X		X			X	X	X	X	X
P087	Osmium oxide OsO4, (T-4)- (OR) Osmium tetroxide (H)			X	X	X		X		X			X	X	X	X	X
P088	7-Oxabicyclo<2.2.1>heptane-2,3-dicarboxylic acid (OR) Endothall (H)			X	X	X		X		X			X	X	X	X	X

"X" = waste code is managed in the indicated process system

TABLE C-1
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS

EPA WASTE CODE	WASTE TYPE (see note 3)	PROCESS SYSTEM HANDLING WASTE															
		Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Can Crushing	Aerosol Depressurization	Drum Wash	Truck Wash	Off-Site Transfer	Generated Onsite
P089	Parathion (OR) Phosphorothioic acid, O,O-diethyl-O-(4-nitrophenyl) ester (H)			X	X	X			X		X			X	X	X	X
P092	Mercury, (acetato-O)phenyl- (OR) Phenylmercury acetate (H)					X			X		X			X	X	X	X
P093	Phenylthiourea			X	X	X			X		X			X	X	X	X
P094	Phorate			X	X	X			X		X			X	X	X	X
P095	Phosgene			X	X	X			X		X			X	X	X	X
P096	Hydrogen phosphide			X	X	X			X		X			X	X	X	X
P097	Famphur			X	X	X			X		X			X	X	X	X
P098	Potassium cyanide K(CN)			X	X	X			X		X			X	X	X	X
P099	Potassium silver cyanide					X			X		X			X	X	X	X
P100						X			X		X			X	X	X	X
P101	Ethyl cyanide					X			X		X			X	X	X	X
P102	2-Propyn-1-ol (OR) Propargyl alcohol (H)			X	X	X			X		X			X	X	X	X
P103	Selenourea (H)					X			X		X			X	X	X	X
P104	Silver cyanide			X	X	X			X		X			X	X	X	X
P105	Sodium azide (H)			X	X	X			X		X			X	X	X	X
P106	Sodium cyanide			X	X	X			X		X			X	X	X	X
P108	Strychnidin-10-one, & salts (OR) Strychnine, & salts (H)			X	X	X			X		X			X	X	X	X
P109	Tetraethyldithiopyrophosphate			X	X	X			X		X			X	X	X	X
P110	Plumbane, tetraethyl- (OR) Tetraethyl lead (H)					X			X		X			X	X	X	X
P111	Tetraethyl pyrophosphate			X	X	X			X		X			X	X	X	X
P113	Thallic oxide (OR) Thallium oxide Tl2O3 (H)					X			X		X			X	X	X	X
P114	Selenious acid, dithallium (1+) salt (OR) Thallium(I) selenite (H)					X			X		X			X	X	X	X
P115	Sulfuric acid, dithallium (1+) salt (OR) Thallium(I) sulfate (H)			X	X	X			X		X			X	X	X	X
P116	Thiosemicarbazide			X	X	X			X		X			X	X	X	X
P118	Trichloromethanethiol			X	X	X			X		X			X	X	X	X
P119	Vanadic acid, ammonium salt			X	X	X			X		X			X	X	X	X
P120	Vanadium oxide V2O5 (OR) Vanadium pentoxide (H)			X	X	X			X		X			X	X	X	X

"X" = waste code is managed in the indicated process system

**TABLE C-1
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS**

EPA WASTE CODE	WASTE TYPE (see note 3)	PROCESS SYSTEM HANDLING WASTE															
		Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Can Crushing	Aerosol Depressurization	Drum Wash	Truck Wash	Off-Site Transfer	Generated Onsite
P121	Zinc cyanide Zn(CN)2			X	X	X			X		X			X	X	X	X
P122	Zinc phosphide Zn3P2 when present at concentrations greater than 10% (R,T)			X	X	X			X		X			X	X	X	X
P123	Toxaphene			X	X	X			X		X			X	X	X	X
P127	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate (OR) Carbofuran (H)					X			X		X			X	X	X	X
P128	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester) (H)					X					X			X	X	X	X
P185	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-(methylamino)-carbonylloxime (OR) Tirpate (H)					X					X			X	X	X	X
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 methylcarbamate ester (1:1) (OR) Physostigmine salicylate (H)					X					X			X	X	X	X
P189	Carbamic acid, (dibutylamino)-thiolmethyl-, 2,3-dihydro-2, 2-dimethyl -7-benzofuranyl ester (OR) Carbosulfan (H)					X					X			X	X	X	X
P190	Carbamic acid, methyl-, 3-methylphenyl ester (OR) Metolcarb (H)					X					X			X	X	X	X
P191	Carbamic acid, dimethyl-, 1-(dimethyl-amino)carbonyl- 5-methyl-1H-pyrazol-3-yl ester (OR) Dimetilan (H)					X					X			X	X	X	X
P192	Isolan (OR) Carbamic acid, dimethyl-, 3-methyl-1- (1-methylethyl)-1H-pyrazol-5-yl ester (H)					X					X			X	X	X	X
P194	Ethanimidothioc acid, 2-(dimethylamino)-N-...(methylamino) carbonyloxy -2-oxo-, methyl ester (OR) Oxamyl (H)					X					X			X	X	X	X
P196	Manganese dimethyldithiocarbamate (OR) Manganese, bis(dimethylcarbamodithioato-S,S')-, (H)					X					X			X	X	X	X
P197	Formparanate (OR) Methanimidamide, N,N-dimethyl-N'-2-methyl-4-...(methylamino)carbonyloxyphenyl- (H)					X					X			X	X	X	X
P198	Methanimidamide, N,N-dimethyl-N'-3-...(methylamino)-carbonyl oxy phenyl-, monohydrochloride (OR) Formetanate hydrochloride (H)					X					X			X	X	X	X

"X" = waste code is managed in the indicated process system

TABLE C-1
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS

EPA WASTE CODE	WASTE TYPE (see note 3)	PROCESS SYSTEM HANDLING WASTE															
		Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Can Crushing	Aerosol Depressurization	Drum Wash	Truck Wash	Off-Site Transfer	Generated Onsite
P199	Methiocarb (OR) Mexacarbate (OR) Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate (H)					X			X		X			X	X	X	X
P201	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate (OR) Promecarb (H)					X			X		X			X	X	X	X
P202	m-Cumenyl methylcarbamate (OR) 3-Isopropylphenyl N-methylcarbamate (OR) Phenol, 3-(1-methylethyl)-, methyl carbamate (H)					X			X		X			X	X	X	X
P203	Aldicarb sulfone (OR) Propanal, 2-methyl-2-(methyl-sulfonyl)-, O-(methylamino)carbonyl oxime (H)					X			X		X			X	X	X	X
P204	Physostigmine (OR) Pyrrolo.2,3-bindol-5-ol, 1,2,3,3a,8,8a-hexahydro-1, 3a,8-trimethyl-methylcarbamate (ester),(3aS-cis)- (H)					X			X		X			X	X	X	X
P205	Zinc, bis(dimethylcarbamodithioato-S,S')-, (OR) Ziram (H)					X			X		X			X	X	X	X
U001	Acetaldehyde (I)			X	X	X			X		X			X	X	X	X
U002	2-Propanone (I) (OR) Acetone (I)	X		X	X	X			X		X			X	X	X	X
U003	Acetonitrile (I,T)	X		X	X	X			X		X			X	X	X	X
U004	Acetophenone (OR) Ethanone, 1-phenyl-			X	X	X			X		X			X	X	X	X
U005	Acetamide, N-9H-fluoren-2-yl-			X	X	X			X		X			X	X	X	X
U006	Acetyl chloride (C,R,T)			X	X	X			X		X			X	X	X	X
U007	Acrylamide			X	X	X			X		X			X	X	X	X
U008	Acrylic acid (I)			X	X	X			X		X			X	X	X	X
U009	Acrylonitrile			X	X	X			X		X			X	X	X	X
U010	Mitomycin C			X	X	X			X		X			X	X	X	X
U011	Amitrole			X	X	X			X		X			X	X	X	X
U012	Aniline (I,T)			X	X	X			X		X			X	X	X	X
U014	Auramine			X	X	X			X		X			X	X	X	X
U015	Azaserine			X	X	X			X		X			X	X	X	X
U016	Benz(c) acridine			X	X	X			X		X			X	X	X	X
U017	Benzal chloride			X	X	X			X		X			X	X	X	X

"X" = waste code is managed in the indicated process system

**TABLE C-1
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS**

EPA WASTE CODE		WASTE TYPE (see note 3)	PROCESS SYSTEM HANDLING WASTE															
			Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Can Crushing	Aerosol Depressurization	Drum Wash	Truck Wash	Off-Site Transfer	Generated Onsite
U018		2-Propenoic acid, 2-methyl-, ethyl ester			X	X	X				X				X	X	X	X
U018		Benz(a)anthracene			X	X	X				X				X	X	X	X
U019		Benzene (L,T)	X		X	X	X				X				X	X	X	X
U020		Benzenesulfonic acid chloride (C,R)			X	X	X				X				X	X	X	X
U021		Benzidine			X	X	X				X				X	X	X	X
U022		Benzo(a)pyrene			X	X	X				X				X	X	X	X
U023		Benzene, (trichloromethyl)-			X	X	X				X				X	X	X	X
U024		Dichloromethoxy ethane			X	X	X				X				X	X	X	X
U025		Dichloroethyl ether			X	X	X				X				X	X	X	X
U026		Naphthalenamine, N,N			X	X	X				X				X	X	X	X
U027		Dichloroisopropyl ether			X	X	X				X				X	X	X	X
U028		1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester			X	X	X				X				X	X	X	X
U029		Methane, bromo-			X	X	X				X				X	X	X	X
U030		Benzene, 1-bromo-4-phenoxy-			X	X	X				X				X	X	X	X
U031		1-Butanol (I) (OR) n-Butyl alcohol (I)	X		X	X	X				X				X	X	X	X
U032		Chromic acid H2CrO4, calcium salt			X	X	X				X				X	X	X	X
U033		Carbon oxyfluoride (R,T)			X	X	X				X				X	X	X	X
U034		Acetaldehyde, trichloro-			X	X	X				X				X	X	X	X
U035		Benzenebutanoic acid, 4-(bis(2-chloroethyl)amino)-			X	X	X				X				X	X	X	X
U036		Chlordane, alpha & gamma isomers			X	X	X				X				X	X	X	X
U037		Benzene, chloro- (OR) Chlorobenzene	X		X	X	X				X				X	X	X	X
U038		Benzenecetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester			X	X	X				X				X	X	X	X
U039		p-Chloro-m-cresol			X	X	X				X				X	X	X	X
U041		Epichlorohydrin			X	X	X				X				X	X	X	X
U042		2-Chloroethyl vinyl ether			X	X	X				X				X	X	X	X
U043		Ethene, chloro- (OR) Vinyl chloride	X		X	X	X				X				X	X	X	X
U044		Chloroform (OR) Methane, trichloro-			X	X	X				X				X	X	X	X

"X" = waste code is managed in the indicated process system

TABLE C-1
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS

EPA WASTE CODE	WASTE TYPE (see note 3)	PROCESS SYSTEM HANDLING WASTE															
		Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Can Crushing	Aerosol Depressurization	Drum Wash	Truck Wash	Off-Site Transfer	Generated Onsite
U045	Methane, chloro- (L,T)			X	X	X			X		X			X	X	X	X
U046	Chloromethyl methyl ether			X	X	X			X		X			X	X	X	X
U047	beta-Chloronaphthalene			X	X	X			X		X			X	X	X	X
U048	o-Chlorophenol			X	X	X			X		X			X	X	X	X
U049	4-Chloro-o-toluidine, hydrochloride			X	X	X			X		X			X	X	X	X
U050	Chrysene			X	X	X			X		X			X	X	X	X
U051	Creosote			X	X	X			X		X			X	X	X	X
U052	Cresol (Cresylic acid) (OR) Phenol, methyl-			X	X	X			X		X			X	X	X	X
U053	Crotonaldehyde			X	X	X			X		X			X	X	X	X
U055	Benzene, (1-methylethyl)- (l) (OR) Cumene (l)			X	X	X			X		X			X	X	X	X
U056	Benzene, hexahydro- (l) (OR) Cyclohexane (l)	X		X	X	X			X		X			X	X	X	X
U057	Cyclohexanone (l)	X		X	X	X			X		X		X	X	X	X	X
U058	Cyclophosphamide			X	X	X			X		X			X	X	X	X
U059	Daunomycin			X	X	X			X		X			X	X	X	X
U060	DDD			X	X	X			X		X			X	X	X	X
U061	DDT			X	X	X			X		X			X	X	X	X
U062	Diallate			X	X	X			X		X			X	X	X	X
U063	Dibenz(a,h)anthracene			X	X	X			X		X			X	X	X	X
U064	Benzo(rst)pentaphene			X	X	X			X		X			X	X	X	X
U065	1,2,3,4 - Diepoxybutane			X	X	X			X		X			X	X	X	X
U066	1,2-Dibromo-3-chloropropane			X	X	X			X		X			X	X	X	X
U067	Ethane, 1,2-dibromo-			X	X	X			X		X			X	X	X	X
U068	Methane, dibromo-			X	X	X			X		X			X	X	X	X
U069	Dibutyl phthalate			X	X	X			X		X			X	X	X	X
U070	Benzene, 1,2-dichloro- (OR) o-Dichlorobenzene	X		X	X	X			X	X	X			X	X	X	X
U071	Benzene, 1,3-dichloro- (OR) m-Dichlorobenzene	X		X	X	X			X	X	X			X	X	X	X
U072	Benzene, 1,4-dichloro- (OR) p-Dichlorobenzene	X		X	X	X			X	X	X			X	X	X	X
U073	(1,1'-Biphenyl)-4,4'-diamine, 3,3' dichloro			X	X	X			X		X			X	X	X	X

"X" = waste code is managed in the indicated process system

**TABLE C-1
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS**

EPA WASTE CODE	WASTE TYPE (see note 3)	PROCESS SYSTEM HANDLING WASTE														Generated Onsite
		Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Can Crushing	Aerosol Depressurization	Drum Wash	Truck Wash	Off-Site Transfer
U074	2-Butene, 1,4-dichloro- (I,T)			X	X	X			X		X			X	X	X
U075	Dichlorodifluoromethane			X	X	X			X		X			X	X	X
U076	Ethane, 1,1-dichloro-			X	X	X			X		X			X	X	X
U077	Ethane, 1,2-dichloro-			X	X	X			X		X			X	X	X
U078	1,1-Dichloroethylene			X	X	X			X		X			X	X	X
U079	1,2-Dichloroethylene			X	X	X			X		X			X	X	X
U080	Methane, dichloro- (OR) Methylene chloride	X		X	X	X			X		X		X	X	X	X
U081	2,4-Dichlorophenol			X	X	X			X		X			X	X	X
U082	2,6-Dichlorophenol			X	X	X			X		X			X	X	X
U083	Propylene dichloride			X	X	X			X		X			X	X	X
U084	1,3-Dichloropropene			X	X	X			X		X			X	X	X
U085	1,2,3,4-Diepoxybutane(I,T)			X	X	X			X		X			X	X	X
U086	Hydrazine, 1,2-diethyl-			X	X	X			X		X			X	X	X
U087	O,O-Diethyl S-methyl dithiophosphate			X	X	X			X		X			X	X	X
U088	1,2-Benzenedicarboxylic acid, diethyl ester			X	X	X			X		X			X	X	X
U089	Diethylstilbestrol			X	X	X			X		X			X	X	X
U090	1,3-Benzodioxole, 5-propyl-			X	X	X			X		X			X	X	X
U091	(1,1' - Biphenyl) - 4,4' - diamine, 3,3'-dimethoxy			X	X	X			X		X			X	X	X
U092	Dimethylamine (I)			X	X	X			X		X			X	X	X
U093	Benzenamine, N,N-dimethyl-4-(phenylazo)-			X	X	X			X		X			X	X	X
U094	Benz(a)anthracene, 7,12-dimethyl-			X	X	X			X		X			X	X	X
U095	(1,1'-Biphenyl-4,4'-diamine, 3,3'-dimethyl-; 3,3-D			X	X	X			X		X			X	X	X
U096	alpha. alpha-Dimethylbenzylhydroperoxide (R)			X	X	X			X		X			X	X	X
U097	Dimethylcarbamoyl chloride			X	X	X			X		X			X	X	X
U098	Carbamic chloride, dimethyl-			X	X	X			X		X			X	X	X
U099	1,2-Dimethylhydrazine			X	X	X			X		X			X	X	X
U101	2,4-Dimethylphenol			X	X	X			X		X			X	X	X
U102	1,2-Benzenedicarboxylic acid, dimethyl ester			X	X	X			X		X			X	X	X

"X" = waste code is managed in the indicated process system

**TABLE C-1
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS**

EPA WASTE CODE	WASTE TYPE (see note 3)	PROCESS SYSTEM HANDLING WASTE															
		Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Can Crushing	Aerosol Depressurization	Drum Wash	Truck Wash	Off-Site Transfer	Generated Onsite
U103	Dimethyl sulfate			X	X	X			X		X			X	X	X	X
U105	2,4-Dinitrotoluene			X	X	X			X		X			X	X	X	X
U106	2,6-Dinitrotoluene			X	X	X			X		X			X	X	X	X
U107	1,2-Benzenedicarboxylic acid, dioctyl ester			X	X	X			X		X			X	X	X	X
U108	1,4-Diethyleneoxide (OR) 1,4-Dioxane			X	X	X			X	X	X			X	X	X	X
U109	Hydrazine, 1,2-diphenyl-			X	X	X			X		X			X	X	X	X
U110	1-Propanimine, N-propyl-(I) (OR) Dipropylamine (I)			X	X	X			X		X			X	X	X	X
U111	Di-n-propylnitrosamine			X	X	X			X		X			X	X	X	X
U112	Acetic acid ethyl ester (I) (OR) Ethyl acetate (I)	X		X	X	X			X		X			X	X	X	X
U113	Ethyl acrylate (I)			X	X	X			X		X			X	X	X	X
U114	Carbamodithioic acid, 1,2-ethanedithylbis-, salts & esters			X	X	X			X		X			X	X	X	X
U115	Ethylene oxide (I,T)			X	X	X			X		X			X	X	X	X
U116	2-Imidazolidinethione			X	X	X			X		X			X	X	X	X
U117	Ethyl ether (I)			X	X	X			X		X			X	X	X	X
U118	Ethyl methacrylate			X	X	X			X		X			X	X	X	X
U119	Methanesulfonic acid, ethyl ester			X	X	X			X		X			X	X	X	X
U120	Fluoranthene			X	X	X			X		X			X	X	X	X
U121	Methane, trichlorofluoro- (OR) Trichloromonofluoromethane	X		X	X	X			X		X			X	X	X	X
U122	Formaldehyde			X	X	X			X	X	X			X	X	X	X
U123	Formic acid (C,T)			X	X	X			X		X			X	X	X	X
U124	Furan (I)			X	X	X			X		X			X	X	X	X
U125	2-Furancarboxaldehyde (I)			X	X	X			X		X			X	X	X	X
U126	Glycidylaldehyde			X	X	X			X		X			X	X	X	X
U127	Hexachlorobenzene			X	X	X			X		X			X	X	X	X
U128	Hexachlorobutadiene			X	X	X			X		X			X	X	X	X
U129	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha, 2alpha, 3beta, 4alpha, 6beta)-			X	X	X			X		X			X	X	X	X
U130	1,3-Cyclopentadiene, 1,2,3,4,5-hexachloro-			X	X	X			X		X			X	X	X	X

"X" = waste code is managed in the indicated process system

TABLE C-1
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS

EPA WASTE CODE	WASTE TYPE (see note 3)	PROCESS SYSTEM HANDLING WASTE															
		Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Can Crushing	Aerosol Depressurization	Drum Wash	Truck Wash	Off-Site Transfer	Generated Onsite
U131	Hexachlorophene			X	X	X			X		X			X	X	X	X
U132	Hexachlorophene			X	X	X			X		X			X	X	X	X
U133	Hydrazine (R,T)					X			X		X			X	X	X	X
U134	Hydrofluoric acid (C,T) (OR) Hydrogen fluoride (C,T)		X	X	X	X	X	X	X		X	X		X	X	X	X
U135	Hydrogen sulfide			X	X	X			X		X			X	X	X	X
U136	Arsinic acid, dimethyl-			X	X	X			X		X			X	X	X	X
U137	Indeno(1,2,3-cd)pyrene			X	X	X			X		X			X	X	X	X
U138	Methyl iodide			X	X	X			X		X			X	X	X	X
U140	1-Propanol, 2-methyl- (I,T) (OR) Isobutyl alcohol (I,T)	X		X	X	X			X		X			X	X	X	X
U141	1,3-Benzodioxole, 5-(1-propenyl)-			X	X	X			X		X			X	X	X	X
U142	Kepone			X	X	X			X		X			X	X	X	X
U143	Lasiocarpine			X	X	X			X		X			X	X	X	X
U144	Acetic acid, lead(2+) salt			X	X	X			X		X			X	X	X	X
U145	Lead phosphate			X	X	X			X		X			X	X	X	X
U146	Lead, bis(acetato-O)tetrahydroxytri-			X	X	X			X		X			X	X	X	X
U147	2,5-Furandione			X	X	X			X		X			X	X	X	X
U148	Maleic hydrazide			X	X	X			X		X			X	X	X	X
U149	Malononitrile			X	X	X			X		X			X	X	X	X
U150	Melphalan			X	X	X			X		X			X	X	X	X
U151	Mercury			X	X	X			X		X			X	X	X	X
U152	Methacrylonitrile (I,T)			X	X	X			X		X			X	X	X	X
U153	Methanethiol (I,T)			X	X	X			X		X			X	X	X	X
U154	Methanol (l) (OR) Methyl alcohol (l)	X		X	X	X			X		X	X		X	X	X	X
U155	Methapyrene			X	X	X			X		X			X	X	X	X
U156	Carbonochloridic acid, methyl ester (l,T)			X	X	X			X		X			X	X	X	X
U157	Benz(j)aceanthrylene, 1,2-dihydro-3-methyl			X	X	X			X		X			X	X	X	X
U158	4,4'-Methylenebis(2-chloroaniline)			X	X	X			X		X			X	X	X	X
U159	2-Butanone (l,T) (OR) Methyl ethyl ketone (MEK) (l,T)	X		X	X	X			X		X	X		X	X	X	X

"X" = waste code is managed in the indicated process system

TABLE C-1
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS

EPA WASTE CODE	WASTE TYPE (see note 3)	PROCESS SYSTEM HANDLING WASTE															
		Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Can Crushing	Aerosol Depressurization	Drum Wash	Truck Wash	Off-Site Transfer	Generated Onsite
U160	2-Butanone, peroxide (R, T)			X	X	X				X				X	X	X	X
U161	4-Methyl-2-pentanone (I) (OR) Methyl isobutyl ketone (I) (OR) Pentanol, 4-methyl-	X		X	X	X			X		X			X	X	X	X
U162	Methyl methacrylate (I,T)			X	X	X			X		X			X	X	X	X
U163	Guanidine, N-methyl-N'-nitro-N-nitroso			X	X	X			X		X			X	X	X	X
U164	Methylthiouracil			X	X	X			X		X			X	X	X	X
U165	Naphthalene			X	X	X			X		X			X	X	X	X
U166	1,4-Naphthalenedione			X	X	X			X		X			X	X	X	X
U167	1-Naphthalenamine			X	X	X			X		X			X	X	X	X
U168	2-Naphthalenamine			X	X	X			X		X			X	X	X	X
U169	Benzene, nitro-			X	X	X			X		X			X	X	X	X
U170	p-Nitrophenol			X	X	X			X		X			X	X	X	X
U171	2-Nitropropane (I,T) (OR) Propane, 2-nitro- (I,T)			X	X	X			X		X			X	X	X	X
U172	1-Butanamine, N-butyl-N-nitroso-			X	X	X			X		X			X	X	X	X
U173	N-Nitrosodiethanolamine			X	X	X			X		X			X	X	X	X
U174	Ethanamine, N-ethyl-N-nitroso-			X	X	X			X		X			X	X	X	X
U176	N-Nitroso-N-ethylurea			X	X	X			X		X			X	X	X	X
U177	N-Nitroso-N-methylurea			X	X	X			X		X			X	X	X	X
U178	Carbamic acid, methylnitroso-, ethyl ester			X	X	X			X		X			X	X	X	X
U179	N-Nitrosopiperidine			X	X	X			X		X			X	X	X	X
U180	Pyrrolidine, 1-nitroso-			X	X	X			X		X			X	X	X	X
U181	Benzenamine, 2-methyl-5-nitro-			X	X	X			X		X			X	X	X	X
U182	1,3,5-Trioxane, 2,4,6-trimethyl			X	X	X			X		X			X	X	X	X
U183	Benzene, pentachloro-			X	X	X			X		X			X	X	X	X
U184	Ethane, pentachloro-			X	X	X			X		X			X	X	X	X
U185	Benzene, pentachloronitro-			X	X	X			X		X			X	X	X	X
U186	1-Methylbutadiene (I)			X	X	X			X		X			X	X	X	X
U187	Phenacetin			X	X	X			X		X			X	X	X	X

"X" = waste code is managed in the indicated process system

TABLE C-1
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS

EPA WASTE CODE	WASTE TYPE (see note 3)	PROCESS SYSTEM HANDLING WASTE															
		Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Can Crushing	Aerosol Depressurization	Drum Wash	Truck Wash	Off-Site Transfer	Generated Onsite
U188	Phenol	X		X	X	X			X		X			X	X	X	X
U189	Sulfur phosphide (R)			X	X	X			X		X			X	X	X	X
U190	1,3-Isobenzofurandione			X	X	X			X		X			X	X	X	X
U191	2-Picoline			X	X	X			X		X			X	X	X	X
U192	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propenyl)-			X	X	X			X		X			X	X	X	X
U193	1,2-Oxathiolane, 2,2-dioxide			X	X	X			X		X			X	X	X	X
U194	1-Propanamine (1,T)			X	X	X			X		X			X	X	X	X
U196	Pyridine			X	X	X			X		X			X	X	X	X
U197	p-Benzoquinone			X	X	X			X		X			X	X	X	X
U200	Reserpine			X	X	X			X		X			X	X	X	X
U201	1,3-Benzenediol			X	X	X			X		X			X	X	X	X
U202	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide, & salts			X	X	X			X		X			X	X	X	X
U203	1,3-Benzodioxole, 5-(2-propenyl)-			X	X	X			X		X			X	X	X	X
U204	Selenious acid			X	X	X			X		X			X	X	X	X
U205	Selenium sulfide			X	X	X			X		X			X	X	X	X
U206	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D-			X	X	X			X		X			X	X	X	X
U207	Benzene, 1,2,4,5-tetrachloro-			X	X	X			X		X			X	X	X	X
U208	1,1,1,2-Tetrachloroethane (OR) Ethane, 1,1,1,2-tetrachloro-	X		X	X	X			X		X			X	X	X	X
U209	1,1,2,2-Tetrachloroethane (OR) Ethane, 1,1,2,2-tetrachloro-	X		X	X	X			X		X			X	X	X	X
U210	Ethene, tetrachloro- (OR) Tetrachloroethylene	X		X	X	X			X		X		X	X	X	X	X
U211	Carbon tetrachloride (OR) Methane, tetrachloro-			X	X	X			X		X			X	X	X	X
U213	Furan, tetrahydro-(I) (OR) Tetrahydrofuran (I)	X		X	X	X			X		X			X	X	X	X
U214	Acetic acid, thallium(1+) salt			X	X	X			X		X			X	X	X	X
U215	Carbonic acid, dithallium(1+) salt			X	X	X			X		X			X	X	X	X
U216	Thallium(I) chloride			X	X	X			X		X			X	X	X	X
U217	Nitric acid, thallium(1+) salt			X	X	X			X		X			X	X	X	X
U218	Ethanethioamide			X	X	X			X		X			X	X	X	X
U219	Thiourea			X	X	X			X		X			X	X	X	X

"X" = waste code is managed in the indicated process system

TABLE C-1
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS

EPA WASTE CODE	WASTE TYPE (see note 3)	PROCESS SYSTEM HANDLING WASTE															
		Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Can Crushing	Aerosol Depressurization	Drum Wash	Truck Wash	Off-Site Transfer	Generated Onsite
U220	Benzene, methyl- (OR) Toluene	X		X	X	X			X		X		X	X	X	X	X
U221	Benzenediamine, ar-methyl-			X	X	X			X		X			X	X	X	X
U222	Benzenamine, 2-methyl-, hydrochloride			X	X	X			X		X			X	X	X	X
U223	Benzene, 1,3-diisocyanatomethyl- (R,T)			X	X	X			X		X			X	X	X	X
U225	Bromoform			X	X	X			X		X			X	X	X	X
U226	Ethane, 1,1,1-trichloro- (OR) Methyl chloroform	X		X	X	X			X		X		X	X	X	X	X
U227	Ethane, 1,1,2-trichloro-			X	X	X			X		X			X	X	X	X
U228	Ethene, trichloro- (OR) Trichloroethylene	X		X	X	X			X		X			X	X	X	X
U234	Benzene, 1,3,5-trinitro-			X	X	X			X		X			X	X	X	X
U235	1-Propanol, 2,3-dibromo-, phosphate (3:1)			X	X	X			X		X			X	X	X	X
U236	2,7-Naphthalenedisulfonic acid, 3,3'-(3,3'-dimethyl(1,1'-biphenyl)-4,4'-diyl)bis(azo)bis(5-amino-4-hydroxy)-, tetrasodium salt			X	X	X			X		X			X	X	X	X
U237	2,4-(1H,3H)-Pyrimidinedione, 5-((bis(2-chloroethyl)amino)-			X	X	X			X		X			X	X	X	X
U238	Carbanic acid, ethyl ester			X	X	X			X		X			X	X	X	X
U239	Benzene, dimethyl- (1,T) (OR) Xylene (I)	X		X	X	X			X		X			X	X	X	X
U240	2,4-D, salts & esters			X	X	X			X		X			X	X	X	X
U243	1-Propene, 1,1,2,3,3,3-hexachloro-			X	X	X			X		X			X	X	X	X
U244	Thioperoxydicarbonic diamide ((H2N)C(S)2 S2, tetramethyl-			X	X	X			X		X			X	X	X	X
U246	Cyanogen bromide (CN)Br			X	X	X			X		X			X	X	X	X
U247	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-methoxy-					X			X		X			X	X	X	X
U248	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations of 0.3% or less			X	X	X			X		X			X	X	X	X
U249	Zinc phosphide Zn3P2, when present at concentrations of 10% or less			X	X	X			X		X			X	X	X	X
U271	Benomyl (OR) Carbamic acid, 1-(butylamino)carbonyl- 1H-benzimidazol-2-yl-, methyl ester			X	X	X			X		X			X	X	X	X
U277	Sulfallate			X	X	X			X		X			X	X	X	X
U278	Bendiocarb (OR) 1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbanate			X	X	X			X		X			X	X	X	X

"X" = waste code is managed in the indicated process system

TABLE C-1
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS

PROCESS SYSTEM HANDLING WASTE																		
EPA WASTE CODE	WASTE TYPE (see note 3)	Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Can Crushing	Aerosol Depressurization	Drum Wash	Truck Wash	Off-Site Transfer	Generated Onsite	
U279	Carbaryl (OR) 1-Naphthalenol, methylcarbamate			X	X	X			X		X			X	X	X	X	X
U280	Barban (OR) Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester			X	X	X			X		X			X	X	X	X	X
U328	Benzenamine, 2-methyl-			X	X	X			X		X			X	X	X	X	X
U353	Benzenamine, 4-methyl-			X	X	X			X		X			X	X	X	X	X
U359	Ethanol, 2-ethoxy-			X	X	X			X		X			X	X	X	X	X
U364	Bendiocarb phenol (OR) 1,3-benzodioxol-4-ol, 2,2-dimethyl-			X	X	X			X		X			X	X	X	X	X
U365	Molinate			X	X	X			X		X			X	X	X	X	X
U366	Dazomet			X	X	X			X		X			X	X	X	X	X
U367	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl- (OR) Carbofuran phenol			X	X	X			X		X			X	X	X	X	X
U372	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester (OR) Carbendazim			X	X	X			X		X			X	X	X	X	X
U373	Carbamic acid, phenyl-, 1-methylethyl ester (OR) Propham			X	X	X			X		X			X	X	X	X	X
U375	3-Iodo-2-propynyl n-butylcarbamate			X	X	X			X		X			X	X	X	X	X
U376	Selenium tetrakis (dimethyl-dithiocarbamate) 2			X	X	X			X		X			X	X	X	X	X
U377	Potassium n-methyl-dithiocarbamate			X	X	X			X		X			X	X	X	X	X
U378	Potassium n-hydroxymethyl-n-methyl-dithiocarbamate			X	X	X			X		X			X	X	X	X	X
U379	Sodium dibutyl-dithiocarbamate			X	X	X			X		X			X	X	X	X	X
U381	carbamodithioic acid, diethyl-, - sodium salt			X	X	X			X		X			X	X	X	X	X
U382	Sodium dimethyl-dithiocarbamate			X	X	X			X		X			X	X	X	X	X
U383	Potassium dimethyl-dithiocarbamate			X	X	X			X		X			X	X	X	X	X
U384	Metam Sodium			X	X	X			X		X			X	X	X	X	X
U385	Carbamothioic acid, dipropyl-, S-propyl ester			X	X	X			X		X			X	X	X	X	X
U386	Carbamothioic acid, cyclohexylethyl-, S-ethyl ester			X	X	X			X		X			X	X	X	X	X
U387	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester (OR) Prosulfocarb			X	X	X			X		X			X	X	X	X	X
U389	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester (OR) Triallate			X	X	X			X		X			X	X	X	X	X
U390	Carbamothioic acid, dipropyl-, S-ethyl ester			X	X	X			X		X			X	X	X	X	X

"X" = waste code is managed in the indicated process system

TABLE C-1
EPA WASTE CODES AND FACILITY WASTE MANAGEMENT OPTIONS

EPA WASTE CODE	WASTE TYPE (see note 3)	PROCESS SYSTEM HANDLING WASTE															
		Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment (note 4)	Solids Consolidation	Debris Shredding	Small Container Management	Can Crushing	Aerosol Depressurization	Drum Wash	Truck Wash	Off-Site Transfer	Generated Onsite
U391	Carbamothioic acid, butylethyl-, S-propyl ester			X	X	X			X		X			X	X	X	X
U392	Butylate			X	X	X			X		X			X	X	X	X
U393	Copper dimethyl-dithiocarbamate			X	X	X			X		X			X	X	X	X
U394	A2213 (OR) Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester			X	X	X			X		X			X	X	X	X
U395	Diethylene glycol, dicarbamate (OR) Ethanol, 2,2'-oxybis-, dicarbamate			X	X	X			X		X			X	X	X	X
U396	Ferbam			X	X	X			X		X			X	X	X	X
U400	Bis(penta-methylene)-thiuram			X	X	X			X		X			X	X	X	X
U401	Tetramethylthiuram monosulfide			X	X	X			X		X			X	X	X	X
U403	Disulfiram			X	X	X			X		X			X	X	X	X
U404	Ethanamine, N,N-diethyl (OR) Triethylamine			X	X	X			X		X			X	X	X	X
U407	Ethyl Ziram			X	X	X			X		X			X	X	X	X
U409	Carbamic acid, 1,2-phenylenebis (iminocarbonothioyl) bis-, dimethyl ester (OR) Thiophanate-methyl			X	X	X			X		X			X	X	X	X
U410	Ethanimidothioic acid, N,N'-thiobis-(methylimino) carbonyloxybis-, dimethyl ester (OR) Thiodicarb			X	X	X			X		X			X	X	X	X
U411	Phenol, 2-(1-methylethoxy)-, methylcarbamate (OR) Propoxur			X	X	X			X		X			X	X	X	X

"X" = waste code is managed in the indicated process system

TABLE C-1

WASTE TYPE (see note 3)

1) Unless otherwise indicated, all "D", "F", "K", "P", and "U" listed wastes shown above are hazardous due to toxic properties.

If not hazardous due to toxicity only, the hazardous properties are indicated in parentheses following the waste description using the notations listed below:

(T) = Toxicity, (R) = Reactivity, (I) = Ignitability, (C) = Corrosivity, (H) = Acute Hazardous Waste (refer to 40 CFR 261.30 for additional information on each waste stream).

2) The waste description following "(OR)" in the "Waste Type" column signifies the common name of the material, per 40 CFR 261.30

3) Refer to 40 CFR 261.20 to 261.33 for full description of the waste codes.

4) Organic wastes containing less than 500 ppmw of volatile organic compounds may be stabilized to remove free liquids in the roll-off bin located in this process area.

These organic wastes may carry any codes associated with waste destined for solids consolidation.

5) Wastes will be processed and treated through Romics Process System Handling Waste as described in Subpart D-Treatment Standards in 40 CFR 268.40

TABLE C-2

“RESERVED”

TABLE C-3A
WASTE IDENTIFICATION/CLASSIFICATION
SOLVENT RECYCLING

Typical Industries/Processes Generating Wastes:

Auto Body, Painting, Electronic Manufacturing, Dry-Cleaning, Paints and Pigments, General Parts & Equipment Degreasing, Laboratory/R&D

TYPICAL WASTE STREAMS ¹	TYPICAL WASTE CODES ²	TYPICAL CHARACTERISTICS ³
<u>Non-Chlorinated Solvents</u> Acetone, Lacquer Thinner, Methyl Ethyl Ketone, n-Methyl Pyrollidone, Mineral Spirits, N-butyl Acetate, Tetrahydrofuran, Toluene, Xylene	<u>EPA Codes:</u> D004, D005, D006, D007, D008, D009, D010, D011, D018, D023, D024, D025, D026, D035, D036, D038, F003, F004, F005, K048, K049, K050, K051, K052, P005, U002, U003, U031, U056, U057, U112, U140, U154, U159, U161, U213, U220, U239	<u>Physical Characteristics:</u> Liquid: 75-100% Solid/Semisolid: 0-25% pH: 3-11 Specific Gravity: 0.6-1.4 Flashpoint: < 140 °F <u>Chemical Composition:</u> Acetone, Alcohols, Methyl Ethyl Ketone, Mineral Spirits, n-Methyl Pyrollidone, N-butyl Acetate, Tetrahydrofuran, Toluene, Xylene <u>Hazardous Characteristics</u> Ignitable, Toxic
<u>Chlorinated Solvents</u> Methylene Chloride, Perchloroethylene, Trichloroethylene, 1,1,1-Trichloroethane	<u>EPA Codes:</u> D001, D002, D019, D020, D021, D022, D027, D028, D032, D033, D034, D039, D040, D041, D042, D043, F001, F002, K086, U037, U080, U121, U208, U209, U210, U226, U228	<u>Physical Characteristics:</u> Liquid: 75-100% Solid/Semisolid: 0-25% pH: 3-11 Specific Gravity: 0.6-1.7 Flashpoint: < 140 °F <u>Chemical Composition:</u> Methylene Chloride, Perchloroethylene, Trichloroethylene <u>Hazardous Characteristics:</u> Ignitable, Toxic

FOOTNOTES

- ¹ A sampling of typical waste streams/codes managed by the Facility managed in the indicated processes is supplied; the listing is not comprehensive. See Table C-1 for a complete listing of acceptable waste streams/codes for each management process.
- ² These waste codes typically represent the wastes to be managed as specified. Wastes carrying other waste codes (as listed in Table C-1) may also be managed in Facility processes.
- ³ These characteristics typically represent the wastes to be managed as specified. Please refer to Tables C-5 and C-6 for storage and process limits for each waste management method.

TABLE C-3B
WASTE IDENTIFICATION/CLASSIFICATION
ETHYLENE GLYCOL RECYCLING

Typical Industries/Processes Generating Wastes:

Vehicle repair/service, machine shops, metal working activities

TYPICAL WASTE STREAMS ¹	TYPICAL WASTE CODES ²	TYPICAL CHARACTERISTICS ³
Ethylene glycol, propylene glycol, triethylene glycol – these materials are commonly referred to as antifreeze or coolant	<u>EPA Codes:</u> D008	<u>Physical Characteristics:</u> Liquid: 75-100% Solid/Semisolid: 0-25% pH: 3-11 Specific Gravity: 0.9-1.2 Flashpoint: > 140 °F <u>Chemical Composition:</u> Ethylene glycol, propylene glycol, may have trace used oil <u>Hazardous Characteristics:</u> Toxic

FOOTNOTES

- ¹ A sampling of typical waste streams/codes managed by the Facility managed in the indicated processes is supplied; the listing is not comprehensive. See Table C-1 for a complete listing of acceptable waste streams/codes for each management process.
- ² These waste codes typically represent the wastes to be managed as specified. Wastes carrying other waste codes (as listed in Table C-1) may also be managed in Facility processes.
- ³ These characteristics typically represent the wastes to be managed as specified. Please refer to Tables C-5 and C-6 for storage and process limits for each waste management method.

TABLE C-3C
WASTE IDENTIFICATION/CLASSIFICATION
FUEL BLENDING

Typical Industries/Processes Generating Wastes:

Industrial maintenance, cleaning of parts and equipment, painting, paint manufacture, tank and line cleaning, printing

TYPICAL WASTE STREAMS ¹	TYPICAL WASTE CODES ²	TYPICAL CHARACTERISTICS ³
Paint and paint thinner, hydrocarbon solvents, flammable solvents, machine and hydraulic oils, alcohols, diesel, gasoline, inks, press wash	<u>EPA Codes:</u> D001, D002, D004-D015, D018-D042, F001-F005, F037, F038, K048-K052, K086, K087, K156, K159, K161, K169-K172, P005, U002, U003, U019, U031, U037, U043, U044, U051, U052, U055, U056, U057, U070, U071, U072, U080, U108, U112, U121, U122, U140, U154, U159, U161, U171, U188, U210, U211, U213, U220, U226, U228, U239	<u>Physical Characteristics:</u> Liquid: 50-100% Solid/Semisolid: 0-50% pH: 2.0 – 12 Specific Gravity: 0.6-1.7 Flashpoint: < 140 °F <u>Chemical Composition:</u> Mineral spirits, toluene, xylene, oils, Stoddard solvent, isopropyl alcohol, methanol, other oxygenates, diesel, gasoline, other inert ingredients <u>Hazardous Characteristics:</u> Ignitable, Toxic

FOOTNOTES

- ¹ A sampling of typical waste streams/codes managed by the Facility managed in the indicated processes is supplied; the listing is not comprehensive. See Table C-1 for a complete listing of acceptable waste streams/codes for each management process.
- ² These waste codes typically represent the wastes to be managed as specified. Wastes carrying other waste codes (as listed in Table C-1) may also be managed in Facility processes.
- ³ These characteristics typically represent the wastes to be managed as specified. Please refer to Tables C-5 and C-6 for storage and process limits for each waste management method.

TABLE C-3D
WASTE IDENTIFICATION/CLASSIFICATION
AQUEOUS TREATMENT

Typical Industries/Processes Generating Wastes:

Aqueous cleaning and degreasing, manufacturing processes, groundwater remediation, contaminated precipitation, tank and line rinsing, automotive maintenance

TYPICAL WASTE STREAMS ¹	TYPICAL WASTE CODES ²	TYPICAL CHARACTERISTICS ³
Water and ethylene glycol, dilute acetic acid solution, coolant oil, aqueous cleaners, slurry waste, contaminated stormwater	<u>EPA Codes:</u> D001, D002, D004-D011, D018, D023-D026, D028, D029, D035, F001-F005, F039, K048, K051, K052, K086, K087, U002, U019, U031, U154, U159, U161, U188, U210, U213, U220, U226, U228, U239	<u>Physical Characteristics:</u> Liquid: 75–100% Solid/Semisolid: 0–25% pH: 4.0-12.0 Specific Gravity: 0.8-1.4 Flashpoint: > 100 °F <u>Chemical Composition:</u> Water, organic solvents, dirt, acetic acid, hydrocarbons, salts <u>Hazardous Characteristics:</u> Ignitable, Corrosive, Toxic

FOOTNOTES

- ¹ A sampling of typical waste streams/codes managed by the Facility managed in the indicated processes is supplied; the listing is not comprehensive. See Table C-1 for a complete listing of acceptable waste streams/codes for each management process.
- ² These waste codes typically represent the wastes to be managed as specified. Wastes carrying other waste codes (as listed in Table C-1) may also be managed in Facility processes.
- ³ These characteristics typically represent the wastes to be managed as specified. Please refer to Tables C-5 and C-6 for storage and process limits for each waste management method.

TABLE C-3E
WASTE IDENTIFICATION/CLASSIFICATION
NEUTRALIZATION

Typical Industries/Processes Generating Wastes:

Metal finishing, surplus product, tank and line rinsing, etching

TYPICAL WASTE STREAMS¹	TYPICAL WASTE CODES²	TYPICAL CHARACTERISTICS³
Spent acid, cleaning compounds, caustic solutions	<u>EPA Codes:</u> D002, D004-D011	<u>Physical Characteristics:</u> Aqueous liquids, little to no organic contamination pH: 0-14.0 Specific Gravity: 0.8-1.7 Flashpoint: > 140 °F <u>Chemical Composition:</u> Hydrochloric acid, sulfuric acid, nitric acid, sulfamic acid, water, sodium hydroxide, potassium hydroxide, sodium bicarbonate, detergents, surfactants, sodium carbonate <u>Hazardous Characteristics:</u> Corrosive

FOOTNOTES

- ¹ A sampling of typical waste streams/codes managed by the Facility managed in the indicated processes is supplied; the listing is not comprehensive. See Table C-1 for a complete listing of acceptable waste streams/codes for each management process.
- ² These waste codes typically represent the wastes to be managed as specified. Wastes carrying other waste codes (as listed in Table C-1) may also be managed in Facility processes.
- ³ These characteristics typically represent the wastes to be managed as specified. Please refer to Tables C-5 and C-6 for storage and process limits for each waste management method.

TABLE C-3F
WASTE IDENTIFICATION/CLASSIFICATION
INORGANIC TREATMENT

Typical Industries/Processes Generating Wastes:

Semi-conductor industries, metal fabrication and/or processing waste, aqueous cleaners

TYPICAL WASTE STREAMS ¹	TYPICAL WASTE CODES ²	TYPICAL CHARACTERISTICS ³
Miscellaneous metal-bearing wastes, corrosive wastes, aqueous parts cleaning wastes, metal processing wastes	<u>EPA Codes:</u> D002, D004-D011, F006-F009, F019, F039, P010-P012, U134	<u>Physical Characteristics:</u> Liquid: 75-100% Solid/Semisolid: 0-25% pH: 0-14.0 Specific Gravity: 0.6-1.7 Flashpoint: >140 °F <u>Chemical Composition:</u> Heavy metals, hydrochloric acid, sulfuric acid, nitric acid, sulfamic acid, water, sodium hydroxide, potassium hydroxide, sodium bicarbonate, detergents, surfactants, sodium carbonate <u>Hazardous Characteristics:</u> Toxic, Corrosive
Non-pumpable sludges, semi-solid wastes, filter cakes, contaminated soils, potentially with incidental free liquids	<u>EPA Codes</u> F037, F038, F039, K048, K050, K051, K052	<u>Physical Characteristics:</u> Liquid: 0-10% Solid/Semisolid: 90-100% pH: n/a Specific Gravity: n/a Flashpoint: n/a <u>Chemical Composition:</u> Metal bearing sludges, absorbents, soil contaminated with organics or inorganics, oil. <u>Hazardous Characteristics:</u> Toxic

FOOTNOTES

- ¹ A sampling of typical waste streams/codes managed by the Facility managed in the indicated processes is supplied; the listing is not comprehensive. See Table C-1 for a complete listing of acceptable waste streams/codes for each management process.
- ² These waste codes typically represent the wastes to be managed as specified. Wastes carrying other waste codes (as listed in Table C-1) may also be managed in Facility processes.
- ³ These characteristics typically represent the wastes to be managed as specified. Please refer to Tables C-5 and C-6 for storage and process limits for each waste management method.

TABLE C-3G
WASTE IDENTIFICATION/CLASSIFICATION
SOLIDS CONSOLIDATION

Typical Industries/Processes Generating Wastes:

Manufacturing, equipment maintenance, printing, site remediation, cleanup,

TYPICAL WASTE STREAMS ¹	TYPICAL WASTE CODES ²	TYPICAL CHARACTERISTICS ³
SOLID FUELS Solvent-, oil-, and grease-contaminated rags, wipes, wood, and other debris having >5,000 BTU/lb, reacted resins, solid spill clean-up residuals	<u>EPA Codes:</u> D004–11, D018, D019, D021–30, D032–36, D038, D039, D040, D043, F001–5, F037, F038, K048–51, U002, U003, U019, U031, U037, U055, U056, U057, U070, U080, U108, U112, U121, U140, U154, U159, U161, U171, U210, U211, U213, U220, U226, U228, U239	<u>Physical Characteristics:</u> Solid 100% pH: n/a Specific Gravity: n/a Flashpoint: n/a <u>Chemical Composition:</u> Debris (e.g., wood, paper, cloth): 75–100% Organic solvents: 0–20% Oil, grease: 0–20% Ink 0–20% Resin 0–100% Absorbent 0–20% <u>Hazardous Characteristics:</u> Toxic

FOOTNOTES

- ¹ A sampling of typical waste streams/codes managed by the Facility managed in the indicated processes is supplied; the listing is not comprehensive. See Table C-1 for a complete listing of acceptable waste streams/codes for each management process.
- ² These waste codes typically represent the wastes to be managed as specified. Wastes carrying other waste codes (as listed in Table C-1) may also be managed in Facility processes.
- ³ These characteristics typically represent the wastes to be managed as specified. Please refer to Tables C-5 and C-6 for storage and process limits for each waste management method.

TABLE C-3G
WASTE IDENTIFICATION/CLASSIFICATION
SOILIDS CONSOLIDATION (continued)

Typical Industries/Processes Generating Wastes:

Site remediation, surplus product, process wastes, electroplating

TYPICAL WASTE STREAMS ¹	TYPICAL WASTE CODES ²	TYPICAL CHARACTERISTICS ³
LANDFILL: Solid corrosive materials, sodium bicarbonate, absorbent with hydrocarbons, plating sludges, baghouse dust, petroleum contaminated soils	<u>EPA Codes:</u> D004–11, F001-F006, D018-019, D021-030, D032-D040, F024, F037, F039, K048, K050, K052, K086-087, U002-U004, U019, U031, U037, U055-057, U070, U080, U108, U110, U112, U121, U122, U140, U154, U159, U161, U171, U209, U210, U211, U213, U220, U226, U228, U239	<u>Physical Characteristics:</u> Solid 100% Liquid or liquid-solid requiring treatment prior to land disposal pH: n/a Specific Gravity: n/a Flashpoint: n/a <u>Chemical Composition:</u> Sand, soil, debris, petroleum hydrocarbons, sodium hydroxide, sodium bicarbonate, metals <u>Hazardous Characteristics:</u> Corrosive, Toxic

FOOTNOTES

- ¹ A sampling of typical waste streams/codes managed by the Facility managed in the indicated processes is supplied; the listing is not comprehensive. See Table C-1 for a complete listing of acceptable waste streams/codes for each management process.
- ² These waste codes typically represent the wastes to be managed as specified. Wastes carrying other waste codes (as listed in Table C-1) may also be managed in Facility processes.
- ³ These characteristics typically represent the wastes to be managed as specified. Please refer to Tables C-5 and C-6 for storage and process limits for each waste management method.

TABLE C-3G
WASTE IDENTIFICATION/CLASSIFICATION
SOILIDS CONSOLIDATION (continued)

Typical Industries/Processes Generating Wastes:

Lab cleanup, surplus product, site cleanup, petroleum refining, chemical manufacture, electronics manufacturing, semiconductor manufacturing

TYPICAL WASTE STREAMS ¹	TYPICAL WASTE CODES ²	TYPICAL CHARACTERISTICS ³
INCINERATION: Packaged Laboratory Chemicals (Lab Packs), contaminated debris, paint related materials, mill waste, process waste	<u>EPA Codes:</u> D001, D002, D004–11, D012–17, D018–43, F001–5, F037, F038, F039, K048–52, K086, K087, K156–159, K161, K169–K172, various U and P codes	<u>Physical Characteristics:</u> Liquid, solid, semi-solid, multi-phase pH: n/a Specific Gravity: n/a Flashpoint: n/a <u>Chemical Composition:</u> Varies <u>Hazardous Characteristics:</u> Ignitable, Toxic

FOOTNOTES

- ¹ A sampling of typical waste streams/codes managed by the Facility managed in the indicated processes is supplied; the listing is not comprehensive. See Table C-1 for a complete listing of acceptable waste streams/codes for each management process.
- ² These waste codes typically represent the wastes to be managed as specified. Wastes carrying other waste codes (as listed in Table C-1) may also be managed in Facility processes.
- ³ These characteristics typically represent the wastes to be managed as specified. Please refer to Tables C-5 and C-6 for storage and process limits for each waste management method.

TABLE C-3H
WASTE IDENTIFICATION/CLASSIFICATION
OFF-SITE TRANSFER

Typical Industries/Processes Generating Wastes:

At a minimum, inclusive of industries listed under other Facility management options.

TYPICAL WASTE STREAMS ¹	TYPICAL WASTE CODES ²	TYPICAL CHARACTERISTICS ³
Waste streams managed under this option vary widely and may consist of any of the example waste streams shown in Table C3A through I, as well as others. See Table C-1 for a listing of waste streams managed under this option.		

FOOTNOTES

- ¹ A sampling of typical waste streams/codes managed by the Facility managed in the indicated processes is supplied; the listing is not comprehensive. See Table C-1 for a complete listing of acceptable waste streams/codes for each management process.
- ² These waste codes typically represent the wastes to be managed as specified. Wastes carrying other waste codes (as listed in Table C-1) may also be managed in Facility processes.
- ³ These characteristics typically represent the wastes to be managed as specified. Please refer to Tables C-5 and C-6 for storage and process limits for each waste management method.

TABLE C-3I
WASTE IDENTIFICATION/CLASSIFICATION
TEN-DAY TRANSFER

Typical Industries/Processes Generating Wastes:

At a minimum, inclusive of industries listed under other Facility management options.

TYPICAL WASTE STREAMS ¹	TYPICAL WASTE CODES ²	TYPICAL CHARACTERISTICS ³
Not an activity subject to permitting requirements.		

FOOTNOTES

- ¹ A sampling of typical waste streams/codes managed by the Facility managed in the indicated processes is supplied; the listing is not comprehensive. See Table C-1 for a complete listing of acceptable waste streams/codes for each management process.
- ² These waste codes typically represent the wastes to be managed as specified. Wastes carrying other waste codes (as listed in Table C-1) may also be managed in Facility processes.
- ³ These characteristics typically represent the wastes to be managed as specified. Please refer to Tables C-5 and C-6 for storage and process limits for each waste management method.

TABLE C-3J
WASTE IDENTIFICATION/CLASSIFICATION
MISCELLANEOUS MANAGEMENT PROCESSES

Typical Industries/Processes Generating Wastes:

Lab cleanup, product use, surplus materials, educational institutions, R&D

TYPICAL WASTE STREAMS¹	TYPICAL WASTE CODES²	TYPICAL CHARACTERISTICS³
Consolidation of Small Containers (Lab Packs)	<u>EPA Codes:</u> Any listed in Part A	<u>Physical Characteristics:</u> Varies widely, liquid or solid, lab packs are small containers packed in DOT containers with absorbent materials <u>Chemical Composition:</u> Varies widely <u>Hazardous Characteristics:</u> Ignitable, Corrosive, Toxic
<i>Can Crush</i> Paints, roofing supplies, carburetor cleaner, paint thinner, ink	<u>EPA Codes:</u> D001, D002, D004–11	<u>Physical Characteristics:</u> 1–5 gallon containers of liquid, semi-solid, or mixed liquid-solid pH: 2-14 Specific Gravity: varies Flashpoint: > 73 °F <u>Chemical Composition:</u> Solvents, paints, thinners, inks, <u>Hazardous Characteristics:</u> Ignitable, Toxic

FOOTNOTES

¹ A sampling of typical waste streams/codes managed by the Facility managed in the indicated processes is supplied; the listing is not comprehensive. See Tables C-1 for a complete listing of acceptable waste streams/codes for each management process.

² These waste codes typically represent the wastes to be managed as specified. Wastes carrying other waste codes (as listed in Table C-1) may also be managed in Facility processes.

TABLE C-3K
WASTE IDENTIFICATION/CLASSIFICATION
MISCELLANEOUS MANAGEMENT PROCESSES (Continued)

TYPICAL WASTE STREAMS¹	TYPICAL WASTE CODES²	TYPICAL CHARACTERISTICS³
<i>Aerosol Depressurization</i> Spray paint, lubricants, cosmetics	<u>EPA Codes:</u> D001, U002, U057, U080, U154, U159, U226	<u>Physical Characteristics:</u> Pressurized gas with liquid in small cans <u>Chemical Composition:</u> Flammable propellant with various active ingredients. <u>Hazardous Characteristics:</u> Ignitable, Toxic
<i>Drum Wash</i> DOT empty drums, RCRA empty drums, and drums with some residual materials (not meeting definition of RCRA empty)	<u>EPA Codes:</u> See Table C-1	<u>Physical Characteristics:</u> Liquids: varies Solids/Semisolids: varies pH: varies Specific Gravity: varies Flashpoint: varies <u>Chemical Composition:</u> varies <u>Hazardous Characteristics:</u> Toxic, ignitable, corrosive

FOOTNOTES

- ¹ A sampling of typical waste streams/codes managed by the Facility managed in the indicated processes is supplied; the listing is not comprehensive. See Table C-1 for a complete listing of acceptable waste streams/codes for each management process.
- ² These waste codes typically represent the wastes to be managed as specified. Wastes carrying other waste codes (as listed in Table C-1) may also be managed in Facility processes.
- ³ These characteristics typically represent the wastes to be managed as specified. Please refer to Tables C-5 and C-6 for storage and process limits for each waste management method.

TABLE C-3K
WASTE IDENTIFICATION/CLASSIFICATION
MISCELLANEOUS MANAGEMENT PROCESSES (Continued)

TYPICAL WASTE STREAMS ¹	TYPICAL WASTE CODES ²	TYPICAL CHARACTERISTICS ³
<p><i>Truck Wash</i></p> <p>Trucks and/or tankers may contain any water compatible liquid and sludges that have been received by the facility. . These can carry almost any of the waste codes received at the facility as shown in Section C, Table C-1, except for D003 (reactive wastes), which are not processed on-site. Romic will also be able to clean hazardous material or hazardous waste transfer vehicles that have not made a delivery to the facility</p>	<p><u>EPA Codes:</u> Any listed in Part A</p>	<p><u>Physical Characteristics:</u> Liquids: varies Solids/Semisolids: varies pH: 0-14 Specific Gravity: varies Flashpoint: varies</p> <p><u>Chemical Composition:</u> Varies widely</p> <p><u>Hazardous Characteristics:</u> varies</p>

FOOTNOTES

- ¹ A sampling of typical waste streams/codes managed by the Facility managed in the indicated processes is supplied; the listing is not comprehensive. See Table C-1 for a complete listing of acceptable waste streams/codes for each management process.
- ² These waste codes typically represent the wastes to be managed as specified. Wastes carrying other waste codes (as listed in Table C-1) may also be managed in Facility processes.
- ³ These characteristics typically represent the wastes to be managed as specified. Please refer to Tables C-5 and C-6 for storage and process limits for each waste management method.

TABLE C-4
WASTE ACCEPTANCE ANALYSIS SUMMARY*
PRIMARY MANAGEMENT PROCESSES

Waste Parameters	Solvent Recovery	Ethylene Glycol Recycling	Fuel Blending	Wastewater Treatment	Neutralization	Inorganic Treatment	Solids Consolidation	Off-site Transfer
Physical Description/Observation (1)	D,B	D,B	D,B	D,B	D,B	D,B	D	D,B
pH	D,B (2)	D,B	D (2)	D,B (2)	D,B (2)	D,B (2)		D,B (2, 3)
Specific Gravity	D,B	D,B	D,B	D,B	D,B	D,B		B (3, 4)
Radiation Screen	D,B	D,B	D,B	D,B	D,B	D,B	D	D,B
Solvent Composition	D,B	D,B	D,B (5)	D,B	D,B (6)	D,B (6)		D,B (3, 6)
Cyanide Screen	D,B (6)	D,B (6)	D,B (6)	D,B (6)	D,B (6)	D,B (6)		D,B (3, 6)
Oxidizer Screen	D,B (6)	D,B (6)	D,B (6)	D,B (6)	D,B (6)	D,B(6)		D,B (3, 6)
Sulfide Screen				D,B (6)	D,B (6)			D,B (3, 6)
Heat of Combustion (BTU)			B				D	D (1)
Total Metals			D, B (6)	D, B (6)		D,B	D (1)	D,B (6)
Total Halogens			B				D (1)	D,B (6)
PCBs			D,B (6)					D,B (6)
Total Cyanides				D, B (8)	D, B (8)		D (8)	D, B (8)
Total Sulfides				D, B (8)	D, B (8)		D (8)	D, B (8)
Flash Point				B (6)				D,B (3, 6)
Waste Compatibility	D,B (9)		B (9)	D,B (9)	D,B (9)	D,B (9)		D,B (9, 10)
Ammonia				B (6)	D,B			B (3, 6)

Footnotes:

* = Table applies to both pre-acceptance and acceptance processes

D = Analysis performed on container waste

B = Analysis performed on bulk waste

- 1) Includes an evaluation of chemical composition listed on waste's profile, conformity of the information with container labeling, and physical observation of waste.
- 2) Test may be conducted on 1:1 mix of sample and water, if direct measurement is not feasible.
- 3) Performed on liquids only and, for semi-solid wastes, if viscosity and/or % sludge allows test.
- 4) Analysis only performed on liquids to be placed into on-site tanks.
- 5) May be performed in-lieu of BTU analysis.
- 6) Performed as necessary if profile or waste's chemical and/or physical characteristics (e.g. extreme pH value, labeling) indicate possible presence of suspect waste parameter and/or to comply with off-site receiving facility criteria.
- 7) If visible oil layer is present, and enough oil is present to obtain a sample (typically > 1 milliliter).
- 8) Analysis performed only if profile and/or test strip indicate possible presence, and the exact amount present is required to be known to properly handle the waste.
- 9) Only performed if incoming material is to be consolidated with other wastes and exhibits extreme acidic or basic properties ($\text{pH} \leq 2.5$ or ≥ 8.5), or has the potential to react (e.g. oxidizers, un-reacted monomers).
- 10) Compatibility of potentially incompatible solid wastes (e.g. extreme pH values, oxidizers) to be consolidated is based on profile information and/or physical descriptions/observations of wastes.

TABLE C-5
STORAGE AND PROCESS LIMITATIONS* – PRIMARY MANAGEMENT PROCESSES

Waste Parameters	Solvent Recycling	Ethylene Glycol Recycling	Fuel Blending	Liquefaction	Wastewater Treatment	Neutralization	Inorganic Treatment	Solids Consolidation	Debris Shredding	Off-Site Transfer
Physical Description	Liquid	Liquid	Solid/liquid	Solid/semisolid	Semisolid/liquid	Solid/liquid	Semisolid/liquid	Solid	Solid	Solid/semisolid/liquid
pH	2.0 – 14.0	2.5 - 12.0	1.0 – 14.0	2.5 - 12.0	4.0 – 12.0	0 – 14.0	0 – 14.0	n/a	n/a	0-14
Specific Gravity	0.6 - 1.7	0.9 - 1.2	0.6 - 1.7	n/a	0.8 - 1.4	0.8 - 1.7 (liquids)	0.6-1.7	n/a	n/a	see footnote ¹
Radiation Screen	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	negative
Solvent Composition	See footnote ²	> 15 % ethylene glycol	See footnote ²	n/a	Organics < 50%	Organics ≤ 1%	Organics ≤ 10 %	n/a	n/a	varies ^{2, 3}
Cyanide Screen	Negative	Negative	Negative	Negative	See Footnote ³	Negative	No limit	n/a	n/a	varies ³
Oxidizer Screen	Negative	Negative	Negative	Negative	See Footnote ³	See Footnote ³	No limit	n/a	n/a	varies ³
Sulfide Screen	n/a	Negative	n/a	n/a	See Footnote ³	n/a	n/a	n/a	n/a	varies ³
Heat of Combustion (BTU)	No limit	n/a	> 3,000 BTU/lb	> 3,000 BTU/lb	n/a	n/a	n/a	n/a or > 3,000 BTU/lb ⁴	n/a or > 3,000 BTU/lb ⁴	n/a > 3,000 BTU/lb ⁴
Total Metals	No limit	No limit	varies ³	No limit	See footnote ⁵	No limit	See footnote ¹⁰	varies ³	varies ³	varies ³
Total Halogens	No limit	No limit	varies ³	No limit	No limit	No limit	No limit	varies ³	varies ³	varies ³
PCBs	< 5 ppm	< 5 ppm ⁶	< 50 ppm	< 50 ppm	< 5 ppm ⁶	< 5 ppm ⁶	< 5 ppm ⁶	< 50 ppm	< 50 ppm	< 50 ppm
Total Cyanides	No limit	No limit	No limit	No limit	< 2,000 ppm	< 2,000 ppm	No limit	varies ³	varies ³	varies ³
Total Sulfides	No limit	No limit	No limit	No limit	< 260 ppm	< 260 ppm	No limit	varies ³	varies ³	varies ³
Flash Point	No limit	> 100 ° F	No limit	No limit	No limit	No limit	No limit	n/a	n/a	varies ³
Waste Compatibility ^{7, 8}	ΔT < 10°C	ΔT < 10°C	ΔT < 10°C	ΔT < 10°C	ΔT < 10°C	ΔT < 10°C	ΔT < 10°C	see footnote ⁸	see footnote ⁸	ΔT < 10°C ⁹
Ammonia	No limit	See Footnote ³	No limit	No limit	See Footnote ³	See Footnote ³	No limit	n/a	n/a	< 2,000 ppm ⁹ or varies ³

Footnotes:

*	=	The determination of each waste's compliance with the storage and process limits listed here is based on profile and/or sampling information. Also note that, although not specifically listed here, the Facility's permit-excluded wastes (i.e. radioactive, bio-hazardous, etc.) are assumed waste acceptance limitations.		
n/a	=	not applicable	PCBs	= Polychlorinated biphenyls
ppm	=	parts per million	ΔT	= change of temperature

- 1) Results should correspond closely to expected specific gravity for material; limits also based on EPA-approved specific gravity limits of tank/container used to consolidate liquids.
- 2) Solvent composition assists Facility in determining the amount and nature of solvents present in wastes. Results should correspond closely to waste composition information provided on profile, and are used as an aid in setting operating parameters. There are no specific limits for Facility permit-acceptable solvents.
- 3) The storage and/or process limits for these parameters are determined by the Facility's general permit waste acceptance limits and/or ultimate off-site receiving facilities, and are not applicable to Facility management methods.
- 4) For wastes destined for incineration or landfill, BTU values are not applicable. For wastes destined for fuel, target BTU value is > 3,000 BTU/lb.
- 5) The following metals limits correspond to disposition code/treatment process used for aqueous wastes: A1 (direct bio-treatment): equals that of POTW discharge limits, A2 (TFE distillation column): equals POTW limits multiplied by 20, and A3 (vacuum distillation): equals POTW limits multiplied by 400. Metals analysis is performed on consolidated aqueous wastes in tanks on a batch basis prior to transfer to the A1, A2, or A3 treatment processes.
- 6) If visible oil layer is present, and enough oil is present to obtain a sample (typically > 1 milliliter), oil must be < 5 ppm PCBs.
- 7) For liquids, aliquot of sample of potentially incompatible waste (based on profile or fingerprint analysis) is mixed with a sample of waste in a target storage tank; an observed violent reaction or temperature rise of 10°C or greater indicates incompatibility.
- 8) For solids, compatibility of potentially incompatible wastes to be consolidated is based on profile information and/or physical descriptions/observations of wastes.
- 9) Limit for potentially incompatible liquids to be consolidated prior to off-site transfer.
- 10) Metals limits will vary by waste type and are based on the specific processing method's ability to treat inorganic wastes so that resulting waste water meets above listed Wastewater Treatment metals limits.

TABLE C-6
STORAGE AND PROCESS LIMITATIONS* – MISCELLANEOUS MANAGEMENT PROCESSES

Waste Parameters	Consolidation of Small Containers	<i>Can Crushing</i>	<i>Aerosol Depressurization</i>	<i>Drum Wash</i>	<i>Tanker Truck Wash</i>
Physical Description/ Observation	Solid/semisolid/ liquid	Semisolid/ liquid	Pressurized liquid	Nearly empty; may contain residual solid/semisolid/ liquid	Semisolid/liquid
pH	See footnotes ^{1,2}	See footnotes ^{1,2}	n/a	n/a	0-14 ²
Specific Gravity	See footnote ¹	See footnote ¹	n/a	n/a	no limit
Radiation Screen	negative ⁹	negative ⁹	negative ⁹	negative ⁹	negative ¹⁰
Solvent Composition	See footnote ^{1,3}	See footnotes ³	n/a	n/a	see footnote ³
Cyanide Screen	See footnote ¹	negative	n/a	n/a	no limit ⁸
Oxidizer Screen	See footnote ¹	negative	n/a	n/a	no limit ⁸
Sulfide Screen	See footnote ¹	no limit	n/a	n/a	no limit ⁸
Heat of Combustion (BTU)	See footnote ¹	> 3,000 ⁴	n/a	n/a	n/a
Total Metals	See footnote ¹	See footnote ⁵	n/a	n/a	no limit
Total Halogens	See footnote ¹	no limit	n/a	n/a	no limit
PCBs	< 50 ppm ^{6,9}	< 50 ppm ^{6,9}	n/a	n/a	< 50 ppm ^{6,9}
Total Cyanides	See footnote ¹	no limit	n/a	n/a	< 2,000 ppm
Total Sulfides	See footnote ¹	no limit	n/a	n/a	< 260 ppm
Flash Point	See footnote ¹	no limit	n/a	n/a	no limit
Waste Compatibility ⁷	$\Delta T < 10^{\circ}\text{C}$	$\Delta T < 10^{\circ}\text{C}$	n/a	n/a	$\Delta T < 10^{\circ}\text{C}$
Ammonia	See footnote ¹	no limit	n/a	n/a	< 2,000 ppm

Footnotes:

* = Storage and process limits based on profile and/or sampling information

n/a = not applicable

ΔT = change of temperature

PCBs = Polychlorinated biphenyls

ppm = parts per million

- 1) Waste acceptance limit pertains to consolidated wastes and defaults to limit for onsite management option or off-site facility receiving limit.
- 2) If pH of waste is ≤ 2.5 or ≥ 12.5 (based on profile or analytical data), waste compatibility (see note #7) test may be performed.
- 3) Solvent composition assists Facility in determining the amount and type of solvents present in wastes. Results should correspond closely to waste composition information provided on profile, and are used as an aid in setting operating parameters. There are no specific limits for Facility permit-acceptable solvents.
- 4) For resulting wastes destined for wastewater treatment, solvent recovery, incineration, or landfill, BTU is not applicable; BTU value must be $> 3,000$ for wastes destined for fuel.
- 5) For wastes destined for fuel and/or off-site transfer wastes, metals limits are set by individual kilns/off-site facilities and are subject to change. For wastes destined for on-site aqueous treatment, see Table C-5 for metals limits.
- 6) If oil or oil layer present, and enough oil is present to obtain a sample (typically > 1 milliliter)
- 7) Aliquot of sample of potentially incompatible waste (based on profile or fingerprint analysis) is mixed with a sample of waste in a target storage tank; an observed violent reaction or temperature rise of 10°C or greater indicates incompatibility.
- 8) If test strip indicates possible presence, compatibility test will be performed as necessary for wastes to be consolidated
- 9) Limit based on profile information; physical analysis may be performed if physical observations (i.e. labeling) indicate a deviation from waste's profile.
- 10) Test performed on non-RCRA empty trucks arriving solely for the purpose of receiving truck washing services.

TABLE C-7a

**DISPOSITION CODE COMPATIBILITY AND CONTAINER STORAGE LOCATIONS
PRIMARY MANAGEMENT PROCESSES**

Waste Management Option	Example Disposition Codes ¹	Example Incompatible Disposition Codes ^{1, 2, 3}	Typical Container Storage Locations ⁴
Solvent Recycling	<u>Non-Chlorinated Solvents</u> ACE: Acetone, LAC: Lacquer Thinner, MEK: Methyl Ethyl Ketone, NMP: n-Methyl Pyrrolidone, RCMS: Mineral Spirits, NBAC: N-butyl Acetate, THF: Tetrahydrofuran, TOL: Toluene, XYL: Xylene <u>Chlorinated Solvents</u> MCH: Methylene Chloride, PERK: Perchloroethylene, TCE: Trichloroethylene, TCA: 1,1,1-Tri-chloroethane	OXLA, OXLB, NAL	Storage Building #1
Ethylene Glycol Recycling	E/G: Ethylene glycol recycling	OXLA, OXLB, NAL	Storage Building #1
Fuel Blending	F1: Wastes for fuel with 0-10% water, 0-4% chlorine F2: Wastes for fuel with 11-20% water, 4-8% chlorine F3: Wastes for fuel with > 20% water, > 8% chlorine	OXLA, OXLB, NAL	Storage Building #1
Liquefaction	T/B: Liquefaction	OXLA, OXLB, NAL	Storage Building #1
Aqueous Treatment	A1: Aqueous waste to go directly to bio-treatment system A2: Aqueous waste with less than 5% solids, can go directly to fractionator A3: Aqueous waste with less than 5% solids, can go directly to thin film evaporator	NAL	Storage Building #1
Neutralization	NAL: Neutralize acid, liquid	NBL, OXLB	Storage Building #2 Building on secondary containment pallets, if necessary ⁵
	NBL: Neutralize base, liquid	NAL, OXLA	Storage Building #2 on secondary containment pallets, if necessary ⁵
Inorganic Treatment	To be determined (TBD)	See footnote ³	Storage Building #1 or #2
Solids Consolidation	INC: Incineration, solids for consolidation, LDF: Landfill, may be consolidated	OXLA, OXLB, NAL See footnote ³	Storage buildings #1

- 1) The disposition codes listed here are shown for example purposes only. The Facility may change, add, or delete disposition codes for each management option to meet current waste management requirements.
- 2) Wastes with disposition codes that are known to be incompatible will not be mixed unless compatibility test results demonstrate conclusively that, in that specific case, the two wastes are compatible, and mixing them would cause no adverse reaction or condition.
- 3) For proposed waste streams and management options, disposition codes will be assigned and/or wastes will be segregated based on some or all of the following: profile information, laboratory data, manifest information, DOT information, and/or established data on wastes compatibility. This also applies to disposition codes that do not specify waste characteristics (e.g. acidic, basic), such as INC, LDF.
- 4) Upon receipt, all incoming containerized wastes are temporarily stored in container sampling areas (see Figure C-1) pending results of receipt analysis. Wastes designated as either oxidizers or corrosives (concentrated mineral acids only) by DOT labeling are placed on in designated sampling area, or are placed in secondary containment pallets in the container sampling area. If containerized wastes are determined through the receipt analysis procedure to have been classified incorrectly, they will be placed onto secondary containment pallets in a timely fashion before transfer to the appropriate container storage location.
- 5) Waste to be placed on secondary containment pallets if other wastes in storage area are incompatible.

TABLE C-7a

**DISPOSITION CODE COMPATIBILITY AND CONTAINER STORAGE LOCATIONS
PRIMARY MANAGEMENT PROCESSES**

Waste Management Option	Example Disposition Codes ¹	Example Incompatible Disposition Codes ^{1, 2, 3}	Typical Container Storage Locations ⁴
	DEBG: Debris, grindable (solid fuels)	OXLA, OXLB, NAL	
Debris Shredding	DEBS: solid fuels, to be shredded INCS: Incineration, to be shredded	OXLA, OXLB, NAL	Storage buildings #1
Off-Site Transfer	INCN: Incineration, do not consolidate	OXLA, OXLB, NAL	Storage Building #1 or #2
	LDFN: Landfill, do not consolidate	See footnote ³	Storage Building #1
	OXLA: Oxidizer, liquid, acid storage	OXLB	Storage Building #2 on secondary containment pallets, if necessary ⁵
	OXLB: Oxidizer, liquid, base storage	OXLA	Storage Building #2 on secondary containment pallets, if necessary ⁵
	OXSA: Oxidizer, solid, acid storage	OXLB	Storage Building #2 on secondary containment pallets, if necessary ⁵
	OXSB: Oxidizer, solid, base storage	OXLA	Storage Building #2 on secondary containment pallets, if necessary ⁵
Ten-Day Transfer	Not applicable		

Other Example Disposition Codes**HOLD:** Hold**REJ:** Reject**SID:** Special Instructions for Disposal**RUS:** Re-use on-site

- 1) The disposition codes listed here are shown for example purposes only. The Facility may change, add, or delete disposition codes for each management option to meet current waste management requirements.
- 2) Wastes with disposition codes that are known to be incompatible will not be mixed unless compatibility test results demonstrate conclusively that, in that specific case, the two wastes are compatible, and mixing them would cause no adverse reaction or condition.
- 3) For proposed waste streams and management options, disposition codes will be assigned and/or wastes will be segregated based on some or all of the following: profile information, laboratory data, manifest information, DOT information, and/or established data on wastes compatibility. This also applies to disposition codes that do not specify waste characteristics (e.g. acidic, basic), such as INC, LDF.
- 4) Upon receipt, all incoming containerized wastes are temporarily stored in container sampling areas (see Figure C-1) pending results of receipt analysis. Wastes designated as either oxidizers or corrosives (concentrated mineral acids only) by DOT labeling are placed on in designated sampling area, or are placed in secondary containment pallets in the container sampling area. If containerized wastes are determined through the receipt analysis procedure to have been classified incorrectly, they will be placed onto secondary containment pallets in a timely fashion before transfer to the appropriate container storage location.
- 5) Waste to be placed on secondary containment pallets if other wastes in storage area are incompatible.

TABLE C-7b

**MISCELLANEOUS MANAGEMENT PROCESSES
DISPOSITION CODE COMPATIBILITY AND CONTAINER STORAGE LOCATIONS**

Waste Management Option	Example Disposition Codes ¹	Example Incompatible Disposition Codes ^{1, 2, 3}	Typical Container Storage Locations ⁴
Consolidation of Small Containers	LP/01: recycle LP/03: incineration LP/07: landfill	OXLA, OXLB, NAL OXLA, OXLB, NAL See footnote ³	Storage Building #2
<i>Can Crushing</i>	TBD	OXLA, OXLB, NAL	Storage building #1 or #2
<i>Aerosol Depressurization</i>	RA: Aerosols	OXLA, NAL	Storage building #1
<i>Drum Crush</i>	RE: Recycle – Empty Drum	See footnote ³	Railspur Area & West Bay Processing
<i>Tanker Truck Wash</i>	TBD	See footnote ³	N/A

Other Example Disposition Codes**HOLD:** Hold**REJ:** Reject**SID:** Special Instructions for Disposal**RUS:** Re-use on-site

- 1) The disposition codes listed here are shown for example purposes only. The Facility may change, add, or delete disposition codes for each management option to meet current waste management requirements.
- 2) Wastes with disposition codes that are known to be incompatible will not be mixed unless compatibility test results demonstrate conclusively that, in that specific case, the two wastes are compatible, and mixing them would cause no adverse reaction or condition.
- 3) For proposed waste streams and management options, disposition codes will be assigned and/or wastes will be segregated based on some or all of the following: profile information, laboratory data, manifest information, DOT information, and/or established data on wastes compatibility. This also applies to disposition codes that do not specify waste characteristics (*e.g.* acidic, basic), such as INC, LDF.
- 4) Upon receipt, all incoming containerized wastes are temporarily stored in container sampling areas (see Figure C-1) pending results of receipt analysis. Wastes designated as either oxidizers or corrosives (concentrated mineral acids only) by DOT labeling are placed on in designated sampling area, or are placed in secondary containment pallets in the container sampling area. If containerized wastes are determined through the receipt analysis procedure to have been classified incorrectly, they will be placed onto secondary containment pallets in a timely fashion before transfer to the appropriate container storage location.
- 5) Waste to be placed on secondary containment pallets if other wastes in storage area are incompatible.

TABLE C-8
SAMPLING METHODS AND EQUIPMENT

MATERIAL	METHOD	EQUIPMENT
Extremely viscous liquid or semi-solid	ASTM D140-70	Tubing or thief
Crushed or powdered material	ASTM D346-75	Tubing, trier scoop or shovel
Soil or rock-like material	ASTM D420-69	Tubing, trier, auger, scoop or shovel
Soil-like material	ASTM D1452-65	Tubing, trier, auger, scoop or shovel
Fly ash-like material	ASTM D2234-76	Tubing, trier, auger, scoop or shovel
Containerized liquid	EPA 600/2-80-018 January 1980	Modified Coliwasa, tubing, weighted bottle, or bomb sampler

TABLE C-9
SAMPLE BOTTLE SELECTION

Sample	Plastic	Glass	Metal
Acids(except HF)	X	X	
Hydrofluoric Acid (HF)	X		
Alkalines	X	X	
Solvents		X	X
Oils	X	X	X
Solids	X	X	X
Aqueous	X	X	

X: Sample compatible for storage in this type of container.

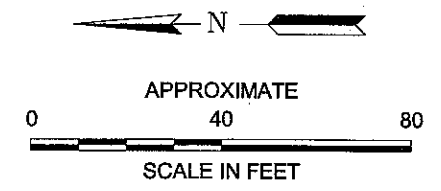
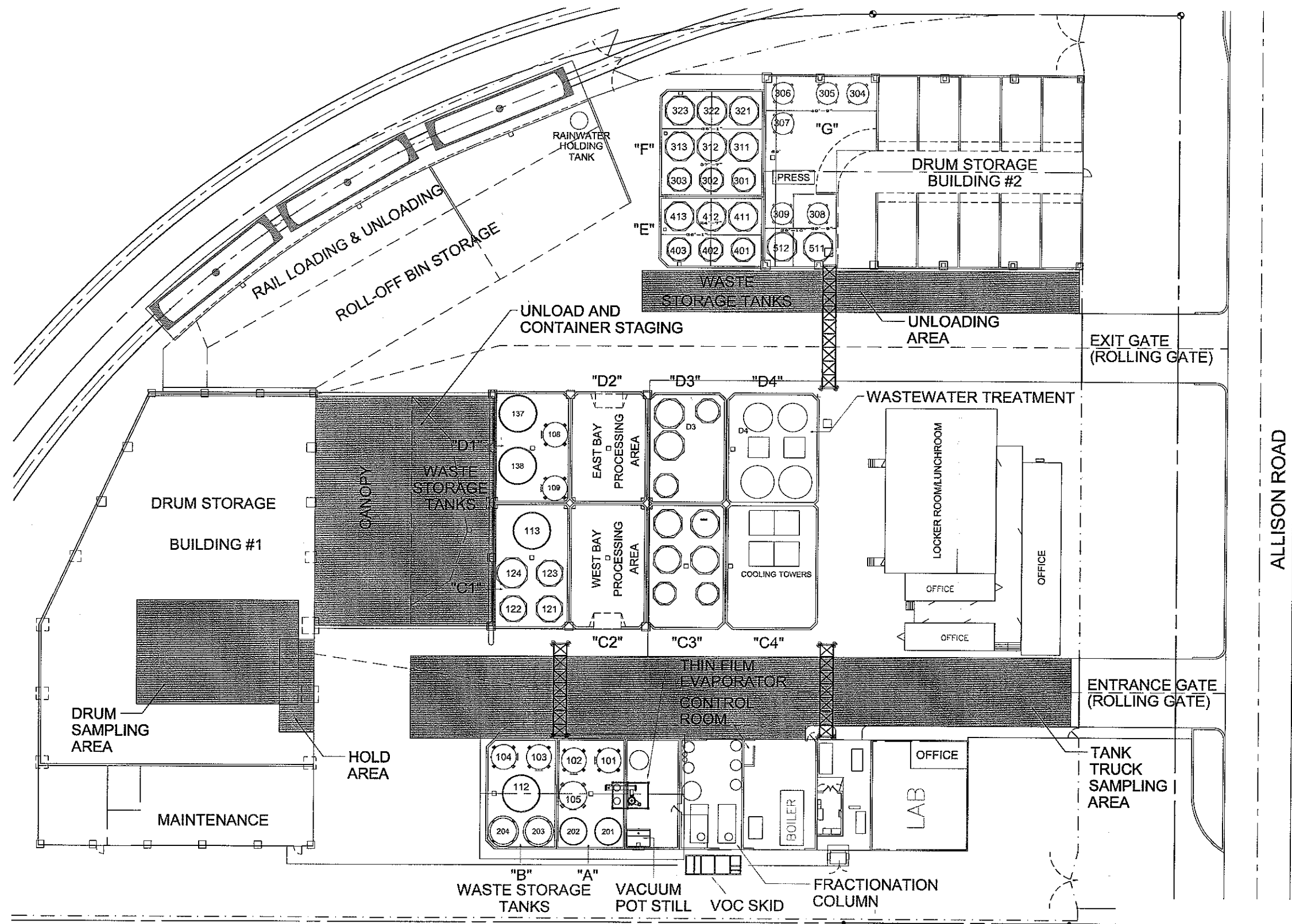
TABLE C-10
ANALYTICAL PARAMETERS, METHODS, AND RATIONALE

Parameter	Method Reference¹	Rationale
Physical Description/Observation	Romic Method	Determine variations in waste type, conformance to profile
pH	SW-846 Method	Determine variations in waste type; storage limitations; compatibility
Specific Gravity	Modified ASTM D1429-76 and/or Romic Method	Determine general chemical composition; variations in waste type
Radiation Screen	Geiger Counter/Romic Method	Screen out restricted material
Solvent Composition	Modified EPA Method, 8015 Gas Chromatography ASTM D3271	Determine composition of solvents present for use in determining ability to recycle and/or parameters necessary for treatment
Cyanide Screen	Test Strip/Romic Method	Determine variations in waste type; storage/process and discharge limitations; compatibility
Oxidizer Screen	Test strip/Romic Method	Indication of oxidizing potential
Sulfide Screen	Romic Method	Determine variations in waste type; process/discharge limitations; compatibility
Chlorine Screen	Beilstein Screen/Romic Method	Indicate presence of chlorine/chlorinated solvents
Heat of Combustion (BTU)	ASTM D240/Romic Method	Alternative fuel blending specifications
Total Metals ²	EPA methods 3005, 3050B, and 6010B	Alternative fuel specifications; ensure ability to meet discharge limits for specific treatment processes; LDR compliance
Total Halogens	Romic Method	Off-site receiving facility criteria
PCBs	EPA Method 8082	Screen out restricted material; off-site disposal specifications
Total Cyanides	Distillation/Romic Method SW846, 9014, 335.2	Screen out restricted material, off-site receiving facility criteria; process/discharge limitations, LDR compliance
Total Sulfides	SW846, 9034, 376.2/Romic Method	Off-site receiving facility criteria; LDR compliance
Flash Point	ASTM D3828	Determination of ignitability; storage limitations; compatibility, variations in waste type
Compatibility Screen	Romic Method	Determination of compatibility and proper management option
Ammonia	Romic Method	Determination of compatibility and proper management option, health and odor concerns

Footnotes:

- 1) “Romic Method” means a method developed internally to accommodate the special needs of hazardous waste verification. Romic Methods are described in Standard Operating Protocols (SOPs), which are maintained on site.
- 2) “Total Metals” means the total concentration of one or more of the eight RCRA metals in a waste, individually speciated.

FIGURES



REFERENCE: BASEMAP PROVIDED BY:
ROMIC
 ENVIRONMENTAL TECHNOLOGIES CORP.
 ROMIC SOUTHWEST, CHANDLER, ARIZONA

URS

P:\ROMIC\2005 UPDATES\NEW CADD\A16445.DWG 1-14-05

Waste Sampling Locations
 Romic - Southwest
 Chandler, Arizona

Figure C-1

Figure C-2

Primary
Process Flow Chart

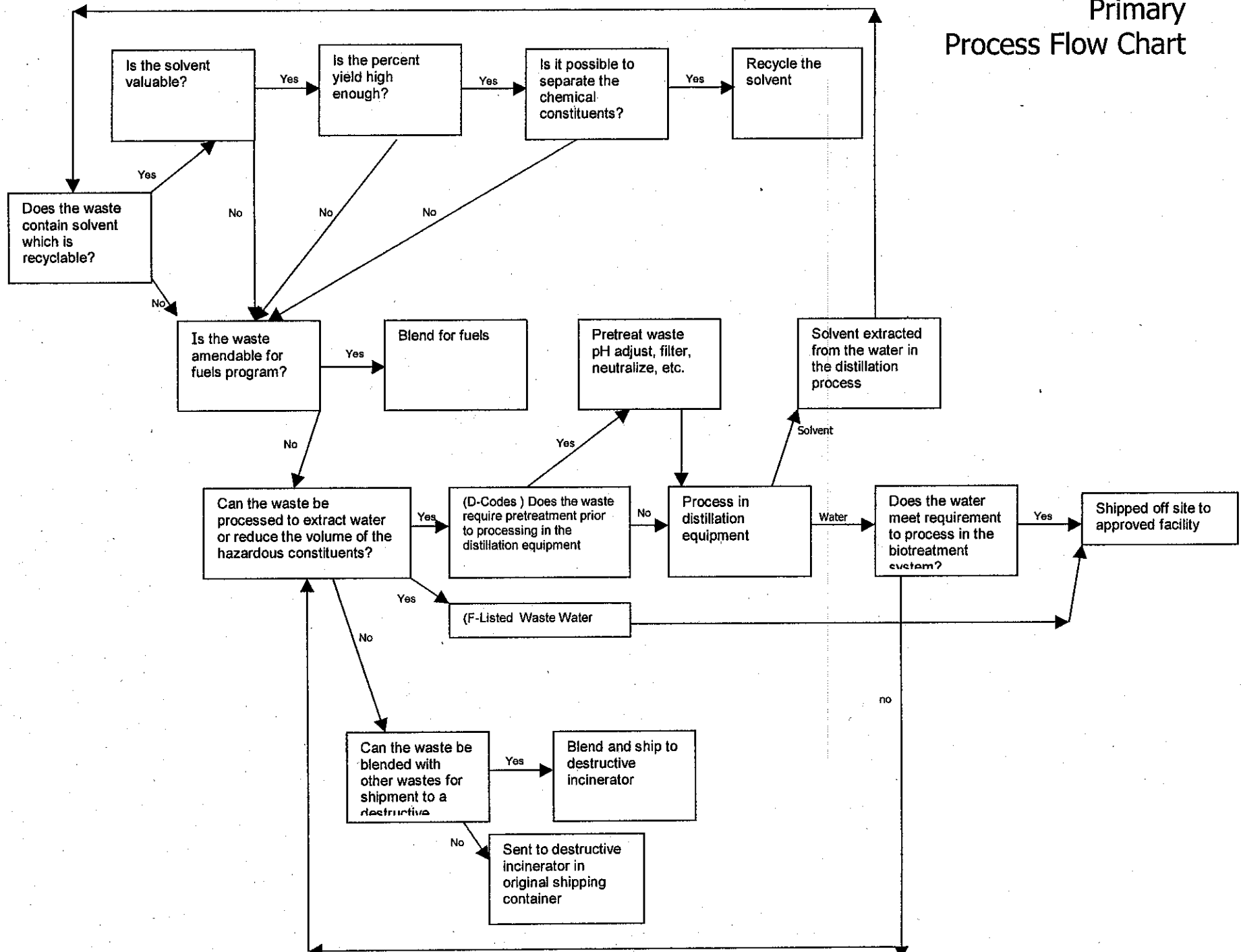
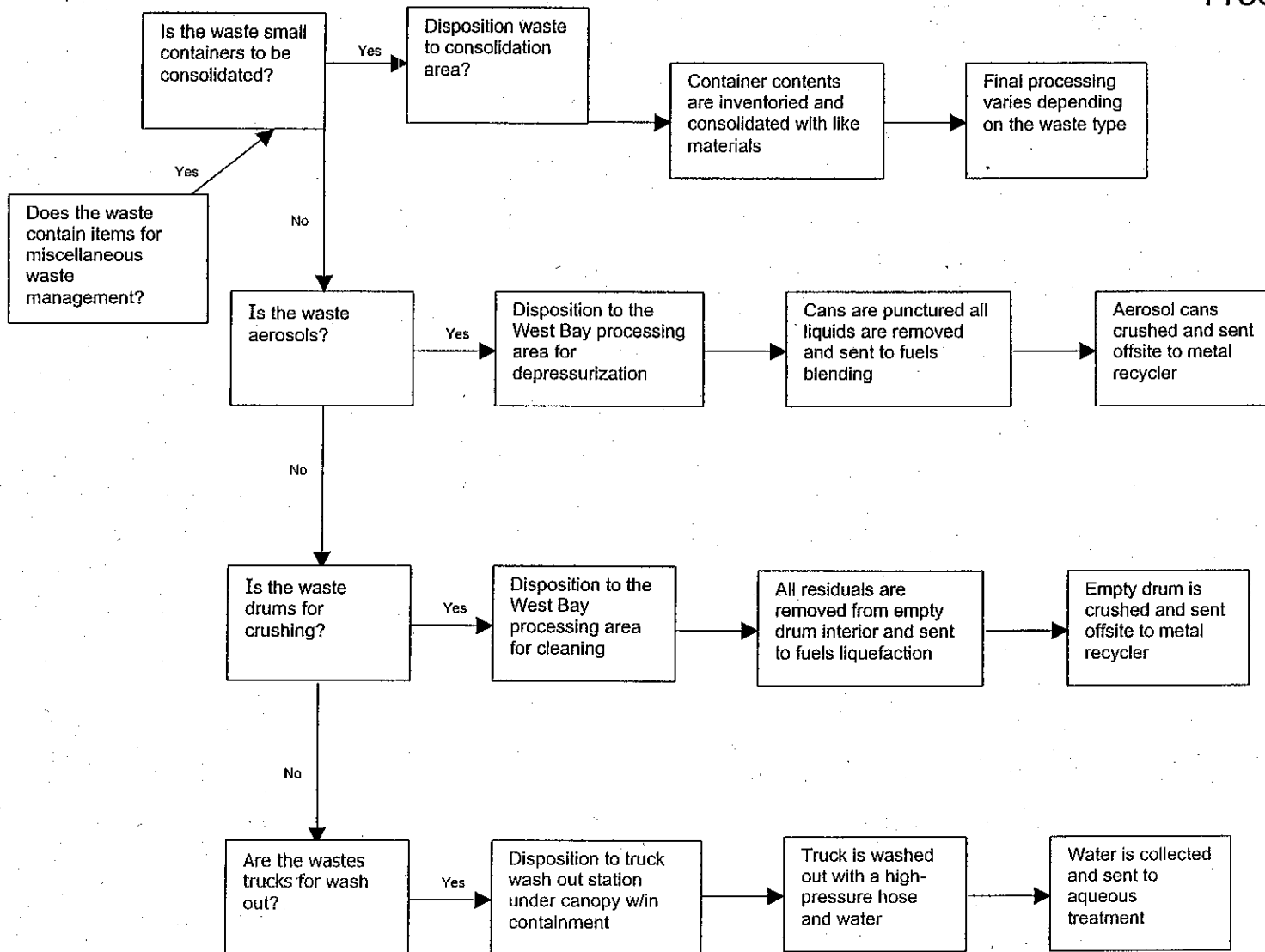


Figure C-3

Miscellaneous Process Flow Chart



No. 374591



- **Recycling**
- **Lab Packing**
- **Field Services**
- **Consulting**

- 2081 Bay Road • East Palo Alto, CA 94303-1316
Tel: (650) 324-1638 • Fax: (650) 462-2311

- PO Box 5004 • 6760 W. Allison Road • Chandler, AZ 85226-5130
Tel: (520) 796-1040 • Fax: (520) 796-6214

_____ - _____ % Total maximum concentration (must be $\geq 100\%$) _____ %

No. _____

374591

G. Metals (use parts per million with a maximum range of 1,000 ppm)

<input type="checkbox"/> Total	<input type="checkbox"/> TCLP	<input type="checkbox"/> STLC	<input type="checkbox"/> No Metals Present
Antimony Sb _____	Chromium VI Cr (D007) _____	Nickel Ni _____	
Arsenic As (D004) _____	Cobalt Co _____	Selenium Se (D010) _____	
Barium Ba (D005) _____	Copper Cu _____	Silver Ag (D011) _____	
Beryllium Be _____	Lead Pb (D008) _____	Thallium Tl _____	
Cadmium Cd (D006) _____	Mercury Hg (D009) _____	Vanadium V _____	
Chromium III Cr (D007) _____	Molybdenum Mo _____	Zinc Zn _____	

H. Other Properties (check all that apply)

- | | | |
|---|--|---|
| <input type="checkbox"/> Lab Pack - Assorted | <input type="checkbox"/> <20% VOC | <input type="checkbox"/> Benzene NESHAP |
| <input type="checkbox"/> DOT Corrosive Only | <input type="checkbox"/> Reactive Cyanide | <input type="checkbox"/> Ozone Depleting |
| <input type="checkbox"/> Oxidizer | <input type="checkbox"/> Reactive Sulfide | <input type="checkbox"/> Ammonia Containing |
| <input type="checkbox"/> Organic Peroxide | <input type="checkbox"/> Flammable Solid | <input type="checkbox"/> Highly Odorous |
| <input type="checkbox"/> Polymeric Resin | <input type="checkbox"/> Dangerous When Wet | <input type="checkbox"/> Compressed Gas |
| <input type="checkbox"/> OSHA Carcinogen | <input type="checkbox"/> Spontaneously Combustible | <input type="checkbox"/> Medical / Infectious |
| <input type="checkbox"/> Acutely Hazardous (P code) | <input type="checkbox"/> Pyrophoric / Air Reactive | <input type="checkbox"/> Radioactive |
| <input type="checkbox"/> CA Extremely Hazardous | <input type="checkbox"/> Explosive / Shock Sensitive | <input type="checkbox"/> PCB Containing |
| <input type="checkbox"/> Pesticide Containing | <input type="checkbox"/> Non-Friable Asbestos | <input type="checkbox"/> Dioxin Containing |
| | <input type="checkbox"/> Friable Asbestos | |

Complete Non-Hazardous Waste Certification for: ☐ Non-Hazardous Waste ☐ Triple-Rinsed Containers

I. Shipping Information

Shipping Name _____

Technical n.o.s. or NON-RCRA Name _____

Hazard Class _____ UN / NA

--	--	--	--

 PG ☐ I ☐ II ☐ III

EPA Waste Code(s) _____

Subcategories _____ ☐ WW ☐ NWW

CA Code

--	--	--

 Other State Code(s) _____ Lowest RQ Constituent _____ / Pounds _____

☐ "Poison" ☐ "Poison Inhalation Hazard, Zone _____" ☐ "Dangerous When Wet" ☐ Ozone Depleting Label ☐ DOT-E _____

Primary Label _____ Subsidiary Label _____ Emergency Response Guidebook # _____

Special Handling Instructions _____

J. Certification

I certify that all information submitted in this and all attached documents is complete and accurate and that all known or suspected hazards have been disclosed. I further certify that any samples submitted in conjunction with this document are representative of the waste to be shipped.

Authorized Generator Signature _____

Print Name/Title _____ Date ____ / ____ / ____

Attachments _____ Total Pages ☐ MSDS ☐ Lab Analysis Other _____

ROMIC USE ONLY 7/01

<input type="checkbox"/> Standard	<input type="checkbox"/> Generic	<input type="checkbox"/> Lab Pack	<input type="checkbox"/> Certificate of Disposal Requested	<input type="checkbox"/> No Sample	<input type="checkbox"/> Rush
<input type="checkbox"/> Recycle/Return - Specifications _____				Sample # _____	
<input type="checkbox"/> New Customer	<input type="checkbox"/> Existing Customer	TSM _____	CSR _____		
Comments _____					

Appendix C-1

Laboratory Quality Assurance Procedures Manual

Appendix C-1

Laboratory Quality Assurance Procedure Manual

TABLE OF CONTENTS

Section No.		Page No.
1	PROJECT DESCRIPTION	i
	1.1 Purpose	i
	1.2 Scope	i
	1.3 QA Objectives	i
2	SAMPLING PROCEDURES	i
	2.1 Purpose	i
	2.2 Responsibilities	i
	2.3 Training	i
3	SAMPLE CUSTODY	ii
	3.1 Profile Samples	ii
	3.2 Waste Shipments	ii
4	SAMPLE RETENTION	iii
	4.1 Profile Samples	iii
	4.2 Waste Samples	iii
	4.3 Calorimetry	iii
	4.4 Total Halogens	iii
	4.5 Karl Fischer Analysis	iii
	4.6 pH Measurement	iii
	4.7 Ion Chromatography	iii
5	CALIBRATION PROCEDURES AND FREQUENCY	iii
	5.1 Gas Chromatography Methods	iv
6	DATA REDUCTION, REPORTING, AND REVIEW	iv
	6.1 Data Reduction	iv
	6.2 Data Reporting and Review	iv
	6.3 Responsibility	iv
7	ANALYTICAL PROCEDURES	iv
8	PREVENTATIVE MAINTENANCE	iv

1 PROJECT DESCRIPTION

1.1 Purpose

The laboratory of Romic Environmental Technologies Corporation maintains specific operational, test, and control procedures designed to assure that the analyses conducted produce accurate and reliable data. The data is used by various operating groups within Romic to properly classify and manage the received waste. The procedures established to assure accurate test results is described in the Quality Assurance Procedure Manual.

1.2 Scope

This QAPM addresses the specific needs of Romic's laboratory as part of a hazardous waste management facility (TSD) and is not designed to address the special needs of a state certified laboratory.

1.3 QA Objectives

Each analytical method maintains its own set of quality assurance objectives. These objectives are specified in the Standard Operating Procedures (SOP's) for each analysis. A summary of the QA/QC requirements for laboratory methods is listed in section 6 of this manual, however any requirements set forth in a method's SOP supercedes anything written here.

2 SAMPLING PROCEDURES

2.1 Purpose

The primary objective of the laboratory's sampling program is to collect samples that are accurate, reliable, and representative of the waste stream as a whole. A representative sample is a small portion of the waste that contains all the properties, constituents, and characteristics of the entire waste stream in the identical quantity and intensity. Detailed instructions for sampling waste received at Romic are set forth in SOP RSW-LAB-022. The Laboratory Drum Sampler has primary responsibility for all sampling activities on the facility.

2.2 Responsibilities

The designated drum sampler is responsible for:

- a) Determining the appropriate equipment, sampling techniques and sample containers to be used in the sampling process.
- b) Cleaning sampling devices, containers, and other equipment in order to eliminate the possibility of cross contamination between samples.
- c) Ensuring that sufficient quantity of sample is obtained.
- d) Checking that all sample documentation i.e., labels, log-sheets, chain of custody records, packing lists are correct and transfer this information to the laboratory.

2.3 Training

All sampling personnel are trained to be prepared for the potential hazards associated with handling toxic materials. They must follow the procedures established by the Health and Safety Department. They are required to wear appropriate personal protective equipment throughout the entire sampling process.

3 SAMPLE CUSTODY

3.1 Profile Samples

For the purpose of profile approval, a formal chain of custody is not required. However, many of the essential elements of a chain of custody procedure are followed to assure the integrity of the profile samples.

- a) All samples sent to Romic must be accompanied by a sample “Profile Form”. Each profile form has a unique number that is used to identify the waste stream and track the sample.
- b) The generator is responsible for obtaining a representative sample of the waste, completing the profile form and labeling the profile sample with the profile number. By filling out and signing the profile form the generator is certifying that the sample is representative of the waste stream.
- c) The profile paperwork and sample arrive at the facility together either hand delivered by the generator, a representative of Romic, or shipped via a courier such as UPS.
- d) Laboratory personnel receive the sample and paperwork, and forward the profile form to Customer Service Department. The Customer Service Department reviews the profile form for completeness and routes the form to the laboratory document coordinator.
- e) The Document Coordinator enters customer and generator information into the waste tracking database, and returns the profile form to the laboratory.
- f) Laboratory personnel then record receipt of the profile into the Profile Log Database. After analysis and approval by the Laboratory Manager, the profile is logged out of the lab in the Profile Log Database.
- g) The Laboratory is responsible for the proper storage and disposal of all profile samples. Data sheets and laboratory records are retained as part of the permanent documentation until facility closure

3.2 Waste Shipments

- a) All container and bulk shipments are assigned a unique tracking number when they are received. A drum sampling analysis sheet is generated which will accompany the samples through the entire approval process. The generator name and manifest information is entered into Romic’s waste tracking database.
- b) Each sample taken is labeled with the tracking number of the drums that it was taken from.
- c) The samples and the drum sampling analysis sheet are taken together to the laboratory. Laboratory personnel log receipt of the samples into the laboratory KPI database.
- d) Laboratory personnel are responsible for the care and custody of samples from the time they are received until the sample is exhausted. Data sheets and laboratory records are to be retained as part of the permanent documentation until facility closure.

4 SAMPLE RETENTION

The laboratory retains samples for three months for the specific purpose of allowing re-sampling in the event of a dispute or discrepancy in the waste shipment. At the end of the retention time the samples are handled as hazardous waste, and consolidated or put into drums for further management.

4.1 Profile Samples

Profile samples required per the Waste Analysis Plan will be retained for three months. They are stored in secondary containment in the laboratory. After three months, the samples will be treated as a hazardous waste and managed accordingly.

4.2 Waste Samples

Incoming waste shipments are sampled and analyzed per the requirements set forth in the Waste Analysis Plan. Samples are retained for up to three months in the original sample containers. They are stored in secondary containment in the laboratory. After three months the samples will be treated as a hazardous waste and managed accordingly.

4.3 Calorimetry

A benzoic acid tablet is run at a minimum monthly to check instrument operation. EE values are updated after a bomb has been resurfaced or as necessary based on the results of the benzoic acid standard runs.

4.4 Total Halogens

Titrate a 1% chloride standard monthly, or as necessary, to check the silver nitrate titrant stability.

4.5 Karl Fischer Analysis

Deionized water is used as the reference standard to set 100% titration endpoint. The water factor is determined daily and whenever the titration solution is changed.

4.6 pH Measurement

The meter is calibrated daily, with three buffer solutions pH 4, 7, and 10. An independent QC solution of pH 7.0 is used to check the calibration.

4.7 Ion Chromatography

The methods are calibrated using a one-point curve. A method QC and blank are run prior to every analysis set and at 10% intervals thereafter. The methods are recalibrated only when QC runs indicate it is necessary. The blank run should show the system is free from contamination.

5 CALIBRATION PROCEDURES AND FREQUENCY

The level and frequency of calibration will vary with each method as well as the specific requirements of the task at hand. In many cases, for the support of production processes, a completely verified and substantiated calibration procedure is not necessary or desirable. For those cases where a rigorous calibration procedure is required, the following are the minimum requirements.

5.1 Gas Chromatography Methods

- a) Solvent Screens: A two-point calibration curve is maintained using 25 of the most commonly received solvents. The curve's range is from 10% to 50% w/w composition. A QC solution containing five components 20% each w/w, selected for their range of retention times, is run each day and then at 10% intervals thereafter. Retention time standards for another 38 common industrial solvents are available primarily as a qualitative standard.
- b) PCB Analysis: A method blank, Arochlor 1242 standard, and a matrix spike are run before each analysis set. The matrix spike and blank are run at 10% intervals thereafter. After any PCB's are identified in the sample, the appropriate Arochlor standard is run and the sample amount is calculated using a one-point curve with the standard run. A retention time library for eight common Arochlor's is available for comparison and pattern matching. The library chromatograms are updated as required.

6 DATA REDUCTION, REPORTING, AND REVIEW

6.1 Data Reduction

All data generated is reduced using a combination of manual and automated computer programs. The Laboratory Manager or his designated Chemist reviews all data.

6.2 Data Reporting and Review

Data is reported in a number of forms as needed by the laboratory to assure proper management of the hazardous waste. At a minimum, all test results required in the facility's waste analysis plan are recorded and maintained as part of the facility's Operating Record. The Laboratory Manager is responsible for reviewing the files that are part of the Operating Record to assure QA policies are met.

6.3 Responsibility

Laboratory analysts are responsible for their own QA/QC data. This data has to be kept in the designated laboratory areas at all times. Each analyst is required to follow the QA/QC as specified in each method's SOP, and the Waste Analysis Plan. It is the analyst's responsibility to initiate any necessary corrective actions. It is the Laboratory Manager's responsibility to review and approve the corrective actions that were taken by the analysts.

7 ANALYTICAL PROCEDURES

All analyses are conducted in accordance with the specific test method referenced or described in the Waste Analysis Plan. The methods used are either from ASTM, EPA SW-846 or Romic Methods of the Part B Permit Application. All analysts are required to follow methods as specified therein.

8 PREVENTATIVE MAINTENANCE

Trained laboratory personnel perform all instrument maintenance that can affect the quality of data generated. Laboratory balances, viscometers, radiation meters, and colorimeter bombs are not maintained by Laboratory personnel. They are serviced, calibrated and certified annually by either the manufacturer or other vendor.