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### DEPARTMENT OF HEALTH

#### NOTICE OF PROPOSED RULEMAKING

### HAZARDOUS WASTE REGULATIONS

The Director, Department of Health, pursuant to the authority set forth in sections 6 and 24 of the District of Columbia Hazardous Waste Management Act of 1977, as amended, D.C. Law 2-64 §6, D.C. Code, Sections 6-705 and 6-738 (1995 Repl. Vol.) and Mayor's Order 98-55, dated April 15, 1998, hereby gives notice of intent to adopt amendments to Chapters 40 through 54 of Title 20 of the District of Columbia Municipal Regulations (DCMR), "Environment", in not less than thirty (30) days from the date of publication of this notice in the <u>DC Register</u>. Further, these rules shall not become effective until approved by the Council of the District of Columbia, or 45 days after submission to the Council, not including Saturdays, Sundays, legal holidays and days of Council recess, if the Council has not disapproved the regulations.

The proposed amendments will make the District's Hazardous Waste Regulations equivalent to and at least as stringent as the federal Hazardous Waste Regulations published at 40 C.F.R. Parts 260 through 279, revised as of July 1, 1998. In some instances, the District's regulations are more stringent or broader in scope than the federal regulations.

These amended regulations contain rules governing inspection and enforcement procedures, the identification and listing of hazardous wastes, standards for generators, transporters and owners and operators of treatment, storage and disposal facilities, standards for the management of specific hazardous wastes and specific types of hazardous waste management facilities. a description of the hazardous waste permit program and procedures for decision making.

These rules are available for inspection at the Martin Luther King, Jr. Library and the Department of Health, Environmental Health Administration, Hazardous Waste Division, 51 N Street, N.E., 3<sup>rd</sup> Floor, Washington. D.C. 20002, between the hours of 8:30 a.m. and 4 p.m. Monday through Friday.

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### CHAPTER 40 GENERAL STANDARDS FOR THE MANAGE-MENT OF HAZARDOUS WASTE

#### 4000 GENERAL PROVISIONS

- 4000.1 This chapter shall provide overview information, general standards and regulations for the management of hazardous waste in the District of Columbia. A petition must be made to the EPA Administrator to add a testing or analytical method pursuant to §\$4001.6 through 4001.9, or to exclude a waste pursuant to §4001.10.
- 4000.2 Any information provided to the Department under this chapter shall be made available to the public to the extent and in the manner authorized by the D.C. Freedom of Information Act (FOIA), D.C. Law 1-96, D.C. Code §§1-1521 through 1-1529 (1992 Repl. Vol.), and regulations implementing FOIA (1 DCMR, Chapter 4) as applicable.
- 4000.3 Any person who submits information to the Department under this chapter may assert a claim of business confidentiality covering all or part of that information by following the procedures set forth by the Mayor. Information covered by the claim shall be disclosed by the Department in accordance with §4000.2.

#### 4001 RULEMAKING PETITIONS

- 4001.1 Any person may petition the Director of the Department to modify or revoke any provision of this chapter except those regulations that specify testing or analytical methods.
- 4001.2 Each petition shall be submitted to the Director by certified mail and shall include the following:
  - (a) The petitioner's name and address;
  - (b) A statement of the petitioner's interest in the proposed action;
  - (c) A description of the proposed action, including (where appropriate) suggested regulatory language; and
  - (d) A statement of the need and justification for the proposed action, including any supporting tests, studies, or other information.
- 4001.3 The Director shall make a tentative decision to grant or deny a petition and shall publish notice of the tentative decision, either in the form of a proposed rule or a tentative determination to deny the petition in the *District of Columbia Register* for written public comment.
- 4001.4 Upon the written request of any interested person, the Director may, at his or her discretion, hold an informal public hearing to consider oral comments on the tentative decision. A person requesting a hearing shall state the issues to be raised and explain why written comments would not suffice to communicate the person's views. The Director may in any case decide on his or her own motion to hold an informal public hearing.
- 4001.5 After evaluating all public comments, the Director shall make a final decision by publishing in the *District of Columbia Register* a regulatory amendment or a denial of the petition.
- 4001.6 Any person seeking to add a testing or analytical method to Chapter 41 or 44 shall petition EPA for a regulatory amendment. The petitioner shall demonstrate to the satisfaction of the

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Administrator that the proposed method is equal to or superior to the corresponding method prescribed in Chapter 41 or 44 in terms of its sensitivity, accuracy, and precision (that is, reproducibility).

- 4001.7 Each petition shall include, in addition to the information required by §4001.2, the following:
  - (a) A full description of the proposed method, including all procedural steps and equipment used in the method;
  - (b) A description of the types of wastes or waste matrices for which the proposed method may be used;
  - (c) Comparative results obtained from using the proposed method with those obtained from using the relevant or corresponding methods prescribed in Chapter 41 or 44;
  - (d) An assessment of any factors which may interfere with, or limit the use of, the proposed method; and
  - (e) A description of the quality control procedures necessary to ensure the sensitivity, accuracy and precision of the proposed method.
- 4001.8 After receiving a petition for an equivalent method, the Administrator may request any additional information on the proposed method which he or she may reasonably require to evaluate the method.
- 4001.9 If the Administrator amends the Federal regulations to permit use of a new testing method, the method shall be incorporated in *Test Methods for the Evaluation of Solid Waste: Physical/Chemical Methods* (incorporated by reference, see Chapter 53).
- 4001.10 Any person seeking to exclude a waste at a particular generating facility from the lists in \$4109 may file a petition with the Administrator of EPA pursuant to 40 CI'R Part 260.22.
- 4001.11 The Director may decide on a case-by-case basis that persons accumulating or storing the recyclable materials described in §4103.2(d) should be regulated under §§4103.4, 4103.5 and 4103.6. The basis for this decision is that the materials are being accumulated or stored in a manner that does not protect human health and the environment because the materials or their toxic constituents have not been adequately contained, or because the materials being accumulated or stored together are incompatible. In making this decision, the Director will consider the following factors:
  - (a) The types of materials accumulated or stored and the amounts accumulated or stored;
  - (b) The method of accumulation or storage;
  - (c) The length of time the materials have been accumulated or stored before being reclaimed;
  - (d) Whether any contaminants are being released into the environment, or are likely to be so released; and
  - (e) Other relevant factors.
- 4001.12 The procedures for the decision under §4001.11 are set forth in §4001.13.
- 4001.13 The Director shall use the following procedures when determining whether to regulate hazardous waste recycling activities described in §4103.2(d) under the provisions of §§4103.4, 4103.5 and 4103.6, rather than under the provisions of §4505 of this subtitle:

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- (a) If a generator is accumulating the waste, the Director shall issue a notice setting forth the factual basis for the decision and stating that the person must comply with the applicable requirements of §§4200, 4202, 4203 and 4204 of this subtitle. The notice shall become final within thirty (30) days, unless the person served requests a public hearing to challenge the decision. Upon receiving the request, the Director shall hold a public hearing. The Director shall provide notice of the hearing to the public and allow public participation at the hearing. The Director shall issue a final order after the hearing stating whether or not compliance with Chapter 42 is required. The order becomes effective thirty (30) days after service of the decision unless the Director specifies a later date or unless an appeal is requested. The order may be appealed to the District Court of Appeals, under §4010.12, by any person who participated in the public hearing. The Court may choose to grant or to deny the appeal. Final Agency action occurs when a final order is issued and Agency review procedures are exhausted.
- (b) If the person is accumulating the recyclable material at a storage facility, the notice will state that the person shall obtain a permit in accordance with all applicable provisions of Chapters 46 and 47 of this subtitle. The owner or operator of the facility shall apply for a permit within no less than sixty (60) days and no more than six (6) months of notice, as specified in the notice. If the owner or operator of the facility wishes to challenge the Director's decision, the owner or operator may do so in the permit application, in a public hearing held on the draft permit, or in comments filed on the draft permit shall specify the reasons for the Agency's determination. The question of whether the Director's decision was proper will remain open for consideration during the public comment period discussed under §4700.21 of this subtitle and in any subsequent hearing.
- 4001.14 Any person seeking to add a hazardous waste or a category of hazardous waste to the universal waste regulation of Chapter 48 of this subtitle may petition for a regulatory amendment under §§4001.1 through 4001.5, 4001.14, and 4805. The procedures for this petition are as follows:
  - (a) The petitioner shall demonstrate to the satisfaction of the Director that regulation under the universal waste regulations of Chapter 48 of this subtitle is appropriate for the waste or category of waste, will improve management practices for the waste or category of waste, will improve the implementation of the hazardous waste program. The petition shall include the information required by §4001.2, and the petition should also address as many of the factors listed in §4805.4 as are appropriate for the waste or category of waste addressed in the petition.
  - (b) The Director shall grant or deny a petition using the factors listed in §4805.4. The decision shall be based on the weight of evidence showing that regulation under Chapter 48 of this subtitle is appropriate for the waste or category of waste, will improve management practices for the waste or category of waste, and will improve implementation of the hazardous waste program.
  - (c) The Director may request additional information needed to evaluate the merits of the petition.
- 4001.15 In accordance with the standards and criteria in §4001.16 and the procedures in §4001.18, the Director may determine on a case-by-case basis that the following recycled materials are not solid wastes:

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(a) Materials that are accumulated speculatively without sufficient amounts being recycled (as defined in §5400.1);

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- (b) Materials that are reclaimed and then reused within the original production process in which they were generated; and
- (c) Materials that have been reclaimed but must be reclaimed further before the materials are completely recovered.
- 4001.16 Variances from classification as a solid waste can be obtained from the Director who will use the procedures found at §4001.18 for evaluating applications. Requests for variance may be granted under the following situations:
  - (a) The Director may grant requests for a variance from classification as a solid waste those materials that are accumulated speculatively without sufficient amounts being recycled if the applicant demonstrates that sufficient amounts of the material will be recycled or transferred for recycling in the following year. If a variance is granted, it is valid only for the following year, but can be renewed, on an annual basis, by filing a new application. The Director's decision shall be based on the following criteria:
    - (1) The manner in which the material is expected to be recycled, when the material is expected to be recycled, and whether this expected disposition is likely to occur (for example, because of past practice, market factors, the nature of the material, or contractual arrangements for recycling);
    - (2) The reason that the applicant has accumulated the material for one (1) or more years without recycling 75 percent of the volume accumulated at the beginning of the year;
    - (3) The quantity of material already accumulated and the quantity expected to be generated and accumulated before the material is recycled;
    - (4) The extent to which the material is handled to minimize loss; and
    - (5) Other relevant factors.
  - (b) The Director may grant requests for a variance from classification as a solid waste those materials that are reclaimed and then reused as feedstock within the original production process in which the materials were generated if the reclamation operation is an essential part of the production process. This determination will be based on the following criteria:
    - (1) How economically viable the production process would be if it were to use virgin materials, rather than reclaimed materials;
    - (2) The prevalence of the practice on an industry-wide basis;
    - (3) The extent to which the material is handled before reclamation to minimize loss;
    - (4) The time period between generating the material and reclaiming it, and the time between reclamation and return to the original primary production process;
    - (5) The location of the reclamation operation in relation to the production process;
    - (6) Whether the reclaimed material is used for the purpose for which it was originally produced when it is returned to the original process and whether it is returned to the process in substantially its original form;
    - (7) Whether the person who generates the material also reclaims it; and

- (8) Other relevant factors.
- (c) The Director may grant requests for a variance from classification as a solid waste those materials that have been reclaimed but must be reclaimed further before recovery is completed if, after initial reclamation, the resulting material is commodity-like (even though it is not yet a commercial product, and has to be reclaimed further). This determination will be based on the following factors:
  - (1) The degree of processing the material has undergone and the degree of further processing that is required;
  - (2) The value of the material after it has been reclaimed;
  - (3) The degree to which the reclaimed material is like an analogous raw material;
  - (4) The extent to which an end market for the reclaimed material is guaranteed;
  - (5) The extent to which the reclaimed material is handled to minimize loss; and
  - (6) Other relevant factors.
- 4001.17 In accordance with the standards and criteria in §5400.1 (definition of "boiler"), and the procedures in §4001.18, the Director may determine on a case-by-case basis that certain enclosed devices using controlled flame combustion are boilers, even though they do not otherwise meet the definition of boiler contained in §5400.1 after considering the following criteria:
  - (a) The extent to which the unit has provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases;
  - (b) The extent to which the combustion chamber and energy recovery equipment are of integral design;
  - (c) The efficiency of energy recovery, calculated in terms of the recovered energy compared with the thermal value of the fuel;
  - (d) The extent to which exported energy is utilized;
  - (e) The extent to which the device is in common and customary use as a "boiler" functioning primarily to produce steam, heated fluids, or heated gases; and
  - (f) Other factors, as appropriate.
- 4001.18 The Director shall use the following procedures in evaluating applications for variances from classification as a solid waste or applications to classify particular enclosed controlled flame combustion devices as boilers:
  - (a) The applicant shall apply to the Director for the variance. The application shall address the relevant criteria contained in §4001.16 or §4001.17; and
  - (b) The Director shall evaluate the application and issue a draft notice tentatively granting or denying the application. Notification of this tentative decision shall be provided by newspaper advertisement or radio broadcast in the locality where the recycler is located. The Director shall accept comment on the tentative decision for thirty (30) days, and may also hold a public hearing upon request or at his or her discretion. The Director shall issue a final decision after the close of the comment period or after the hearing (if any).

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#### 4002 RIGHT OF ENTRY

- 4002.1 The Director, or his or her designee, shall have the right, upon presentation of appropriate credentials to the owner, operator or agent in charge, to enter without delay any place where hazardous wastes are or have been generated, stored, treated, transported or disposed. for the purpose of enforcing the Act or this subtitle, as set forth in §4002.
- 4002.2 Appropriate credentials for making an inspection shall include, but are not limited to, the following:
  - (a) A duly issued photo identification card or badge showing the name of the inspector and proof of employment with the Department; or
  - (b) A notice of inspection issued by the Environmental Health Administration. Pesticides, Hazardous Waste and Underground Storage Tank Division, containing at least the following information:
    - (1) The name of the owner, operator, or agent in charge;
    - (2) The address to be inspected;
    - (3) The date of the inspection; and
    - (4) The signature of the inspector.
- 4002.3 Entry may be at any reasonable time, with or without prior notice, as follows:
  - (a) In emergency situations, or where there is a potential immediate threat to public health or the environment, the Director shall have the right to enter at any hour; or
  - (b) In non-emergency situations, entry between the hours of 7:30 a.m. and 6 p.m. on weekdays, and entry during any hours in which the owner or operator is open for business shall be deemed "reasonable."

### 4003 ENTRIES FOR INSPECTIONS AND MONITORING

- 4003.1 Upon entry, the Director or designated inspector may do the following:
  - (a) Inspect the premises where the waste is or was located and surrounding areas that may be impacted;
  - (b) Inspect and obtain samples of any waste or substance used in the treatment of waste; and
  - (c) Inspect and copy any records, reports, information or test results relating to the purposes of the Act.
- 4003.2 If the Director obtains any samples before leaving the premises, he or she shall give the owner, operator, or agent in charge, a receipt that describes the samples obtained, and, if requested, a portion of each sample equal in volume or weight to the portion obtained. If any analysis is made of the samples, a copy of the results of the analysis shall be furnished promptly to the owner, operator, or agent in charge.
- 4003.3 In addition to information required to be produced during an inspection as provided by §4003.1, the Director may require in writing that a generator, transporter, or owner or

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operator of a treatment, storage or disposal (TSD) facility, or other person handling hazardous wastes, provide any information or record with respect to any of the wastes or the handling of the wastes, as may be necessary to determine compliance with the Act or this subtitle.

- 4003.4 Where the Director makes a written request pursuant to \$4003.3 for the submission of records, documents, responses to specific questions or for other related information, the records, documents or responses shall be submitted to the Director within fourteen (14) days of receipt of a request therefor, unless the Director specifies a different time period.
- 4003.5 The Director may require a generator, transporter, owner or operator of a TSD facility or other responsible party to conduct monitoring or testing, or take any necessary corrective action in accordance with the requirements of the Act and this subtitle.
- 4003.6 When requiring a responsible party to take action pursuant to the Act or this subtitle, the Director may issue a field notice or directive letter, which shall advise the responsible party of the action he or she is required to take and shall state the time period within which the action must be performed, or the Director may take other enforcement actions authorized by this chapter or other provisions of this subtitle.
- 4003.7 The provisions of §4003.5 shall not preclude the Director or a designated inspector from giving an oral directive to a responsible party to cease and desist from an activity or to take immediate action to mitigate dangers from a spill or release, in a situation where there is potential serious danger to health or the environment; provided, that the inspector shall, as soon as practicable thereafter, issue a written directive incorporating the contents of the oral directive.
- 4003.8 When dangerous chemicals or hazardous waste on property pose an imminent threat to human health or the environment, the Director may post the property and restrict access. The posting shall provide the public with notice that a dangerous condition exists and shall prohibit the owner from removing or handling the waste without prior approval by the Director or his or her designee.

#### 4004 JURISDICTION AND DELEGATION OF AUTHORITY FOR ADMINISTRATIVE HEARINGS

- 4004.1 In every case in which a formal administrative hearing is requested or otherwise required pursuant to the Act or pursuant to this chapter, the hearing authority of the Director may be delegated to an authorized hearing authority for the Department or the District of Columbia, which shall have jurisdiction to hear and render a final decision in the case.
- 4004.2 The D.C. Administrative Procedures Act shall govern all cases in which a hearing is requested or otherwise required.
- 4004.3 The Director, or his or her designee, shall be authorized to pursue enforcement actions through:
  - (a) The issuance of notices of violation pursuant to §4005;
  - (b) Proposed compliance orders pursuant to \$4006;
  - (c) Notices of violation combined with immediate compliance orders pursuant to §4007;
  - (d) Notices of intention to suspend or revoke a permit pursuant to §4008;
  - (e) The development and presentation of cases before the hearing authority; and

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- (f) Pursuit of civil infractions fines in accordance with §4012, or other enforcement actions authorized by this chapter.
- 4004.4 The procedures set forth in this chapter shall apply to all enforcement actions; except to the extent they are inconsistent with the provisions of Chapter 47, the provisions of Chapter 47 will prevail in cases pertaining to TSD facility permits.

#### 4005 NOTICE OF VIOLATION, THREAT, OR RELEASE

- 4005.1 Any enforcement action under the Act or pursuant to this chapter shall be commenced with a written notice of violation, threat or release issued to the generator, transporter, owner or operator of a TSD facility, or any other responsible party deemed appropriate by the Director, except as provided in §§4007 and 4008.
- 4005.2 The notice of violation, threat or release shall identify the alleged violation(s), threat or release and may require the generator, transporter, owner or operator of a TSD facility or other person responsible (respondent) to conduct monitoring, testing or take the corrective measures the Director considers reasonable and necessary.
- 4005.3 A "Notice of Violation," "Notice of Threat," or "Notice of Release"; shall make clear the basis for the notice and that failure to take the measures directed, will constitute a violation of the Act or regulations. A field notice or directive letter issued pursuant to §4003.6 may serve as a notice of violation provided it meets the requirements of §4005.
- 4005.4 A notice of violation, threat, or release shall be served on the respondent or his or her authorized agent in person or by certified mail return receipt requested. If the responsible party fails or refuses to accept certified mail, the notice of violation, threat or release may be served by regular first class mail; Provided, that the following requirements are met:
  - (a) The notice is sent to the last known address listed on the EPA ID Number application, Annual Report or other official correspondence submitted to the Department; or
  - (b) The accuracy of the address is verified.
- 4005.5 Where there is a threat to human health or the environment, or a release of hazardous waste into the environment, and the responsible party or address of the responsible party is unknown, or cannot be located, written notice shall be served by conspicuously posting the notice on the property where the threat exists or the release occurred and sending a copy to the last known address via certified mail.

### 4006 PROPOSED COMPLIANCE ORDER

- 4006.1 If the respondent upon whom a notice of violation, threat or release has been served fails to comply with the testing, monitoring or corrective measures required in the notice, the Director, or his or her designee, may issue a proposed compliance order.
- 4006.2 A proposed compliance order shall:
  - (a) Include a statement of the facts and nature of alleged violations and the legal grounds for relief;
  - (b) Allow a reasonable time for compliance with the order consistent with the likelihood for harm and the need to protect health, safety, life, property, and the environment;
  - (c) Advise the respondent that he or she has a right to a hearing and to legal representation;

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- (d) Inform the respondent of any scheduled hearing date or the actions necessary to obtain a hearing and the consequences of failure to comply with the proposed order or failure to request a hearing;
- (e) Set forth the action or actions that the respondent is required to do or the activity or activities that the respondent is required to stop to comply with the order; and
- (f) State the amount of any penalties to be assessed for failure to comply with the order.
- 4006.3 A proposed compliance order shall be served by one (1) of the following methods:
  - (a) Personal service on the respondent or the respondent's agent;
  - (b) Delivering the compliance order to the last known home or business address of the respondent and leaving it with a person over the age of eighteen (18) years residing at the address or employed there;
  - (c) Mailing the compliance order by U.S. mail, first class certified, postage prepaid, to the last known home or business address of the respondent or the respondent's agent; or
  - (d) Any other means set forth in D.C. Law 2-64 or any amendment thereto.
- 4006.4 A proposed compliance order may state in the order or accompanying summons or instructions that the respondent is required to file an answer to the compliance order, the time within which to respond, and the form of response required.

#### 4007 NOTICE OF VIOLATION, THREAT OR RELEASE COMBINED WITH IMMEDIATE COMPLIANCE ORDER/CEASE AND DESIST ORDER

- 4007.1 The Program Manager for the Hazardous Waste Division, or his or her designee, may issue or file a motion before an Administrative Law Judge (ALJ) to issue a notice of violation together with an immediate compliance order, to require a person to correct a situation that immediately threatens the public health, welfare or the environment, or to prohibit any person from engaging in any unauthorized activity that immediately endangers or causes damage to the public health, welfare or the environment.
- 4007.2 When a notice of violation and immediate compliance order is authorized under §4007, reasonable notice shall be a notice appropriate to the emergency nature of the situation, and it shall not be necessary to first issue a proposed compliance order or provide an opportunity for a prior hearing pursuant to §4006.
- 4007.3 An immediate compliance order issued pursuant to \$4007 shall be served in the same manner as a proposed compliance order is served pursuant to \$4006.3, except as provided in \$4007.4.
- 4007.4 Where there is a threat to human health or the environment, or a release of a huzardous waste into the environment, and the responsible party is unknown or cannot be located, notice may be given as set forth in §4005.5.
- 4007.5 An immediate compliance order shall:
  - (a) Include a statement of the nature of the violation, threat or release;
  - (b) Take effect at the time and date signed;
  - (c) Identify the action or actions to be taken or stopped; and

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- (d) Include a statement advising the respondent that he or she has a right to request a hearing before an ALJ within fifteen (15) days of service of the order, and that, if a hearing is not requested within that time period, the order will become final.
- 4007.6 A hearing request shall not stay the effective date of the order.
- 4007.7 If a person fails to comply with the notice within the time period stated in the notice, the Director shall take corrective action necessary to alleviate or terminate the violation, threat, or release to protect human health or the environment.
- 4007.8 If a hearing is requested, the hearing shall be held within fifteen (15) days from the date that the hearing request is received and the ALJ shall issue a decision, including findings of fact and conclusions of law, no later than fifteen (15) days after the hearing, except that time periods set forth in Chapter 47 apply to cases involving TSD facility permits.

#### 4008 NOTICE OF SUSPENSION OR REVOCATION OF PERMIT

- 4008.1 An action for modification, suspension, and reissuance or revocation of a TSD facility permit shall be pursuant to the procedures set forth in §4702.
- 4008.2 An action to suspend or revoke a generator or transporter permit provided for in the Act and this chapter shall be initiated by a notice of suspension, proposed revocation or revocation in accordance with \$4008 in lieu of a notice of violation pursuant to \$4005 or \$4007.
- 4008.3 The notice of suspension, proposed revocation or revocation shall be in writing and shall include the following:
  - (a) The name and address of the holder of the permit;
  - (b) A statement of the action or proposed action;
  - (c) A statement of the alleged violations of the Act, regulations, or terms of the permit; and
  - (d) Notice that the respondent has a right to request a hearing, or to have a hearing at the time and place stated.
- 4008.4 A notice of suspension may take effect immediately, however, respondent shall have a right to request a hearing within fifteen (15) days or may reapply for a permit.
- 4008.5 A notice of proposed revocation may be issued when the permit holder has a history of repeated violations, or when the permit has been suspended. Except as provided in §4008.6, the revocation shall take effect fifteen (15) days after the notice has been given, unless a written request for a hearing is received before that time.
- 4008.6 The Director may immediately revoke a permit upon an initial violation of the Act or this subtitle when the violation presents an imminent and substantial endangerment to the public health, the public welfare, or the environment.
- 4008.<sup>-</sup> In the case of an immediate revocation, the respondent may request a hearing within fifteen (15) days, however, the revocation shall still take effect when served.
- 4008.8 The notice of proposed suspension, proposed revocation or revocation shall be served in the same manner as a proposed compliance order pursuant to \$4006.3.

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#### 4009 SETTLEMENT AGREEMENTS AND CONSENT COMPLIANCE ORDERS

- 4009.1 At any time during the course of the proceedings, the parties to the proceeding may enter into a settlement agreement signed by the parties. A settlement agreement or consent decree shall set forth each of the agreements made, actions to be taken by either party and any agreed upon fines or penalties.
- 4009.2 A settlement agreement shall be effective when signed by the parties thereto and shall not require the signature of an ALJ in order to be filed in the case.
- 4009.3 A settlement agreement may be submitted to the ALJ for approval.
- 4009.4 The parties may enter into a consent compliance order with the approval of the ALJ.
- 4009.5 A consent compliance order shall be signed by the parties to the case and by an ALJ, and shall have the force and effect of any final order. Unless the consent compliance order states otherwise, there shall be no right of appeal from a consent compliance order.

#### 4010 HEARINGS, ISSUANCE OF FINAL ORDER, INTERVENTION, AND APPEALS

- 4010.1 Once a hearing is requested, motions practice, pre-hearing discovery, and the conduct of the hearing shall be as provided in the D.C. Administrative Procedures Act.
- 4010.2 The government shall have the burden of going forward with and of proving that the violation occurred as set forth in the proposed compliance order or notice, and that the proposed civil penalty, corrective action order, revocation or suspension, as the case may be, is appropriate.
- 4010.3 Following the establishment of a *prima facie* case, the respondent shall have the burden of presenting and of going forward with any defense to the allegations stated in the petition. Each matter of controversy shall be determined by the ALJ upon a preponderance of the evidence.
- 4010.4 If a respondent scheduled for a hearing does not appear for the hearing, and no continuance has been granted, the ALJ may receive evidence and hear testimony and may render a decision based on the evidence presented.
- 4010.5 The ALJ shall inform the parties of an action taken under §4010.
- 4010.6 A decision of the ALJ shall be supported by substantial, reliable, and probative evidence pursuant to Section 10 of the D.C. Administrative Procedures Act (D.C. Code §1-1509(c) (1992 Repl. Vol.)).
- 4010.7 The ALJ's decision and order shall include findings of fact and conclusions of law.
- 4010.8 A final compliance order shall also set forth the following:
  - (a) The action or actions that the respondent shall take to correct a violation of the Act or regulations issued under the Act, and may include the following:
    - (1) Performance of testing, studies, investigations, monitoring;
    - (2) Performance of comprehensive site assessment;
    - (3) Preparation of corrective action plans;

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- (4) Implementation of corrective action plan; and
- (5) Maintenance and submission of records; and
- (b) The amount of any civil penalties to be imposed, as authorized by §12 of the Act (D.C. Code §6-711);
- (c) Where applicable, authorization for the Director to enter on property to undertake testing, monitoring, assessment and corrective action, if the respondent fails or refuses to comply with an order requiring the respondent to take these actions within the time period set forth in the order; and
- (d) A statement that the Director may recover the costs incurred if any corrective action is undertaken by the District Government.
- 4010.9 A final order suspending or revoking a permit shall state clearly the action taken, the reasons for the action, and any applicable appeal rights.
- 4010.10 Any person, having an interest that is or may be adversely affected by the outcome of an administrative hearing, may intervene in the proceedings, upon filing a timely motion.
- 4010.11 A person desiring to intervene shall file a motion to intervene and serve copies upon the parties stating the person's grounds for intervention including his or her interest in the proceedings. The motion shall be accompanied by a pleading stating the claim or defense for which intervention is sought and the relief sought.
- 4010.12 Any person adversely affected or aggrieved by a final compliance order, cease and desist order or other administrative order issued pursuant to this chapter and §10 of the Act may appeal the action by filing a petition for review in the D.C. Court of Appeals.
- 4010.13 Appeals shall comply with the rules of the District of Columbia Court of Appeals.
- 4010.14 The filing of a petition for review shall not in itself stay enforcement of the final order or decision.

#### 4011 PENALTIES

4011.1 Penalties for failure to comply with a final compliance order, or a final suspension or revocation order shall be in accordance with §12 of the Act (D.C. Code §6-711).

#### 4012 CIVIL INFRACTIONS

- 4012.1 In any instance where a civil fine, penalty or fee has been established pursuant to the "Department of Consumer and Regulatory Affairs Civil Infractions Act of 1985" (D.C. Law 6-42, D.C. Code §6-2701 *et seq.*) and the "Civil Infractions Regulations" (Title 16 DCMR, Chapter 32) promulgated pursuant thereto, the civil fine, penalty or fee may be imposed as an alternative sanction to the penalties set forth in §§12 (b) and 12(c) of the Act.
- 4012.2 Where civil infractions fines are the only penalties pursued in a particular case, the Civil Infractions Regulations shall govern the proceedings in lieu of this Chapter, and where there is a violation a Notice of Infraction may be issued without first issuing a Notice of Violation, Notice of Threat or Notice of Release.

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- (5) Maintenance and submission of records; and
- (b) The amount of any civil penalties to be imposed, as authorized by \$12 of the Act (D.C. Code \$6-711);
- (c) Where applicable, authorization for the Director to enter on property to undertake testing, monitoring, assessment and corrective action, if the respondent fails or refuses to comply with an order requiring the respondent to take these actions within the time period set forth in the order; and
- (d) A statement that the Director may recover the costs incurred if any corrective action is undertaken by the District Government.
- 4010.9 A final order suspending or revoking a permit shall state clearly the action taken, the reasons for the action, and any applicable appeal rights.
- 4010.10 Any person, having an interest that is or may be adversely affected by the outcome of an administrative hearing, may intervene in the proceedings, upon filing a timely motion.
- 4010.11 A person desiring to intervene shall file a motion to intervene and serve copies upon the parties stating the person's grounds for intervention including his or her interest in the proceedings. The motion shall be accompanied by a pleading stating the claim or defense for which intervention is sought and the relief sought.
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- 4012.3 A civil infractions case may be consolidated for hearing together with another case against the same respondent in which a proposed compliance order or proposed suspension or revocation order has been issued.

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4012.3 A civil infractions case may be consolidated for hearing together with another case against the same respondent in which a proposed compliance order or proposed suspension or revocation order has been issued.

#### 4013 COURT ACTION IN LIEU OF COMPLIANCE ORDER

- 4013.1 After a notice of violation, threat or release, has been issued and the time for compliance has expired, or, after a notice of suspension or revocation has been issued, the Director may, in his or her discretion, institute a court action for injunctive relief, damages, civil or criminal penalties, or recovery of any corrective action costs incurred by the District Government pursuant to §§11 and 12 of the Act, in lieu of proceeding through the administrative process to seek a compliance order or proposed suspension or revocation order.
- 4013.2 Pursuant to \$11 of the Act, the Director may, in his or her discretion, seek a temporary restraining order, preliminary injunction or permanent injunction in Court in lieu of issuing a notice of violation and seeking a compliance order.

#### 4014 COST RECOVERY PROCEDURES

- 4014.1 If the District Government has incurred costs for taking corrective action, the Director shall issue a "demand letter" requesting payment in the amount of all costs incurred by the Director plus any applicable interest. The demand letter shall be issued after completion of corrective action and prior to bringing a judicial action for recovery of costs. At his or her discretion, the Director may also issue interim demand letters before completion of corrective action.
- 4014.2 The demand letter shall include the following information:
  - (a) The total amount due;
  - (b) An itemization of costs included in the total amount claimed;
  - (c) A statement of the time within which payment must be made;
  - (d) The interest rate; and
  - (e) Notice that if the responsible party fails to pay within the prescribed time period, court action may be instituted, a tax lien may be issued and that the responsible party will be liable for costs of the legal action.
- 4014.3 The demand letter shall be mailed to the responsible party postage prepaid at his or her last known address.
- 4014.4 Thirty (30) days after the demand letter has been postmarked, the Director may do the following:
  - (a) Institute court action; or
  - (b) Take any other appropriate collection measures.
- 4014.5 The Director may settle claims for cost recovery, and, in doing so, may compromise a claim, if appropriate, based upon consideration of such factors as the solvency of the responsible party, the cost of the cleanup, the likelihood of recovery, the costs of judicial collection, and pollution prevention measures undertaken by the responsible party.

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#### 4015 ENTRY FOR CORRECTIVE ACTION

- 4015.1 The Director may enter upon property to perform, or cause to be performed, release response and corrective action that are necessary to protect human health or the environment in the following circumstances:
  - (a) In a situation that requires immediate action by the Director to protect human health and the environment; or
  - (b) Where the responsible party for the release has failed or refused to comply with an order issued pursuant to §§4007 or 4010 requiring corrective action.
- 4015.2 Except as provided in §4015.4, the Director shall provide written notice of his or her intention to enter the property to take corrective action, at least seven (7) days before commencing work, and shall serve the notice personally or by certified mail, or where personal service cannot be accomplished, by publication or posting.
- 4015.3 When the owner or operator is a corporation, any notice to be served, if served on the president, treasurer, general manager, or any principal officer of the corporation in the manner provided in §4015.2, shall be deemed to have been served on the corporation. If the owner or operator is a foreign corporation, service on the registered agent of the corporation shall be deemed service on the corporation.
- 4015.4 Where a spill or release of a hazardous waste creates an imminent threat to human health or the environment necessitating summary corrective action and the emergency nature of the situation makes it impractical to give prior notice as provided in §4015.2, the Director may provide notice by conspicuous posting on the property at the earliest time feasible, before commencing work.
- 4015.5 Except as provided in §4015.4, the written notice of intention to begin corrective action shall contain the following information:
  - (a) The name and address of the owner of the property;
  - (b) The name and address of the party to whom the notice is directed;
  - (c) A statement of the authority under which the Director is taking the corrective action;
  - (d) A brief summary of the corrective actions to be taken and the conditions in need of correction:
  - (e) A description of the location where work will take place;
  - (f) Notice of any applicable hearing rights, if the notice has not already been served;
  - (g) A statement that the Director will pursue cost recovery against the responsible party for all corrective action costs and related expenses;
  - (h) The name, position, office address, and phone number of the employee issuing the notice and the name and phone number of the appropriate contact person within the Department: and
  - (i) The signature of the Program Manager of the Hazardous Waste Division, Environmental Health Administration, or other designated representative of the Director.

### 4016 REFERENCES TO FEDERAL REGULATIONS

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4016.1 Any references to Federal regulations are to the version of those regulations as they appear in the July 1, 1998 Code of Federal Regulations, except where noted relative to 49 CFR Part 173 references.

#### 4017 INCORPORATED BY REFERENCE

- 4017.1 When used in Chapters 40 through 54, the following publications are incorporated by reference:
  - (a) "ASTM Standard Test Methods for Flash Point of Liquids by Setaflash Closed Tester," ASTM Standard D 3278-78. Available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103;
  - (b) "ASTM Standard Test Methods for Flash Point by Pensky-Martens Closed Tester," ASTM Standard D-93-79 or D-93-80. D-93-80 is available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103;
  - (c) "ASTM Standard Method for Analysis of Reformed Gas by Gas Chromatography," ASTM Standard D 1946-82, available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.
  - (d) "ASTM Standard Test Method for Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method)," ASTM Standard D 2382-83, available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.
  - (e) "ASTM Standard Practices for General Techniques of Ultraviolet-Visible Quantitative Analysis," ASTM Standard E 169-87, available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.
  - "ASTM Standard Practices for General Techniques of Infrared Quantitutive Analysis," ASTM Standard E 168-88, available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.
  - (g) "ASTM Standard Practice for Packed Column Gas Chromatography," ASTM Standard E 260-85, available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.
  - (h) "ASTM Standard Test Method for Aromatics in Light Naphthas and Aviation Gasolines by Gas Chromatography," ASTM Standard D 2267-88, available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.
  - "ASTM Standard Test Methods for Preparing Refuse-Derived Fuel (RDF) Samples for Analyses of Metals," ASTM Standard E926-88, Test Method C-Bomb, Acid Digestion Method, available from American Society for Testing Materials, 1916 Race Street, Philadelphia, PA 19103.
  - "ASTM Standard Test Method for Vapor Pressure--Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope," ASTM Standard D 2879-92, available from American Society for Testing and Materials (ASTM), 1916 Race Street, Philadelphia, PA 19103.
  - (k) "API Publication 2517, Third Edition", February 1989, "Evaporative Loss from External Floating-Roof Tanks," available from the American Petroleum Institute, 1220 L Street, Northwest, Washington, D.C. 20005.

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- "APTI Course 415: Control of Gaseous Emissions," EPA Publication EPA-450/2-81-005, December 1981, available from National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.
- (m) "Flammable and Combustible Liquids Code" (1977 or 1981). Available from the National Fire Protection Association, 470 Atlantic Avenue, Boston. Massachusetts 02210; and
- (n) "Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised", October 1992, EPA Publication No. EPA-450/R-92-019, Environmental Protection Agency, Research Triangle Park, NC.
- (o) "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods." EPA Publication SW-846 [Second Edition, 1982 as amended by Update 1 (April, 1984), and Update II (April, 1985)]. The second edition of SW-846 and Updates I and II are available from the National Technical Information Service (NTIS), 5285 Port Royal, Road, Springfield, VA 22161 (703) 487-4600, as document no. PB87-120-291. The cost is forty-eight dollars and ninety-five cents (\$48.95) for paper and thirteen dollars and fifty cents (\$13.50) for microfiche.
- 4017.2 When used in Chapters 40 through 54, the following Appendix from Title 40 of the Code of *Federal Regulations* is incorporated by reference: Appendix I of 40 (CFR Part 260, "Overview of Subtitle C Regulations".
- 4017.3 The references listed in §4017.1 are also available for inspection at the Office of the Federal Register, 800 North Capitol Street, N.W., Suite 700, Washington, DC. These incorporations by reference were approved by the Director of the Federal Register. These materials are incorporated as they exist on the date of approval and a notice of any change in these materials will be published in the FEDERAL REGISTER.

#### 4018 SPECIFIC PROHIBITIONS

- 4018.1 The District of Columbia prohibits the following activities in the District:
  - (a) Use of a surface impoundment for the treatment, storage, or disposal of a hazardous waste;
  - (b) Use of land treatment for hazardous waste disposal;
  - (c) Use of landfills and waste piles for hazardous waste disposal;
  - (d) The burning, processing, or incineration of hazardous waste, hazardous waste fuels, or mixtures of hazardous wastes and other materials in any type of incinerator, boiler, or industrial furnace;
  - (e) The land disposal of hazardous waste or any mixture of hazardous waste and another constituent;
  - (f) The burning of off-specification or on-specification used oil, including burning in a space heater;
  - (g) The use of used oil as a dust suppressant; and
  - (h) The use of underground injection.

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# CHAPTER 41 IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

### 4100 GENERAL

- 4100.1 This chapter identifies those solid wastes that are subject to regulation as hazardous wastes under Chapters 42 through 44, 46, 47, and 50 of this subtitle and that are subject to the notification requirements of 40 CFR 3010.
- 4100.2 The term solid waste identified in this chapter applies only to wastes that also are hazardous for purposes of the regulations implementing HWMA. For example, it does not apply to materials such as non-hazardous scrap, paper, textiles, or rubber that are not otherwise hazardous wastes and that are recycled.
- 4100.3 This chapter identifies the materials that are hazardous wastes under §§8, 11 and 3(b) of the HWMA (D.C. Code §§6-707, 6-710, and 6-702(2)), respectively and section 2(a) of the Illegal Dumping and Enforcement Act, D.C. Code §6-2911 (2A). A material that is not identified as a hazardous waste in this chapter shall be regulated as a hazardous waste if either of the following occur:
  - (a) In the case of §8 of HWMA, the Department has reason to believe that the material may be a hazardous waste within the meaning of §3(b) of HWMA; or
  - (b) In the case of §11 of HWMA, there is danger to public health, public welfare, or the environment.
- 4100.4 A "solid waste" is any discarded material that is not excluded by §4101.1 or that is not excluded by variance granted under §§4001.15 and 4001.16.
- 4100.5 A "discarded material" is any material that is:
  - (a) "Abandoned", as explained in §4100.6; or
  - (b) "Recycled", as explained in §4100.7; or
  - (c) Considered "inherently waste-like", as explained in §4100.8; or
  - (d) A "military munition" identified as a solid waste in §§4512.3 through 4512.6.
- 4100.6 Materials are solid waste if they are "abandoned" by being:
  - (a) Disposed of;
  - (b) Burned or incinerated; or
  - (c) Accumulated, stored, or treated (but not recycled) before or in lieu of being abandoned by being disposed of, burned, or incinerated.

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- 4100.7 Materials are solid wastes if they are "recycled" or accumulated, stored, or treated before recycling, as specified in this section:
  - (a) Materials noted with a "\*" in Column 1 of Table 1 ("Used in a manner constituting disposal") are solid wastes when they are:
    - (1) Applied to or placed on the land in a manner that constitutes disposal; or
    - (2) Used to produce products that are applied to or placed on the land or are otherwise contained in products that are applied to or placed on the land (in which cases the product itself remains a solid waste);
  - (b) However, Commercial chemical products listed in §4109.12 are not solid wastes if they are applied to the land, and that is their ordinary manner of use;
  - (c) Materials noted with a "\*" in column 2 of Table 1 ("Burning for energy recovery") are solid wastes when they are:
    - (1) Burned to recover energy;
    - (2) Used to produce a fuel or are otherwise contained in fuels (in which cases the fuel itself remains a solid waste);
  - (d) Commercial chemical products listed in §4109.12 are not solid wastes if they are themselves fuels;
  - (e) Materials noted with a "\*" in column 3 of Table 1 are solid wastes when "reclaimed" (except as provided under §4101.1(r)). Materials noted with a "-" in column 3 of Table 1 are not solid wastes when reclaimed (except as provided under §4101.1(r));
  - (f) Materials noted with a "\*" in column 4 of Table 1 ("Accumulated speculatively") are solid wastes when accumulated speculatively.

Table 1				
	Use constituting disposal §4100.7(a)	Energy recovery/fuel §4100.7(c)	Reclamation §4100.7(e) (except as provided in §4101.1(r) for mineral processing secondary materials)"	Speculative accumulation §4100.7(f)
	(1)	(2)	(3)	(4)
Spent Materials	(*)	(*)	(*)	(*)
Sludges (listed in §§4109.5 through 4109.10 or 4109.11)	(*)	(*)	(*)	(*)
Sludges exhibiting a characteristic of hazardous waste	(*)	(*)		(*)
By-products §§4109.5 through 4109.10 or 4109.11	(*)	(*)	(*)	(*)
By-products exhibiting a characteristic of hazardous waste	(*)	(*)		(*)
Commercial chemical products listed in §§4109.12	(*)	(*)		
Scrap metal other than excluded scrap metal (see §5400.1	(*)	(*)	(*)	(*)

Note: The terms "spent materials," "sludges," "by-products," and "scrap metal" and "processed scrap metal" are defined in §5400.1.

- 4100.8 The following "Inherently waste-like materials are solid wastes when they are recycled in any manner:
  - (a) Hazardous Waste Nos. F020, F021 (unless used as an ingredient to make a product at the site of generation), F022, F023, F026, and F028.
  - (b) Secondary materials fed to a halogen acid furnace that exhibit a characteristic of a hazardous waste or are listed as a hazardous waste as defined in §4108 or §§4109 through 4111, except for brominated material that meets the following criteria:
    - (1) The material shall contain a bromine concentration of at least 45%;
    - (2) The material shall contain less than a total of 1% of toxic organic compounds listed in Appendix II to Chapter 41; and
    - (3) The material is processed continually on-site in the halogen acid furnace via direct conveyance (hard piping).
  - (c) The Director shall use the following criteria to add wastes to that list:
    - (i) The materials are ordinarily disposed of, burned, or incinerated; or

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- (2) The materials contain toxic constituents listed in Appendix II of Chapter 41, and these constituents are not ordinarily found in raw materials or products for which the materials substitute (or are found in raw materials or products in smaller concentrations) and are not used or reused during the recycling process; and
- (3) The material may pose a substantial hazard to human health and the environment when recycled.
- 4100.9 Materials are not solid wastes when they can be shown to be recycled by being:
  - Used or reused as ingredients in an industrial process to make a product, provided the materials are not being reclaimed;
  - (b) Used or reused as effective substitutes for commercial products; or
  - (c) Generated and reclaimed within the primary mineral processing industry, in which case the conditions of the exclusion found at §4101.1 apply rather than this provision.
- 4100.10 The following materials are solid wastes, even if the recycling involves use, reuse, or return to the original process as described in §§4100.9(a) through 4100.9(c):
  - (a) Materials used in a manner constituting disposal, or used to produce products that are applied to the land;
  - (b) Materials burned for energy recovery, used to produce a fuel, or contained in fuels;
  - (c) Materials accumulated speculatively; or
  - (d) Materials listed in \$\$4100.8(a) and 4100.8(b).
- 4100.11 Respondents in actions to enforce regulations implementing HWMA who raise a claim that a certain material is not a solid waste shall demonstrate that there is a known market or disposition for the material and that they meet the terms of the exclusion or exemption. In doing so, they shall provide appropriate documentation (such as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not a waste, or is exempt from regulation. In addition, owners or operators of facilities claiming that they actually are recycling materials shall show that they have the necessary equipment to do so.
- 4100.12 A solid waste, as defined in §§4100.4 through 4100.11, is a hazardous waste if:
  - (a) It is not excluded from regulation as a hazardous waste under §4101.2; and
  - (b) It meets any of the following criteria:
    - (1) It exhibits any of the characteristics of hazardous waste identified in §4108. However, any mixture of a waste from the extraction, beneficiation, and processing of ores and minerals excluded under §4101.2(h) and any other solid waste exhibiting a characteristic of hazardous waste under §4108 is a hazardous waste only if it exhibits a characteristic that would not have been exhibited by the

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excluded waste alone if the mixture had not occurred, or if it continues to exhibit any of the characteristics exhibited by the non-excluded wastes prior to mixture. Further, for the purposes of applying the Toxicity Characteristic to such mixtures, the mixture is also a hazardous waste if it exceeds the maximum concentration for any contaminant listed in Table 3 to §4108.11 that would not have been exceeded by the excluded waste alone if the mixture had not occurred, or if it continues to exceed the maximum concentration for any contaminant exceeded by the nonexempt waste before mixture;

- (2) It is listed in §§4109 through 4110 and has not been excluded from the lists in §§4109 through 4110 under §§4001.1 and 4001.10;
- (3) It is a mixture of a solid waste and a hazardous waste that is listed in §§4109 through 4110 solely because it exhibits one or more of the characteristics of hazardous waste identified in §4108, unless the resultant mixture no longer exhibits any characteristic of hazardous waste identified in §4108, or unless the solid waste is excluded from regulation under §4101.2(h) and the resultant mixture no longer exhibits any characteristic of hazardous waste identified in §4108 for which the hazardous waste listed in §§4109 through 4110 was listed. (However, nonwastewater mixtures are still subject to the requirements of Chapter 50 of this subtitle, even if they no longer exhibit a characteristic at the point of land disposal);
- (4) It is a mixture of solid waste and one or more hazardous wastes listed in §§4109 through 4110 and has not been excluded from §4100.12(b) under §§4001.1 through 4001.5 and 4001.10; however, the following mixtures of solid wastes and hazardous wastes listed in §§4109 through 4110 are not hazardous wastes (except by application of §4100.12(b)(1) or §4100.12(b)(2)) if the generator can demonstrate that the mixture consists of wastewater the discharge of which is subject to regulation under §§3 and 7 of the Water Pollution Control Act of 1984, effective March 16, 1985 (D.C. Law 5-188; D.C. Code §6-922 and 926, (1995 Repl. Vol.)), or the Wastewater System Regulation Amendment Act of 1985, effective March 12, 1986 (D.C. Law 6-95; D.C. Code §§6-951 et seq., (1995 Repl. Vol.)) (including wastewater at facilities that have eliminated the discharge of wastewater) and:
  - (A) One or more of the following solvents listed in §4109.5 through 4109.10 including carbon tetrachloride, tetrachloroethylene, trichloroethylene, provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 1 part per million; or
  - (B) One or more of the following spent solvents listed in §4109.5 through 4109.10 including methylene chloride, 1,1,1-trichloroethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, spent chlorofluorocarbon solvents, provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to

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wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 25 parts per million; or

- (C) One of the following wastes listed in §4109.11 that is heat exchanger bundle cleaning sludge from the petroleum refining industry (EPA Hazardous Waste No. K050); or
- (D) A discarded commercial chemical product, or chemical intermediate listed in §4109.12, arising from de minimis losses of these materials from manufacturing operations in which these materials are used as raw materials or are produced in the manufacturing process. For the purposes of §4100.12(b)(4)(D), "de minimis" losses include those from normal material handling operations (for example, spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materials); minor leaks of process equipment, storage tanks or containers; leaks from well maintained pump packings and seals; sample purgings; relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; and rinsate from empty containers or from containers that are rendered empty by that rinsing; or
- (E) Wastewater resulting from laboratory operations containing toxic (T) wastes listed in §§4109 through 4110, provided that the annualized average flow of laboratory wastewater does not exceed one percent of total wastewater flow into the headworks of the facility's wastewater treatment or pre-treatment system or provided the wastes' combined annualized average concentration does not exceed one part per million in the headworks of the facility's wastewater treatment or treatment or pre-treatment facility. Toxic (T) wastes used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation; or
- (F) One or more of the following wastes listed in §4109.11 including wastewaters from the production of carbamates and carbamoyl oximes (EPA Hazardous Waste No. K157), provided that the maximum weekly usage of formaldehyde, methyl chloride, methylene chloride, and triethylamine (including all amounts that can not be demonstrated to be reacted in the process, destroyed through treatment, or are recovered, that is, what is discharged or volatilized) divided by the average weekly flow of process wastewater before any dilutions into the headworks of the facility's wastewater treatment system does not exceed a total of 5 parts per million by weight; or
- (G) Wastewaters derived from the treatment of one or more of the following wastes listed in §4109.11 -- organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes (EPA Hazardous Waste No. K156), provided that the maximum concentration of formaldehyde, methyl chloride, methylene chloride, and triethylamine prior to any dilutions into the

headworks of the facility's wastewater treatment system does not exceed a total of 5 milligrams per liter.

4100.13 Used oil containing more than 1000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in §§4109 through 4110. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, by using an analytical method from EPA Publication SW-846, Third Edition, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in Appendix II of Chapter 41. Guidance for specific types of wastes:

- (a) The rebuttable presumption applies to metalworking oils/fluids no matter how they are recycled or disposed; and
- (b) The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units where the CFCs are destined for reclamation. (The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.)
- 4100.14 A solid waste that is not excluded from regulation under §4100.12(a) becomes a hazardous waste when any of the following events occur:
  - (a) In the case of a waste listed in §§4109 through 4110, when the waste first meets the listing description set forth in §§4109 through 4110;
  - (b) In the case of a mixture of solid waste and one or more listed hazardous wastes, when a hazardous waste listed in §§4109 through 4110 is first added to the solid waste; or
  - (c) In the case of any other waste (including a waste mixture), when the waste exhibits any of the characteristics identified in §4108.
- 4100.15 Unless and until it meets the criteria of §4100.16:
  - (a) A hazardous waste shall remain a hazardous waste;
  - (b) Except as otherwise provided in §4100.15(c), any solid waste generated from the treatment, storage, or disposal of a hazardous waste, including any sludge, spill residue, ash, emission control dust, or leachate (but not including precipitation run-off) is a hazardous waste. (However, materials that are reclaimed from solid wastes and that are used beneficially are not solid wastes and hence are not hazardous wastes under this provision unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal.);
  - (c) The following solid wastes are not hazardous even though they are generated from the treatment, storage, or disposal of a hazardous waste, unless they exhibit one or more of the characteristics of hazardous waste:

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(1) Waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry (SIC Codes 331 and 332);

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- Waste from burning any of the materials exempted from regulation by §§4103.3(d) through 4103.3(g);
- (3) Nonwastewater residues, such as slag, resulting from high temperature metals recovery (HTMR) processing of K061, K062 or F006 waste, in units identified as rotary kilns, flame reactors, electric furnaces, plasma arc furnaces, slag reactors, rotary hearth furnace/electric furnace combinations or industrial furnaces (as defined in paragraphs (6), (7), and (13) of the definition for "Industrial furnace" in §5400.1), that are disposed in RCRA Subtitle D units, provided that these residues meet the generic exclusion levels identified in Table 2 of §4100.15(c)(3) for all constituents, and exhibit no characteristics of hazardous waste. In addition the generator shall meet the following requirements:
  - (A) Testing requirements shall be incorporated in a facility's waste analysis plan or a generator's self-implementing waste analysis plan; so that at a minimum, composite samples of residues shall be collected and analyzed quarterly or when the process or operation generating the waste changes;
  - (B) Persons claiming this exclusion in an enforcement action shall have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements; and

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	Table 2
Constituent	Maximum for any single composite sample-TCLP (mg/l)
Generic exclusion level	ls for KO61 and KO62 nonwastewater HTMR residues
Antimony	0.10
Arsenic	0.50
Barium	7.6
Beryllium	0.010
Cadmium ,	0.050
Chromium (total)	0.33
Lead	0.15
Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
Zinc	70
Generic exclusion	levels for FOO6 nonwastewater HTMR residues
Antimony	0.10
Arsenic	0.50
Barium	7.6
Beryllium	0.010
Cadmium	0.050
Chromium (total)	0.33
Cyanide (total) (mg/kg)	1.8
Lead	0.15
Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
2inc 70	

(C) A one-time notification and certification shall be placed in the facility's files and sent to the Director for K061, K062 or F006 HTMR residues that meet the generic exclusion levels for all constituents and do not exhibit any characteristics that are sent to RCRA Subtitle D units. The notification and certification that is placed in the generators or treaters files shall be updated if the process or operation generating the waste changes and/or if the RCRA Subtitle D unit receiving the waste changes. However, the generator or treater need only notify the Director on an annual basis if the changes occur. The notification and certification should be sent to the Director by no later than December 31. The notification shall include the following information:

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The name and address of the RCRA Subtitle D unit receiving the waste shipments; the EPA Hazardous Waste Number(s) and treatability group(s) at the initial point of generation; and, the treatment standards applicable to the waste at the initial point of generation. The certification shall be signed by an authorized representative and shall state as follows: "I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characteristic of hazardous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."; and

- (4) Biological treatment sludge from the treatment of one of the following wastes listed in §4109.11, organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes (EPA Hazardous Waste No. K156), and wastewaters from the production of carbamates and carbamoyl oximes (EPA Hazardous Waste No. K157).
- 4100.16 Any solid waste described in §4100.15 is not a hazardous waste if it meets the following criteria:
  - (a) In the case of any solid waste, it does not exhibit any of the characteristics of hazardous waste identified in §4108. (However, wastes that exhibit a characteristic at the point of generation may still be subject to the requirements of Chapter 50, even if they no longer exhibit a characteristic at the point of land disposal.); or
  - (b) In the case of a waste that is a listed waste under §§4109 and 4110, contains a waste listed under §§4109 through 4110 or is derived from a waste listed in §§4109 through 4110, it also has been excluded from §4100.15 under §§4001.1 through 4001.5 and 4100.10.
- 4100.17 Notwithstanding §§4100.12 through 4100.16 and provided the debris as defined in Chapter 50 of this subtitle does not exhibit a characteristic identified at §4108, the following materials are not subject to regulation under Chapters 40, 41 to 45, 46, 50 or 54:
  - (a) Hazardous debris as defined in Chapter 50 of this subtitle that has been treated using one of the required extraction or destruction technologies specified in Table 5 of §5003.12(d)(5); provided that persons claiming this exclusion in an enforcement action shall have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements; or
  - (b) Debris as defined in Chapter 50 of this subtitle that the Director, considering the extent of contamination, has determined is no longer contaminated with hazardous waste.

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### 4101 EXCLUSIONS

- 4101.1 The following materials are not solid wastes for the purpose of this subtitle:
  - (a) Domestic sewage;
  - (b) Any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly-owned treatment works for treatment;
  - (c) Industrial wastewater discharges that are point source discharges subject to regulation under §402 of the Clean Water Act or §3 and 7 of the Water Pollution Control Act of 1984, effective March 16, 1985, (D.C. Law 5-188; D.C. Code §6-922 and 926, (1995 Repl. Vol.)). (This exclusion applies only to the actual point source discharge. It does not exclude industrial wastewaters while they are being collected, stored or treated before discharge, nor does it exclude sludges that are generated by industrial wastewater treatment.);
  - (d) Irrigation return flows;
  - (e) Materials subjected to in-situ mining techniques that are not removed from the ground as part of the extraction process;
  - (f) Pulping liquors (that is, black liquor) that are reclaimed in a pulping liquor recovery furnace and then reused in the pulping process, unless it is accumulated speculatively as defined in §5400.1;
  - (g) Spent sulfuric acid used to produce virgin sulfuric acid, unless it is accumulated speculatively as defined in §5400.1;
  - (h) Secondary materials that are reclaimed and returned to the original process or processes in which they were generated where they are reused in the production process provided:
    - (1) Only tank storage is involved, and the entire process through completion of reclamation is closed by being entirely connected with pipes or other comparable enclosed means of conveyance;
    - (2) Reclamation does not involve controlled flame combustion (such as occurs in boilers, industrial furnaces, or incinerators);
    - (3) The secondary materials are never accumulated in the tanks for over twelve months without being reclaimed; and
    - (4) The reclaimed material is not used to produce a fuel, or used to produce products that are used in a manner constituting disposal;
  - (i) Spent wood preserving solutions that have been reclaimed and are reused for their original intended purpose;
  - (j) Wastewaters from the wood preserving process that have been reclaimed and are reused to treat wood;





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- (k) Before reuse, the wood preserving wastewaters and spent wood preserving solutions described in §§4101.1(i) and 4101.1(j), so long as they meet all of the following conditions:
  - The wood preserving wastewaters and spent wood preserving solutions are reused on-site at water borne plants in the production process for their original intended purpose;
  - (2) Before reuse, the wastewaters and spent wood preserving solutions are managed to prevent release to either land or groundwater or both;
  - (3) Any unit used to manage wastewaters and/or spent wood preserving solutions before reuse can be visually or otherwise determined to prevent such releases;
  - (4) Any drip pad used to manage the wastewaters and/or spent wood preserving solutions before reuse complies with the standards in §4401, regardless of whether the plant generates a total of less than 100 kg/month of hazardous waste: and
  - (5) Before operating pursuant to this exclusion, the plant owner or operator submits to the appropriate Director a one-time notification stating that the plant intends to claim the exclusion, giving the date on which the plant intends to begin operating under the exclusion, and containing the following language: "I have read the applicable regulation establishing an exclusion for wood preserving wastewaters and spent wood preserving solutions and understand it requires me to comply at all times with the conditions set out in the regulation." The plant shall maintain a copy of that document in its on-site records for a period of no less than three (3) years from the date specified in the notice. The exclusion applies only so long as the plant meets all of the conditions. If the plant goes out of compliance with any condition, it may apply to the Director for reinstatement. The Director may reinstate the exclusion upon finding that the plant has returned to compliance with all conditions and that violations are not likely to recur;
- (1) EPA Hazardous Waste Nos. K060. K087, K141, K142, K143, K144, K145, K147, and K148, and any wastes from the coke by-products processes that are hazardous only because they exhibit the Toxicity Characteristic (TC) specified in §§4108.10 and 4108.11 when, subsequent to generation, these materials are recycled to coke ovens, to the tar recovery process as a feedstock to produce coal tar. or mixed with coal tar before the tar's sale or refining. This exclusion is conditioned on there being no land disposal of the wastes from the point they are generated to the point they are recycled to coke ovens or tar recovery or refining processes, or mixed with coal tar;
- (m) Nonwastewater splash condenser dross residue from the treatment of K061 in high temperature metals recovery units, provided it is shipped in drums (if shipped) and not land disposed before recovery;
- (n) Recovered oil from petroleum refining, exploration and production, and from transportation incident thereto, which is to be inserted into the petroleum refining process (SIC Code 2911) at or before a point (other than direct insertion into a coker) where contaminants are removed. This exclusion applies to recovered oil stored or transported prior to insertion, except that the oil shall not be stored in a manner

involving placement on the land, and shall not be accumulated speculatively, before being so recycled. Recovered oil is oil that has been reclaimed from secondary materials (such as wastewater) generated from normal petroleum refining, exploration and production, and transportation practices. Recovered oil includes oil that is recovered from refinery wastewater collection and treatment systems, oil recovered from oil and gas drilling operations, and oil recovered from wastes removed from crude oil storage tanks. Recovered oil does not include (among other things) oil-bearing hazardous waste listed in §§4109 through 4111 (for example, K048-K052, F037, F038). However, oil recovered from the wastes may be considered recovered oil. Recovered oil also does not include used oil as defined in §5400.1;

- (o) Excluded scrap metal (processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal) being recycled;
- (p) Shredded circuitboards being recycled, provided that they are:
  - (1) Stored in containers sufficient to prevent a release to the environment before recovery; and
  - (2) Free of mercury switches, mercury relays, nickel-cadmium batteries, and lithium batteries;
- (q) Condensates derived from the overhead gases from kraft mill steam strippers that are used to comply with 40 CFR 63.446(e). The exemption applies only to combustion at the mill generating the condensates;
- (r) Secondary materials (that is, sludges, by-products, and spent materials as defined in §5400.1) (other than hazardous wastes listed in §§4109 through 4111) generated within the primary mineral processing industry from which minerals, acids, cyanide, water or other values are recovered by mineral processing, provided that:
  - (1) The secondary material is legitimately recycled to recover minerals, acids, cyanide, water or other values;
  - (2) The secondary material is not accumulated speculatively;
  - (3) Except as provided in §4101.1(r)(4), the secondary material is stored in tanks, containers, or buildings meeting the following minimum integrity standards: a building shall be an engineered structure with a floor, walls, and a roof all of which are made of non-earthen materials providing structural support (except smelter buildings may have partially earthen floors provided the secondary material is stored on the non-earthen portion), and have a roof suitable for diverting rainwater away from the foundation; a tank shall be free standing, not be a surface impoundment (as defined in §5400.1), and be manufactured of a material suitable for containment of its contents; a container shall be free standing and be manufactured of a material suitable for containment of its containment of its contents. If tanks or containers contain any particulate that may be subject to wind dispersal, the owner/operator shall operate these units in a manner that controls fugitive dust. Tanks, containers, and buildings shall be designed, constructed and operated to prevent significant releases to the environment of these materials;

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- (4) The Director may make a site-specific determination, after public review and comment, that only solid mineral processing secondary materials may be placed on pads, rather than in tanks, containers, or buildings. Solid mineral processing secondary materials do not contain any free liquid. The decision-maker shall affirm that pads are designed, constructed and operated to prevent significant releases of the secondary material into the environment. Pads shall provide the same degree of containment afforded by the non-RCRA tanks, containers and buildings eligible for exclusion;
  - (A) The decision-maker shall also consider if storage on pads poses the potential for significant releases via groundwater, surface water, and air exposure pathways. Factors to be considered for assessing the groundwater, surface water, air exposure pathways are: the volume and physical and chemical properties of the secondary material, including its potential for migration off the pad; the potential for human or environmental exposure to hazardous constituents migrating from the pad via each exposure pathway, and the possibility and extent of harm to human and environmental receptors via each exposure pathway;
  - (B) Pads shall meet the following minimum standards: be designed of non-earthen material that is compatible with the chemical nature of the mineral processing secondary material, capable of withstanding physical stresses associated with placement and removal, have run on/runoff controls, be operated in a manner that controls fugitive dust, and have integrity assurance through inspections and maintenance programs;
  - (C) Before making a determination under this paragraph, the Director shall provide notice and the opportunity for comment to all persons potentially interested in the determination. This may be accomplished by placing notice of this action in major local newspapers, or broadcasting notice over local radio stations;
- (5) The owner or operator provides a notice to the Director, identifying the following information: the types of materials to be recycled; the type and location of the storage units and recycling processes; and the annual quantities expected to be placed in land-based units. This notification shall be updated when there is a change in the type of materials recycled or the location of the recycling process; and
- (6) For purposes of §4101.2(h), mineral processing secondary materials shall be the result of mineral processing and may not include any listed hazardous wastes. Listed hazardous wastes and characteristic hazardous wastes generated by non-mineral processing industries are not eligible for the conditional exclusion from the definition of solid waste; and
- (s) Comparable fuels or comparable syngas fuels (that is, comparable/syngas fuels) that meet the requirements of §4111.

4101.2 The following solid wastes are not hazardous wastes:

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- (a) Household waste, including household waste that has been collected, transported, stored, treated, disposed, recovered (for example, refuse-derived fuel) or revised. (See definition of "household waste" in Chapter 54.) A resource recovery facility managing municipal solid waste shall not be deemed to be treating, storing, disposing of, or otherwise managing hazardous wastes for the purposes of regulation under this HWMA, if the facility:
  - (1) Receives and burns only:
    - (A) Household waste (from single and multiple dwellings, hotels, motels, and other residential sources); and
    - (B) Solid waste from commercial or industrial sources that does not contain hazardous waste; and
  - (2) The facility does not accept hazardous wastes, and the owner or operator of the facility has established contractual requirements or other appropriate notification or inspection procedures to assure that hazardous wastes are not received at or burned in the facility;
- (b) Solid wastes generated by any of the following, which are returned to the soils as fertilizers:
  - (1) The growing and harvesting of agricultural crops; or
  - (2) The raising of animals, including animal manures;
- (c) Mining overburden returned to the mine site;
- (d) Fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste, generated primarily from the combustion of coal or other fossil fuels, except as provided by §4507.1 for facilities that burn or process hazardous waste;
- (e) Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas or geothermal energy;
- (f) Wastes that fail the test for the Toxicity Characteristic because chromium is present or are listed in §§4109 through 4111 due to the presence of chromium, which do not fail the test for the Toxicity Characteristic for any other constituent or are not listed due to the presence of any other constituent and do not fail the test for any other characteristic, if it is shown by a waste generator or by waste generators that:
  - (1) The chromium in the waste is exclusively (or nearly exclusively) trivalent chromium;
  - (2) The waste is generated from an industrial process that uses trivalent chromium exclusively (or nearly exclusively) and the process does not generate hexavalent chromium; and
  - (3) The waste is typically and frequently managed in non-oxidizing environments;

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- (g) Specific wastes that meet the standard in §§4101.2(f)(1) through 4101.2(f)(3) (so long as they do not fail the test for the toxicity characteristic for any other constituent, and do not exhibit any other characteristic) are:
  - (1) Chrome (blue) trimmings generated by the following subcategories of the leather tanning and finishing industry; hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling;
  - (2) Chrome (blue) shavings generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling;
  - (3) Buffing dust generated by the following subcategories of the leather tanning and finishing industry; hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish: no beamhouse: through-the-blue;
  - (4) Sewer screenings generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling;
  - (5) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-theblue; and shearling;
  - (6) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; and through-the-blue:
  - (7) Waste scrap leather from the leather tanning industry, the shoe manufacturing industry, and other leather product manufacturing industries;
  - (8) Wastewater treatment sludges from the production of  $TiO_2$  pigment using chromium-bearing ores by the chloride process;
- (h) Solid waste from the extraction, beneficiation, and processing of ores and minerals (including coal, phosphate rock, and overburden from the mining of uranium ore), except as provided by §4507.1 for facilities that burn or process hazardous waste:
  - (1) For purposes of §4101.2(h) beneficiation of ores and minerals is restricted to the following activities; crushing; grinding; washing; dissolution; crystallization; filtration; sorting; sizing; drying; sintering; pelletizing; briquetting; calcining to remove water and/or carbon dioxide; roasting, autoclaving, and/or chlorination in preparation for leaching (except where the roasting (and/or autoclaving and/or chlorination)/leaching sequence produces a final or intermediate product that does not undergo further beneficiation or processing); gravity concentration; magnetic separation; electrostatic separation; flotation; ion exchange; solvent extraction;
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electrowinning; precipitation; amalgamation; and heap, dump, vat, tank, and in situ leaching;

- (2) For the purposes of §4101.2(h), solid waste from the processing of ores and minerals includes only the following wastes as generated:
  - (A) Slag from primary copper processing;
  - (B) Slag from primary lead processing;
  - (C) Red and brown muds from bauxite refining;
  - (D) Phosphogypsum from phosphoric acid production;
  - (E) Slag from elemental phosphorus production;
  - (F) Gasifier ash from coal gasification;
  - (G) Process wastewater from coal gasification;
  - (H) Calcium sulfate wastewater treatment plant sludge from primary copper processing;
  - (I) Slag tailings from primary copper processing;
  - (J) Fluorogypsum from hydrofluoric acid production;
  - (K) Process wastewater from hydrofluoric acid production;
  - (L) Air pollution control dust/sludge from iron blast furnaces;
  - (M) Iron blast furnace slag;
  - (N) Treated residue from roasting/leaching of chrome ore;
  - (O) Process wastewater from primary magnesium processing by the anhydrous process;
  - (P) Process wastewater from phosphoric acid production;
  - (Q) Basic oxygen furnace and open hearth furnace air pollution control dust/sludge from carbon steel production;
  - (R) Basic oxygen furnace and open hearth furnace slag from carbon steel production;
  - (S) Chloride process waste solids from titanium tetrachloride production; and
  - (T) Slag from primary zinc processing; and

- (3) A residue derived from co-processing mineral processing secondary materials with normal beneficiation raw materials remains excluded under §4101.2 if the owner or operator:
  - (A) Processes at least 50 percent by weight normal beneficiation raw materials; and
  - (B) Legitimately reclaims the secondary mineral processing materials;
- (i) Cement kiln dust waste, except as provided by §4507.1 for facilities that burn or process hazardous waste;
- (j) Solid waste that consists of discarded arsenical-treated wood or wood products that fail the test for the Toxicity Characteristic for Hazardous Waste Codes D004 through D017 and that is not a hazardous waste for any other reason if the waste is generated by persons who utilize the arsenical-treated wood and wood product for these materials' intended end use;
- (k) Petroleum-contaminated media and debris that fail the test for the Toxicity Characteristic of §§4108.10 and 4108.11 (Hazardous Waste Codes D018 through D043 only) and are subject to the corrective action regulations under 20 DCMR, Chapters 55 through 70;
- (1) Used chlorofluorocarbon refrigerants from totally enclosed heat transfer equipment, including mobile air conditioning systems, mobile refrigeration, and commercial and industrial air conditioning and refrigeration systems that use chlorofluorocarbons as the heat transfer fluid in a refrigeration cycle, provided the refrigerant is reclaimed for further use;
- (m) Non-terne plated used oil filters that are not mixed with wastes listed in §§4109 through 4111 if these oil filters have been gravity hot-drained using one of the following methods:
  - (1) Puncturing the filter anti-drain back valve or the filter dome end and hot-draining;
  - (2) Hot-draining and crushing;
  - (3) Dismantling and hot-draining; or
  - (4) Any other equivalent hot-draining method that will remove used oil; and
- (n) Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products.
- 4101.3 A hazardous waste that is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated non-waste-treatment-manufacturing unit, is not subject to regulation under Chapters 42 through 44, 46, 47, and 50 or to the notification requirements of RCRA §3010 until it exits the unit in which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than 90

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days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials.

- 4101.4 Samples shall be regulated as follows:
  - (a) Except as provided in §4101.4(b), a sample of solid waste or a sample of water, soil, or air, which is collected for the sole purpose of testing to determine its characteristics or composition, is not subject to any requirements of this chapter or Chapters 42 through 45 and 50 or Chapter 46 or Chapter 47 or to the notification requirements of RCRA §3010 when:
    - (1) The sample is being transported to a laboratory for the purpose of testing;
    - (2) The sample is being transported back to the sample collector after testing;
    - (3) The sample is being stored by the sample collector before transport to a laboratory for testing;
    - (4) The sample is being stored in a laboratory before testing;
    - (5) The sample is being stored in a laboratory after testing but before it is returned to the sample collector; or
    - (6) The sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action where further testing of the sample may be necessary);
  - (b) In order to qualify for the exemption in §§4101.4(a)(1) and 4101.4(a)(2), a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector shall:
    - (1) Comply with U.S. Department of Transportation (DOT), U.S. Postal Service (USPS), or any other applicable shipping requirements; or
    - (2) Comply with the following requirements if the sample collector determines that DOT, USPS, or other shipping requirements do not apply to the shipment of the sample:
      - (A) Assure that the following information accompanies the sample:
        - (i) The sample collector's name, mailing address, and telephone number;
        - (ii) The laboratory's name, mailing address, and telephone number;
        - (iii) The quantity of the sample;
        - (iv) The date of shipment; and
        - (v) A description of the sample;

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- (B) Package the sample so that it does not leak, spill, or vaporize from its packaging.
- (c) This exemption does not apply if the laboratory determines that the waste is hadardous but the laboratory is no longer meeting any of the conditions stated in §4101.- a).
- 4101.5 Except as provided in §4101.6, persons who generate or collect samples in the District for the purpose of conducting treatability studies as defined in §5400.1, shall meet the notification requirements of RCRA §3010 and receive prior approval from the Director. Upon approval, the Director may waive or reduce any requirement of Chapters 41 through 43 of this subtitle. Such samples are not included in the quantity determinations of §4102 when:
  - (a) The sample is being collected and prepared for transportation by the generator or sample collector;
  - (b) The sample is being accumulated or stored by the generator or sample collector before transportation to a laboratory or testing facility; or
  - (c) The sample is being transported to the laboratory or testing facility for the purpose of conducting a treatability study.
- 4101.6 The exemption in §4101.5 is applicable to samples of hazardous waste being collected and shipped for the purpose of conducting treatability studies provided that:
  - (a) The generator or sample collector uses (in "treatability studies") no more than 1,000 kg of media contaminated with non-acute hazardous waste, 100 kg of non-acute hazardous waste other than contaminated media, 1 kg of acute hazardous waste, 250 kg of media contaminated with acute hazardous waste for each process being evaluated for each generated waste stream;
  - (b) The mass of each sample shipment does not exceed 1,000 kg; the 1,000 kg quantity may be all media contaminated with non-acute hazardous waste, or may include 250 kg of media contaminated with acute hazardous waste, 100 kg of hazardous waste, and 1 kg of acute hazardous waste; and
  - (c) The sample shall be packaged so that it shall not leak, spill, or vaporize from its packaging during shipment and the requirements of §4101.6(c)(1) or §4101.6(c)(2) are met; and:
    - (1) The transportation of each sample shipment complies with U.S. Department of Transportation (DOT), U.S. Postal Service (USPS), or any other applicable shipping requirements; or
    - (2) If the DOT, USPS, or other shipping requirements do not apply to the shipment of the sample, the following information shall accompany the sample:
      - (A) The name, mailing address, and telephone number of the originator of the sample;

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- (B) The name, address, and telephone number of the facility that shall perform the treatability study;
- (C) The quantity of the sample;
- (D) The date of shipment; and
- (E) A description of the sample, including its EPA Hazardous Waste Number;
- (d) The sample is shipped to a laboratory or testing facility that is exempt under §4101.9 or has an appropriate TSD facility permit or interim status;
- (e) The generator or sample collector maintains the following records for a period ending three (3) years after completion of the treatability study:
  - (1) Copies of the shipping documents;
  - (2) A copy of the contract with the facility conducting the treatability study;
  - (3) Documentation showing:

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- (A) The amount of waste shipped under this exemption;
- (B) The name, address, and EPA identification number of the laboratory or testing facility that received the waste;
- (C) The date the shipment was made; and
- (D) Whether or not unused samples and residues were returned to the generator; and
- (f) The generator reports the information required under §4101.6(e)(3) in its biennial report.
- 4101.7 The Director may grant requests on a case-by-case basis or up to an additional two years for treatability studies involving bioremediation. The Director may grant requests on a case-bycase basis for quantity limits in excess of those specified in §§4101.6(a) and (b) and 4101.9(d), for up to 10,000 kg of media contaminated with non-acute hazardous waste, 1,000 kg of non-acute hazardous waste, 2500 kg of media contaminated with acute hazardous waste and an additional 1 kg of acute hazardous waste:
  - (a) In response to requests for authorization to ship, store and conduct treatability studies on additional quantities in advance of commencing treatability studies. Factors to be considered in reviewing such requests include the nature of the technology, the type of process (for example, batch versus continuous), size of the unit undergoing testing (particularly in relation to scale-up considerations), the time/quantity of material required to reach steady state operating conditions, or test design considerations such as mass balance calculations; and

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- (b) In response to requests for authorization to ship, store and conduct treatability studies on additional quantities after initiation or completion of initial treatability studies, when: there has been an equipment or mechanical failure during the conduct of a treatability study; there is a need to verify the results of a previously conducted treatability study; there is a need to study and analyze alternative techniques within a previously evaluated treatment process; or there is a need to do further evaluation of an ongoing treatability study to determine final specifications for treatment.
- 4101.8 The additional quantities and timeframes allowed in §§4101.7(a) and 4101.7(b) are subject to all the provisions in §§4101.5 and 4101.6(c) through 4101.6(f). The generator or sample collector shall apply to the Director in the Region where the sample is collected and provide in writing the following information:
  - (a) The reason why the generator or sample collector requires additional time or quantity of sample for treatability study evaluation and the additional time or quantity needed;
  - (b) Documentation accounting for all samples of hazardous waste from the waste stream that have been sent for or undergone treatability studies including the date each previous sample from the waste stream was shipped, the quantity of each previous shipment, the laboratory or testing facility to which it was shipped, the treatability study processes that were conducted on each sample shipped, and the available results on each treatability study;
  - (c) A description of the technical modifications or change in specifications that shall be evaluated and the expected results;
  - (d) If the further study is being required due to equipment or mechanical failure, the applicant shall include information regarding the reason for the failure or breakdown and state the procedures or equipment improvements that have been made to protect against further breakdowns; and
  - (e) Any other information that the Director considers necessary.
- 4101.9 Samples undergoing treatability studies and the laboratory or testing facility conducting these treatability studies in the District (to the extent these facilities are not otherwise subject to the District's hazardous waste requirements) shall meet the notification requirements of RCRA §3010 and receive prior approval from the Director. Upon approval, the Director may waive or reduce any requirement of this chapter, Chapters 42 through 47, and Chapter 50, provided that the conditions of §§4101.9(a) through 4101.9(k) are met. A mobile treatment unit (MTU) may qualify as a testing facility subject to §§4101.9(a) through 4101.9(k). Where a group of MTUs are located at the same site, the limitations specified in §§4101.9(a) through 4101.9(k) apply to the entire group of MTUs collectively as if the group were one MTU. The requirements that testing facilities shall meet are:
  - (a) No less than forty-five (45) days before conducting treatability studies, the facility shall notify the Director in writing that it intends to conduct treatability studies under §4101.9;

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- (b) The laboratory or testing facility conducting the treatability study has an EPA identification number and the prior approval of the Director to conduct a treatability study;
- (c) No more than a total of 1,000 kg of "as received" media contaminated with non-acute hazardous waste, 250 kg of media contaminated with acute hazardous waste or 25 kg of other "as received" hazardous waste is subject to initiation of treatment in all treatability studies in any single day. "As received" waste refers to the waste as received in the shipment from the generator or sample collector. On a case-by-case basis, the Director may grant quantity limitations in excess of these amounts up to the limits set at 40 CFR 261.4(f)(3).
- (d) The quantity of "as received" hazardous waste stored at the facility for the purpose of evaluation in treatability studies does not exceed 1,000 kg, the total of which can include 1,000 kg of media contaminated with non-acute hazardous waste, 250 kg of media contaminated with acute hazardous waste, 100 kg of non-acute hazardous wastes other than contaminated media, and 1 kg of acute hazardous waste. This quantity limitation does not include treatment materials (including nonhazardous solid waste) added to "as received" hazardous waste. On a case-by-case basis, the Director may grant quantity limitations in excess of these amounts up to the limits set at 40 CFR 261.4(f)(4).
- (e) No more than ninety (90) days have elapsed since the treatability study for the sample was completed, or no more than one (1) year (two (2) years for treatability studies involving bioremediation) have elapsed since the generator or sample collector shipped the sample to the laboratory or testing facility, whichever date first occurs. Up to 500 kg of treated material from a particular waste stream from treatability studies may be archived for future evaluation up to five years from the date of initial receipt. Quantities of materials archived are counted against the total storage limit for the facility;
- (f) The treatability study does not involve the placement of hazardous waste on the land or burning of hazardous waste;
- (g) The facility maintains records for three (3) years following completion of each study that show compliance with the treatment rate limits and the storage time and quantity limits. The following specific information shall be included for each treatability study conducted:
  - (1) The name, address, and EPA identification number of the generator or sample collector of each waste sample;
  - (2) The date the shipment was received;
  - (3) The quantity of waste accepted;
  - (4) The quantity of "as received" waste in storage each day;
  - (5) The date the treatment study was initiated and the amount of "as received" waste introduced to treatment each day;

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- (6) The date the treatability study was concluded;
- (7) The date any unused sample or residues generated from the treatability study were returned to the generator or sample collector or, if sent to a designated facility, the name of the facility and the EPA identification number;
- (h) The facility keeps, on-site, a copy of the treatability study contract and all shipping papers associated with the transport of treatability study samples to and from the facility for a period ending 3 years from the completion date of each treatability study;
- (i) The facility prepares and submits a report to the Director by March 15 of each year that estimates the number of studies and the amount of waste expected to be used in treatability studies during the current year, and includes the following information for the previous calendar year:
  - (1) The name, address, and EPA identification number of the facility conducting the treatability studies;
  - (2) The types (by process) of treatability studies conducted;
  - (3) The names and addresses of persons for whom studies have been conducted (including their EPA identification numbers);
  - (4) The total quantity of waste in storage each day;
  - (5) The quantity and types of waste subjected to treatability studies;
  - (6) The date each treatability study was conducted; and
  - (7) The final disposition of residues and unused sample from each treatability study;
- (j) The facility determines whether any unused sample or residues generated by the treatability study are hazardous waste under §§4100.12 through 4100.17 and, if so, are subject to Chapters 41 through 46. and Chapter 50 of this subtitle, unless the residues and unused samples are returned to the sample originator under the §4101.5 exemption; and
- (k) The facility notifies the Director by letter when the facility is no longer planning to conduct any treatability studies at the site.

### 4102 SPECIAL REQUIREMENTS FOR HAZARDOUS WASTE GENERATED BY SMALL QUANTITY GENERATORS

- 4102.1 A generator is a small quantity generator if he or she generates no more than 100 kilograms of hazardous waste in a calendar month and meets the quantity limits of §4102.5.
- 4102.2 [RESERVED]

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- 4102.3 When making the quantity determinations of this chapter and Chapter 42, the generator shall include all hazardous waste that it generates, except hazardous waste that:
  - (a) Is exempt from regulation under \$4101.3 through 4101.9, 4103.3, 4104.1, or 4105.1;
  - (b) Is managed immediately upon generation only in on-site elementary neutralization units, wastewater treatment units, or totally enclosed treatment facilities as defined in §5400.1;
  - (c) Is recycled, without prior storage or accumulation, only in an on-site process subject to regulation under §4103.6;
  - (d) Is used oil managed under the requirements of §4103.3(h) and Chapter 49;
  - (e) Is spent lead-acid batteries managed under the requirements of §4506; or
  - (f) Is universal waste managed under §4106.1 and Chapter 48.
- 4102.4 In determining the quantity of hazardous waste generated, a generator need not include:
  - (a) Hazardous waste when it is removed from on-site storage;
  - (b) Hazardous waste produced by on-site treatment (including reclamation) of his or her hazardous waste, so long as the hazardous waste that is treated was counted once; or
  - (c) Spent materials that are generated, reclaimed, and subsequently reused on-site, so long as the spent materials have been counted once.
- 4102.5 If a generator generates acute hazardous waste in a calendar month in quantities greater than set forth below, all quantities of hazardous waste are subject to full regulation under Chapters 42 through 47 and Chapter 50 of this subtitle, and the notification requirements of RCRA §3010:
  - (a) A total of one kilogram of acute hazardous wastes listed in §§4109.5 through 4109.10, 4109.11, or 4109.12(e).
  - (b) A total of 50 kilograms of any residue or contaminated soil, waste, or other debris resulting from the clean-up of a spill, into or on any land or water, of any acute hazardous wastes listed in §§4109.5 through 4109.10, 4109.11, or 4109.12(e).
- 4102.6 A small quantity generator may accumulate hazardous waste on-site for 180 days provided that the quantity of hazardous waste accumulated on-site never exceeds 600 kilograms or the quantity limitations of §§4102.5(a)&(b). Accumulated wastes that exceed the time and quantity limit of §4102.6 shall be subject to §4202.6.
- 4102.7 A small quantity generator may either treat or dispose of his or her hazardous waste in an onsite facility or ensure delivery to an off-site treatment, storage or disposal facility, either of which, if located in the United States, is:
  - (a) Permitted under Chapter 46 of this subtitle;

- (b) In interim status under Chapter 46 and §§4401.1 and 4401.2 of this subtitle;
- (c) Authorized to manage hazardous waste by a State with a hazardous waste management program approved under 40 CFR part 271;
- (d) Permitted, licensed or registered by a State to manage municipal solid waste and, if managed in a municipal solid waste landfill, is subject to 40 CFR Part 258 (the facilities addressed by this paragraph must be off-site facilities located outside the District and approved by a State to receive the hazardous waste);
- (e) Permitted, licensed, or registered by a State to manage non-municipal non-hazardous waste and, if managed in a non-municipal non-hazardous waste disposal unit after January 1,1998, is subject to the requirements in 40 CFR 257.5 through 257.30 (the facilities addressed by this paragraph must be off-site facilities located outside the District and approved by a State to receive the hazardous waste);
- (f) A facility that:

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- (1) Beneficially uses or reuses, or legitimately recycles or reclaims its waste; or
- (2) Treats its waste prior to beneficial use or reuse, or legitimate recycling or reclamation; or
- (g) For universal waste managed under Chapter 48 of this subtitle, a universal waste handler or destination facility subject to the requirements of Chapter 48 of this subtitle.
- 4102.8 Hazardous waste subject to the reduced requirements of §§4102.1 through 4102.10 may be mixed with non-hazardous waste and remain subject to these reduced requirements even though the resultant mixture exceeds the quantity limitations identified in §§4102.1 through 4102.10, unless the mixture meets any of the characteristics of hazardous waste identified in §4108.
- 4102.9 If any person mixes a solid waste with a hazardous waste that exceeds a quantity exclusion level of §4102.1 through 4102.10, the mixture is subject to full regulation.
- 4102.10 If a small quantity generator's wastes are mixed with used oil, the mixture is subject to regulation as a hazardous waste and is subject to the reduced requirements of §4102 provided the mixture meets the quantity limitations of this section. This restriction applies even if the mixture is destined to be burned for energy recovery. Any material produced from such a mixture by processing, blending, or other treatment is also so regulated even if it is destined to be burned for energy recovery.

#### 4103 REQUIREMENTS FOR RECYCLABLE MATERIALS

4103.1 Hazardous wastes that are recycled ("recyclable materials") are subject to the requirements for generators, transporters, and storage facilities of §§4103.4 through 4103.6, except for the materials listed in §§4103.2 and 4103.3.

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- 4103.2 The following recyclable materials are not subject to the requirements of §4103 but are regulated under §§4502 through 4507 and all applicable provisions in Chapters 46 and 47 of this subtitle:
  - (a) Recyclable materials used in a manner constituting disposal (§4502);
  - (b) The burning of hazardous waste in boilers and industrial furnaces is prohibited in the District under §4400.3 and 4111. However, hazardous wastes destined for burning for energy recovery in boilers and industrial furnaces outside the District are regulated under §4507;
  - (c) Recyclable materials from which precious metals are reclaimed (§4505); and
  - (d) Spent lead-acid batteries that are being reclaimed (§4506).
- 4103.3 The following recyclable materials are not subject to regulation under Chapters 42 through 47 or 50 of this subtitle, and are not subject to the notification requirements of RCRA §3010:
  - (a) Industrial ethyl alcohol that is reclaimed except that, unless provided otherwise in an international agreement as specified in §4204.11:
    - (1) A person initiating a shipment for reclamation in a foreign country, and any intermediary arranging for the shipment, shall comply with the requirements applicable to a primary exporter in §§4204.3 through 4204.6, 4204.9 intro, 4209.9(a)-(d), 4204.9(f), and 4204.10, export such materials only upon consent of the receiving country and in conformance with the EPA Acknowledgment of Consent as defined in §§4204.1 through 4204.11, and provide a copy of the EPA Acknowledgment of Consent to the shipment to the transporter transporting the shipment for export;
    - (2) A transporter transporting a shipment for export may not accept a shipment if he or she knows the shipment does not conform to the EPA Acknowledgment of Consent, shall ensure that a copy of the EPA Acknowledgment of Consent accompanies the shipment and shall ensure that it is delivered to the facility designated by the person initiating the shipment;
  - (b) Scrap metal that is not excluded under §4101.1(o);
  - (c) Fuels produced from the refining of oil-bearing hazardous waste along with normal process streams at a petroleum refining facility if the wastes result from normal petroleum refining, production, and transportation practices (this exemption does not apply to fuels produced from oil recovered from oil-bearing hazardous waste, where the recovered oil is already excluded under §4101.1(n);
  - (d) Hazardous waste fuel produced from oil-bearing hazardous wastes from petroleum refining, production, or transportation practices, or produced from oil reclaimed from such hazardous wastes, where such hazardous wastes are reintroduced into a process that does not use distillation or does not produce products from crude oil so long as the resulting fuel meets the used oil specification under §4900.15 and so long as no other hazardous wastes are used to produce the hazardous waste fuel;

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- (e) Hazardous waste fuel produced from oil-bearing hazardous waste from petroleum refining production, and transportation practices, where such hazardous wastes are reintroduced into a refining process after a point at which contaminants are removed, so long as the fuel meets the used oil fuel specification §4900.15;
- (f) Oil reclaimed from oil-bearing hazardous wastes from petroleum refining, production, and transportation practices, which reclaimed oil is burned as a fuel without reintroduction to a refining process, so long as the reclaimed oil meets the used oil fuel specification under §4900.15;
- (g) Petroleum coke produced from petroleum refinery hazardous wastes containing oil by the same person who generated the waste, unless the resulting coke product exceeds one or more of the characteristics of hazardous waste in §4108;
- (h) Used oil that is recycled and is also a hazardous waste solely because it exhibits a hazardous characteristic is not subject to the requirements of Chapters 40 through 45 and Chapter 50 of this subtitle, but is regulated under Chapter 49 of this subtitle. Used oil that is recycled includes any used oil that is reused, following its original use, for any purpose (including the purpose for which the oil was originally used). Such term includes, but is not limited to, oil that is re-refined, reclaimed, burned for energy recovery, or reprocessed; and
- (i) Hazardous waste that is not "District-only" waste and is exported to or imported from designated member countries of the Organization for Economic Cooperation and Development (OECD) (as defined in §4204.11(b)) for purpose of recovery is subject to the requirements of §4207, if it is subject to either the Federal manifesting requirements of Chapter 42, to the universal waste management standards of Chapter 48, or to other States' requirements analogous to 40 CFR Part 273.
- 4103.4 Generators and transporters of recyclable materials are subject to the applicable requirements of Chapters 42 and 43 and the notification requirements under RCRA §3010, except as provided in §§4103.1 through 4103.3.
- 4103.5 Owners and operators of facilities that store recyclable materials before they are recycled are regulated under all applicable provisions of §§4400 through 4417. §§4428 through 4444, §§4445 through 4459, and §§4474 through 4483, and under Chapters 45, 46, 47, and 50 and the notification requirements under RCRA §3010, except as provided in §§4103.1 through 4103.3. (The recycling process itself is exempt from regulation except as provided in §4103.7.)
- 4103.6 Owners or operators of facilities that recycle recyclable materials without storing them before they are recycled are subject to the following requirements, except as provided in §§4103.1 through 4103.3:
  - (a) Notification requirements under RCRA §3010;
  - (b) Sections 4411.4 and 4411.8 (dealing with the use of the manifest and manifest discrepancies);
  - (c) Section 4103.7.

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4103.7 Owners or operators of facilities subject to TSD facility permitting requirements with hazardous waste management units that recycle hazardous wastes are subject to the requirements of §§4428 through 4444 and §§4445 through 4459.

#### 4104 **RESIDUES OF HAZARDOUS WASTE IN CONTAINERS**

- 4104.1 Any hazardous waste remaining in either an empty container or an inner liner removed from an empty container, as defined in §§4104.3 through 4104.5, is not subject to regulation under Chapters 41 through 44, or Chapters 46, 47 or 50 of this subtitle or to the notification requirements of RCRA §3010.
- 4104.2 Any hazardous waste in either a container that is not empty or an inner liner removed from a container that is not empty, as defined in §§4104.3 through 4104.5, is subject to regulation under Chapters 41 through 44, and Chapters 46, 47 and 50 of this subtitle and to the notification requirements of RCRA §3010.
  - 4104.3 A container or an inner liner removed from a container that has held any hazardous waste, except a waste that is a compressed gas or that is identified as an acute hazardous waste listed in §§4109.5 through 4109.10, 4109.11, or 4109.12(e) is empty if:
    - (a) All wastes have been removed that can be removed using the practices commonly employed to remove materials from that type of container, for example, pouring, pumping, and aspirating; and
    - (b) No more than 2.5 centimeters (one inch) of residue remain on the bottom of the container or inner liner; or
    - (c) No more than 3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to 110 gallons in size; or
    - (d) No more than 0.3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is greater than 110 gallons in size.
  - 4104.4 A container that has held a hazardous waste that is a compressed gas is empty when the pressure in the container approaches atmospheric.
- 4104.5 A container or an inner liner removed from a container that has held an acute hazardous waste listed in §§4109.5 through 4109.10, 4109.11, or 4109.12(e) is empty if:
  - (a) The container or inner liner has been triple rinsed using a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate;
  - (b) The container or inner liner has been cleaned by another method that has been shown in the scientific literature, or by tests conducted by the generator, to achieve equivalent removal; or
  - (c) In the case of a container, the inner liner that prevented contact of the commercial chemical product or manufacturing chemical intermediate with the container, has been removed.

#### 4105 PCB WASTES REGULATED UNDER TOXIC SUBSTANCE CONTROL ACT

4105.1 The disposal of PCB-containing dielectric fluid and electric equipment containing dielectric fluid authorized for use and regulated under 40 CFR part 761 and that are hazardous only because they fail the test for the Toxicity Characteristic (Hazardous Waste Codes D018 through D043 only) are exempt from regulation under Chapters 41 through 44. and Chapters 46, 47, and 50 of this subtitle, and the notification requirements of RCRA §3010.

#### 4106 **REQUIREMENTS FOR UNIVERSAL WASTE**

- 4106.1 The wastes listed in §4106 are exempt from regulation under Chapters 42 through 46 and Chapter 50 except as specified in Chapter 48 and, therefor are not fully regulated as hazardous waste. The wastes listed in §4106 are subject to regulation under Chapter 48. The reduced requirements of Chapter 48 apply only to waste destined for recycling. Except as specified at §4800.2 for pesticide waste, waste destined for disposal is subject to full regulation under Chapters 42 through 46 and Chapter 50.
  - (a) Batteries as described in §§4800.3 through 4800.7;
  - (b) Pesticides as described in §§4800.8 through 4800.12;
  - (c) Thermostats as described in §§4800.13 through 4800.16; and
  - (d) Mercury containing lamps, as described in §4806.

### 4107 CRITERIA FOR IDENTIFYING THE CHARACTERISTICS OF HAZARDOUS WASTE AND FOR LISTING HAZARDOUS WASTE

- 4107.1 The Director shall identify and define a characteristic of hazardous waste in §4108 only upon determining that:
  - (a) A solid waste that exhibits the characteristic may:
    - (1) Cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or
    - (2) Pose a substantial present or potential hazard to human health or the environment when it is improperly treated, stored, transported, disposed of or otherwise managed; and
  - (b) The characteristic can be:
    - Measured by an available standardized test method that is reasonably within the capability of generators of solid waste or private sector laboratories that are available to serve generators of solid waste; or

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- (2) Reasonably detected by generators of solid waste through their knowledge of their waste.
- 4107.2 The Director shall list a solid waste as a hazardous waste only upon determining that the solid waste meets one of the following criteria:
  - (a) It exhibits any of the characteristics of hazardous waste identified in §4108;
  - (b) It has been found to be fatal to humans in low doses or, in the absence of data on human toxicity, it has been shown in studies to have an oral LD 50 toxicity (rat) of less than 50 milligrams per kilogram, an inhalation LC 50 toxicity (rat) of less than 2 milligrams per liter, or a dermal LD 50 toxicity (rabbit) of less than 200 milligrams per kilogram or is otherwise capable of causing or significantly contributing to an increase in serious irreversible, or incapacitating reversible, illness. (Waste listed in accordance with these criteria shall be designated Acute Hazardous Waste.); or
  - (c) It contains any of the toxic constituents listed in Appendix II of this chapter and, after considering the following factors, the Director concludes that the waste is capable of posing a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of, or otherwise managed:
    - (1) The nature of the toxicity the constituent presents;
    - (2) The concentration of the constituent in the waste;
    - (3) The potential of the constituent, or any toxic degradation product of the constituent, to migrate from the waste into the environment under the types of improper management considered in §4107.2(c)(7);
    - (4) The persistence of the constituent or any toxic degradation product of the constituent;
    - (5) The potential for the constituent or any toxic degradation product of the constituent to degrade into non-harmful constituents and the rate of degradation;
    - (6) The degree to which the constituent or any degradation product of the constituent bioaccumulates in ecosystems;
    - (7) The plausible types of improper management to which the waste could be subjected;
    - (8) The quantities of the waste generated at individual generation sites or on a regional or national basis;
    - (9) The nature and severity of the human health and environmental damage that has occurred as a result of the improper management of wastes containing the constituent;
    - (10) Action taken by other governmental agencies or regulatory programs based on the health or environmental hazard posed by the waste or waste constituent; and

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- (11) Other factors as may be appropriate.
- (d) Substances shall be listed on Appendix II of this chapter only if they have been shown in scientific studies to have toxic, carcinogenic, mutagenic or teratogenic effects on humans or other life forms. (Wastes listed in accordance with these criteria shall be designated Toxic wastes.)
- 4107.3 The Director may list classes or types of solid waste as hazardous waste if he or she has reason to believe that individual wastes, within the class or type of waste, typically or frequently are hazardous under the definition of hazardous waste as defined in §5400.1.
- 4107.4 The Director shall use the criteria for listing specified in §§4107.2 through 4107.3 to establish the exclusion limits referred to in §4102.3.

#### 4108 CHARACTERISTICS OF HAZARDOUS WASTE

- 4108.1 A solid waste, as defined in §§4100.4 through 4100.11, that is not excluded from regulation as a hazardous waste under §4101.2, is a hazardous waste if it exhibits any of the characteristics identified in §4108.
- 4108.2 A hazardous waste that is identified by a characteristic in §4108 is assigned every EPA Hazardous Waste Number that is applicable as set forth in §4108. This number shall be used in complying with the notification requirements of RCRA §3010 and all applicable recordkeeping and reporting requirements under Chapters 42 through 44, 46, and 50 of this subtitle.
- 4108.3 For purposes of §4108, the Director shall consider a sample obtained using any of the applicable sampling methods specified in 40 CFR part 261 appendix I, as incorporated by reference in §4112.1(a) to be a representative sample within the meaning of Chapter 40 of this subtitle. Because the Director is not formally adopting the 40 CFR part 261 appendix I sampling methods, a person who desires to employ an alternative sampling method is not required to demonstrate the equivalency of his or her method under the procedures set forth in §§4001.1 through 4001.9.
- 4108.4 A solid waste exhibits the characteristic of ignitability if a representative sample of the waste has any of the following properties:
  - (a) It is a liquid, other than an aqueous solution containing less than 24 percent alcohol by volume and has flash point less than 60°C (140°F), as determined by a Pensky-Martens Closed Cup Tester, using the test method specified in ASTM Standard D-93-79 or D-93-80 (incorporated by reference, see §4017), or a Setaflash Closed Cup Tester, using the test method specified in ASTM Standard D-3278-78 (incorporated by reference, see §4017), or as determined by an equivalent test method approved by the Director under procedures set forth in §§4001.1 through 4001.9.
  - (b) It is not a liquid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard.

- (c) It is an ignitable compressed gas as defined in 49 CFR 173.300 (July 1, 1990 49 CFR) and as determined by the test methods described in that regulation or equivalent test methods approved by the Director under §§4001.1 through 4001.9.
- (d) It is an oxidizer as defined in 49 CFR 173.151 (July 1, 1990 49 CFR).
- 4108.5 A solid waste that exhibits the characteristic of ignitability has the EPA Hazardous Waste Number of D001.
- 4108.6 A solid waste exhibits the characteristic of corrosivity if a representative sample of the waste has either of the following properties:
  - (a) It is aqueous and has a pH less than or equal to 2 or greater than or equal to 12.5, as determined by a pH meter using Method 9040 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference in §4017; or
  - (b) It is a liquid and corrodes steel (SAE 1020) at a rate greater than 6.35 mm (0.250 inch) per year at a test temperature of 55°C (130°F) as determined by the test method specified in NACE (National Association of Corrosion Engineers) Standard TM-01-69 as standardized in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference in §4017.
- 4108.7 A solid waste that exhibits the characteristic of corrosivity has the EPA Hazardous Waste Number of D002.
- 4108.8 A solid waste exhibits the characteristic of reactivity if a representative sample of the waste has any of the following properties:
  - (a) It is normally unstable and readily undergoes violent change without detonating;
  - (b) It reacts violently with water;

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- (c) It forms potentially explosive mixtures with water;
- (d) When mixed with water, it generates toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment;
- (e) It is a cyanide or sulfide bearing waste that, when exposed to pH conditions between 2 and 12.5, can generate toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment;
- (f) It is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement;
- (g) It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure; or

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- (h) It is a forbidden explosive as defined in 49 CFR 173.51 (July 1, 1990 49 CFR), or a Class A explosive as defined in 49 CFR 173.53 (July 1, 1990 49 CFR) or a Class B explosive as defined in 49 CFR 173.88 (July 1, 1990 49 CFR).
- 4108.9 A solid waste that exhibits the characteristic of reactivity has the EPA Hazardous Waste Number of D003.
- 4108.10 A solid waste exhibits the characteristic of toxicity if, using the Toxicity Characteristic Leaching Procedure, test Method 1311 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference in §4017, the extract from a representative sample of the waste contains any of the contaminants listed in table 3 at the concentration equal to or greater than the respective value given in that table. Where the waste contains less than 0.5 percent filterable solids, the waste itself, after filtering using the methodology outlined in Method 1311, is considered to be the extract for the purpose of §§4108.10 and 4108.11.
- 4108.11 A solid waste that exhibits the characteristic of toxicity has the EPA Hazardous Waste Number specified in Table 3, which corresponds to the toxic contaminant causing it to be hazardous.

<u> TABLE 3 – MA</u>	KIMUM CONCENTRATION OF CONTAMINANTS FOR TH	E TOXICITY CHA	RACTERISTIC
EPA HW No.~?	Contaminant	CAS No. <sup>2</sup>	Regulatory Level (mg/L)
D004	Arsenic	7440-38-2	5.0
D005	Barium	7440-39-3	100.0
D018	Benzene	71-43-2	0.5
D006	Cadmium	7440-43-9	1.0
D019	Carbon tetrachloride	56-23-5	0.5
D020	Chlordane	57-74-9	0.03
D021	Chlorobenzene	108-90-7	100.0
D022	Chloroform	67-66-3	6.0
D007	Chromium	7440-47-3	5.0
D023	o-Cresol	95-48-7	<sup>4</sup> 200.0
D024	m-Cresol	108-39-4	4 200.0
D025	p-Cresol	106-44-5	4 200.0
D026	Cresol		4 200.0
D016	2,4-D	94-75-7	10.0
D027	1,4-Dichlorobenzene	106-46-7	7.5
D028	1,2-Dichloroethane	107-06-2	0.5
D029	1,1-Dichloroethylene	75-35-4	0.7
D030	2,4-Dinitrotoluene	121-14-2	. 3 0.13
D012	Endrin	72-20-8	0.02
D031	Heptachlor (and its epoxide)	76-44-8	0.008
D032	Hexachlorobenzene	118-74-1	<sup>3</sup> 0.13
D033	Hexachlorobutadiene	87-68-3	0.5

TABLE 3 - MAXIMUM CONCENTRATION OF CONTAMINANTS FOR THE TOXICITY CHARACTERISTIC

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EPA HW No. '	Contaminant	CAS No. 2	Regulatory Level (mg/L)
D034	Hexachloroethane	67-72-1	3.0
D <b>008</b>	Lead	7439-92-1	5.0
D013	Lindane	58-89-9	0.4
D009	Hercury	7439-97-6	0.2
D014	Hethoxychlor	72-43-5	10.0
D035	Hethyl ethyl ketone	78-93-3	200.0
D <b>036</b>	Nitrobenzene	98-95-3	2.0
D037	Pentrachlorophenol	87-86-5	100.0
D <b>038</b>	Pyridine	110-86-1	³ 5.0
D010	Selenium	7782-49-2	1.0
D011	Silver	7440-22-4	5.0
D039	Tetrachloroethylene	127-18-4	0.7
D015	Toxaphene	8001-35-2	0.5
D040	Trichloroethylene	79-01-6	0.5
0041	2,4,5-Trichlorophenol	95-95-4	400.0
D042	2,4,6-Trichlorophenol	88-06-2	2.0
D017	2,4,5-TP (Silvex)	93-72-1	1.0
D <b>043</b>	Vinyl chloride	75-01-4	0.2

'Hazardous waste number.

<sup>2</sup>Chemical abstracts service number.

<sup>3</sup>Quantitation limit is greater than the calculated regulatory level. The quantitation limit therefor becomes the regulatory level.

<sup>4</sup>If o-, m-, and p-Cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total cresol is 200 mg/l.

### 4109 LISTS OF HAZARDOUS WASTES

4109.1 A solid waste is a hazardous waste if it is listed in §4109, unless it has been excluded from this list under §4001.10.

4109.2 The Director shall indicate his or her basis for listing the classes or types of wastes listed in §§4109 through 4111 by employing one or more of the following Hazard Codes:

Ignitable Waste	0
Corrosive Waste	(C)
Reactive Waste	(R)
Toxicity Characteristic Waste	(E)
Acute Hazardous Waste	(#)
Toxic Waste	(T)

Appendix I to Chapter 41 identifies the constituent which caused the Director to list the waste as a Toxicity Characteristic Waste (E) or Toxic Waste (T) in §§4109.5 through 4109.11.

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- 4109.3 Each hazardous waste listed in §§4109 through 4111 is assigned an EPA Hazardous Waste Number, which precedes the name of the waste. This number shall be used in complying with the notification requirements of RCRA §3010 and certain recordkeeping and reporting requirements under Chapters 42 through 44, 46, and 50 of this subtitle.
- 4109.4 The following hazardous wastes listed in §§4109.5 through 4109.10 or §4109.11 are subject to the exclusion limits for acutely hazardous wastes established in §4102: EPA Hazardous Wastes Nos. FO20, FO21, FO22, FO23, FO26, and FO27.
- 4109.5 The following solid wastes are listed hazardous wastes from non-specific sources unless they are excluded under §§4001.1 through 4001.5 and §4001.10 and, as incorporated by reference in §4112.1(d).

Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
Generic:		
F001	The following spent halogenated solvents used in degreasing: Tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1- trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(T)
F002	The following spent halogenated solvents: Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2- trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane, and 1,1,2-trichloroethane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	τ Γ
F003	The following spent non-halogenated solvents: Xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent non-halogenated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above non- halogenated solvents, and, a total of ten percent or more (by volume) of one or more of those solvents listed in F001, F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(1)*
F0 <b>04</b>	The following spent non-halogenated solvents: Cresols and cresylic acid, and nitrobenzene; all spent solvent mixtures/blends containing, before use, a \ total of ten percent or more (by volume) of one or more of the above non- halogenated solvents or those solvents listed in F001, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(T) <sup>3</sup>
F005	The following spent non-halogenated solvents: Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2- nitropropane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non- halogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(1,1)

#### TABLE 4

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Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
F006	Wastewater treatment sludges from electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum.	(T)
F007	Spent cyanide plating bath solutions from electroplating operations.	(R, T)
F00 <b>8</b>	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.	(R, T)
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.	(R, T)
F010	Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process.	(R, T)
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations.	(R, T)
F012	Quenching waste water treatment sludges from metal heat treating operations where cyanides are used in the process.	ന
F0 <b>1</b> 9	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.	(T)
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.).	(H)
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.	(H)
F022	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions.	(H)
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- and 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.).	(H)
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. 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. (This listing does not include wastewaters, wastewater treatment sludges, spent catalysts, and wastes listed in §§4109.5 through 4109.10 or §4109.11.).	(T)
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.	(T)

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Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
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.	(#)
F027	Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing Hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.).	(#)
F028	Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027.	(T)
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 currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with §4110 of this subtitle or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes (that is, F034 or F035), and where the generator does not resume or initiate use of chlorophenolic 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.	(T)
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.	(T)
-035	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.	(T)
	Petroleum refinery primary oil/water/solids separation sludge-Any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not limited to, those generated in: oil/water/solids separators; tanks and impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow. Sludge generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in §§4109.7 through 4109.8 (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and K051 wastes are not included in this listing.	(T)

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Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
F038	Petroleum refinery secondary (emulsified) 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. Such wastes include, but are not limited to, all sludges and floats generated in: induced air flotation (IAF) units, tanks and impoundments, and all sludges generated in DAF units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges and floats generated in aggressive biological treatment units as defined in §§4109.7 through 4109.8 (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and F037, K048, and K051 wastes are not included in this listing.	(T)
F039	Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted waste classified as hazardous under §§4109 through 4111. (Leachate resulting from the disposal of one or more of the following EPA Hazardous Wastes and no other Hazardous Wastes retains its EPA Hazardous Waste Number(s): F020, F021, F022, F026, F027, and/or F028.).	(T)

\*(I,T) should be used to specify mixtures containing ignitable and toxic constituents.

- 4109.6 Listing Specific Definitions: For the purposes of the F037 and F038 listings, oil/water/solids is defined as oil and/or water and/or solids.
- 4109.7 For the purposes of the F037 and F038 listings, aggressive biological treatment units are defined as units that employ one of the following four treatment methods: activated sludge; trickling filter; rotating biological contactor for the continuous accelerated biological oxidation of wastewaters; or high-rate aeration. High-rate aeration is a system of surface impoundments or tanks, in which intense mechanical aeration is used to completely mix the wastes, enhance biological activity, and (A) the units employ a minimum of 6 hp per million gallons of treatment volume; and either (B) the hydraulic retention time of the unit is no longer than 5 days; or (C) the hydraulic retention time is no longer than 30 days and the unit does not generate a sludge that is a hazardous waste by the Toxicity Characteristic.
- 4109.8 Generators and treatment, storage and disposal facilities have the burden of proving that their sludges are exempt from listing as F037 and F038 wastes under this definition. Generators and treatment. storage and disposal facilities shall maintain, in their operating or other onsite records, documents and data sufficient to prove that: (A) the unit is an aggressive biological treatment unit as defined in §§4109.6 through 4109.10; and (B) the sludges sought to be exempted from the definitions of F037 and/or F038 were actually treated in the aggressive biological treatment unit.
- 4109.9 For the purposes of the F037 listing, sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement.
- 4109.10 For the purposes of the F038 listing, (A) sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation

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of lateral particle movement, and (B) floats are considered to be generated at the movement they are formed in the top of the unit.

4109.11 The following solid wastes are listed hazardous wastes from specific sources unles excluded under §§4001.1 through 4001.5 and 4001.10 and listed in appendix IX = 0 CFR part 261, as incorporated by reference in §4112.1(d).

Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
Wood preservation:		
коо1	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol.	(T)
lnorganic pigments:		
K002	Wastewater treatment sludge from the production of chrome yellow and orange pigments.	(T)
к003	Wastewater treatment sludge from the production of molybdate orange pigments.	(T)
к004	Wastewater treatment sludge from the production of zinc yellow pigments.	СТ
K005	Wastewater treatment sludge from the production of chrome green pigments.	(T)
к006	Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated).	(T)
к007	Wastewater treatment sludge from the production of iron blue pigments.	(T)
коов	Oven residue from the production of chrome oxide green pigments.	<u>ري</u>
Organic chemicals:		
к009	Distillation bottoms from the production of acetaldehyde from ethylene.	(T)
к010	Distillation side cuts from the production of acetaldehyde from ethylene.	(T)
К011	Bottom stream from the wastewater stripper in the production of acrylonitrile.	(R, T)
к013	Bottom stream from the acetonitrile column in the production of acrylonitrile.	(R, T)
К014	Bottoms from the acetonitrile purification column in the production of acrylonitrile.	(T)
к015	Still bottoms from the distillation of benzyl chloride.	(T)
к016	Heavy ends or distillation residues from the production of carbon tetrachloride.	(T)
к017	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin.	(T)
к018 .	Heavy ends from the fractionation column in ethyl chloride production.	(T)
К019	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.	(T)
ко20	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.	(T)
к021	Aqueous spent antimony catalyst waste from fluoromethanes production.	(T)

TABLE 5



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Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
к022	Distillation bottom tars from the production of phenol/acetone from cumene.	(T)
к023	Distillation light ends from the production of phthalic anhydride from naphthalene.	(T)
к024	Distillation bottoms from the production of phthalic anhydride from naphthalene.	(T)
к025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene.	(T)
К026	Stripping still tails from the production of methy ethyl pyridines.	(T)
K027	Centrifuge and distillation residues from toluene diisocyanate production.	(R, T)
K028	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane.	(T)
K029	Waste from the product steam stripper in the production of 1,1,1- trichloroethane.	(T)
к030	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene.	(T)
к083	Distillation bottoms from aniline production.	·(T)
K0 <b>8</b> 5	Distillation or fractionation column bottoms from the production of chlorobenzenes.	(T)
к093	Distillation light ends from the production of phthalic anhydride from ortho-xylene.	(T)
K094	Distillation bottoms from the production of phthalic anhydride from ortho-xylene.	(T)
K095	Distillation bottoms from the production of 1,1,1-trichloroethane.	(T)
K096	Heavy ends from the heavy ends column from the production of 1,1,1- trichloroethane.	(T)
к103	Process residues from aniline extraction from the production of aniline.	(T)
K104	Combined wastewater streams generated from nitrobenzene/aniline production.	(T)
к105	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes.	(T)
K107	Column bottoms from product separation from the production of 1,1- dimethyl-hydrazine (UDMH) from carboxylic acid hydrazides.	(C,T)
к10 <b>8</b>	Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(1,T)
к109	Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(T)
K110	Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(T)
K111	Product washwaters from the production of dinitrotoluene via nitration of toluene.	(C,T)
K112	Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
(113	Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)

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Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
к114	Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
К115	Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
к116	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.	(T)
К117	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene.	(T)
К118	Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	(T)
K136	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	(T)
К140	Floor sweepings, off-specification product and spent filter media from the production of 2,4,6-tribromophenol.	(T)
к149	Distillation bottoms from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups, (This waste does not include still bottoms from the distillation of benzyl chloride.).	(T)
к150	Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha- (or methyl-) chlorinated toluenes, ring- chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.	(T)
к151	Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.	(T)
K156	Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes.	(T)
к157	Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes.	(T)
к158	Bag house dusts and filter/separation solids from the production of carbamates and carbamoyl oximes.	(T)
к159	Organics from the treatment of thiocarbamate wastes	(т)
K160	Solids (including filter wastes, separation solids, and spent catalysts) from the production of thiocarbamates and solids from the treatment of thiocarbamate wastes.	(T)
к161	Purification solids (including filtration, evaporation, and centrifugation solids), bag house dust and floor sweepings from the production of dithiocarbamate acids and their salts. (This listing does not include K125 or K126.).	(R,T)
Inorganic chemicals:		
K071	Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used.	(T)
K073	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.	
K106	Wastewater treatment sludge from the mercury cell process in chlorine production.	(т)

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Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
Pesticides:		
к031	By-product salts generated in the production of MSMA and cacodylic acid.	(T)
K032	Wastewater treatment sludge from the production of chlordane.	(T)
к033	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.	(T)
к034	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.	(T)
к035	Wastewater treatment sludges generated in the production of creosote.	(T)
к036	Still bottoms from toluene reclamation distillation in the production of disulfoton.	(T)
к037	Wastewater treatment sludges from the production of disulfoton.	(T)
к038	Wastewater from the washing and stripping of phorate production.	(T)
K039	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.	(T)
K040	Wastewater treatment sludge from the production of phorate.	(T)
K041	Wastewater treatment sludge from the production of toxaphene.	(T)
K042	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T.	(T)
K043	2,6-Dichlorophenol waste from the production of 2,4-D.	(T)
K097	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane.	(T)
K098	Untreated process wastewater from the production of toxaphene.	(T)
K099	Untreated wastewater from the production of 2,4-D.	(T)
K123	Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salt.	(T)
K124	Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts.	(C, T)
(125	Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.	(T)
(126	Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts.	(T)
(131	Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide.	(C,T)
(132	Spent absorbent and wastewater separator solids from the production of methyl bromide.	(T)
xplosives:		
044	Wastewater treatment sludges from the manufacturing and processing of explosives.	(R)
:045	Spent carbon from the treatment of wastewater containing explosives.	(R)
046	Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds.	(T)
047	Pink/red water from TNT operations.	(R)
etroleum efining:		

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Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
к048	Dissolved air flotation (DAF) float from the petroleum refining industry.	(T)
K049	Slop oil emulsion solids from the petroleum refining industry.	(T)
K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry.	(T)
к051	API separator sludge from the petroleum refining industry.	(T)
к052	Tank bottoms (leaded) from the petroleum refining industry.	(T)
Iron and steel:		
K061	Emission control dust/sludge from the primary production of steel in electric furnaces.	(T)
K062	Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332).	(C,T)
Primary copper:		
K064	Acid plant blowdown slurry/sludge resulting from the thickening of blowdown slurry from primary copper production.	(T)
Primary lead:		
K065	Surface impoundment solids contained in and dredged from surface impoundments at primary lead smelting facilities.	(T)
Primary zinc:		
K066	Sludge from treatment of process wastewater and/or acid plant blowdown from primary zinc production.	(T)
Primary aluminum:		
<088	Spent potliners from primary aluminum reduction.	(1)
erroalloys:		
(090	Emission control dust or sludge from ferrochromiumsilicon production.	(1)
(091	Emission control dust or sludge from ferrochromium production	(T)
Secondary Lead:		
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 shall remain in effect until further administrative action is taken. If EPA takes further action effecting this stay, EPA shall publish a notice of the action in the Federal Register).	(T)
:100	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting.	(T)
eterinary harmaceu- icals:		
084	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)
101	Distillation tor residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)

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Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
K102	Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)
Ink formulation:		
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.	(T)
Coking:		
к060	Ammonia still lime sludge from coking operations.	(T)
к087	Decanter tank tar sludge from coking operations.	(T)
К141	Process residues from the recovery of coal tar, including, but not limited to, collecting sump residues from the production of coke from coal or the recovery of coke by-products produced from coal. This listing does not include KO87 (decanter tank tar sludges from coking operations).	(T)
K142	Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal.	(T)
K143	Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal.	(T)
K144	Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal.	(T)
K145	Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.	(T)
K147	Tar storage tank residues from coal tar refining.	(T)
K148	Residues from coal tar distillation, including but not limited to, still bottoms.	(T)

- 4109.12 The following materials or items are hazardous wastes if and when they are discarded or intended to be discarded as described in §4100.5(a), when they are mixed with waste oil or used oil or other material and applied to the land for dust suppression or road treatment, when they are otherwise applied to the land in lieu of their original intended use or when they are contained in products that are applied to the land in lieu of their original intended use, or when, in lieu of their original intended use, they are produced for use as (or as a component of) a fuel, distributed for use as a fuel, or burned as a fuel.
  - (a) Any commercial chemical product, or manufacturing chemical intermediate having the generic name listed in §§4109.12(e) or 4109.12(f).
  - (b) Any off-specification commercial chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in §§4109.12(e) or 4109.12(f).
  - (c) Any residue remaining in a container or in an inner liner removed from a container that has held any commercial chemical product or manufacturing chemical intermediate

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having the generic name listed in §§4109.12(e) or 4109.12(f), unless the container is empty as defined in §§4104.3 through 4104.5. Unless the residue is being beneficially used or reused, or legitimately recycled or reclaimed; or being accumulated, stored, transported or treated before the use, re-use, recycling or reclamation, the Director considers the residue to be intended for discard and, thus, a hazardous waste. An example of a legitimate re-use of the residue would be where the residue remains in the container and the container is used to hold the same commercial chemical product or manufacturing chemical intermediate it previously held. An example of the discard of the residue would be where the drum is sent to a drum reconditioner who reconditions the drum but discards the residue.

- Any residue or contaminated soil, water or other debris resulting from the cleanup of (d) a spill into or on any land or water of any commercial chemical product or manufacturing chemical intermediate having the generic name listed in §§4109.12(e) or 4109.12(f), or any residue or contaminated soil, water or other debris resulting from the cleanup of a spill, into or on any land or water, of any off-specification chemical product and manufacturing chemical intermediate that, if it met specifications, would have the generic name listed in §§4109.12(e) or 4109.12(f). The phrase "commercial chemical product or manufacturing chemical intermediate having the generic name listed in . . ." refers to a chemical substance that is manufactured or formulated for commercial or manufacturing use, which consists of the commercially pure grade of the chemical, any technical grades of the chemical that are produced or marketed, and all formulations in which the chemical is the sole active ingredient. It does not refer to a material, such as a manufacturing process waste, that contains any of the substances listed in §§4109.12(e) or 4109.12(f). Where a manufacturing process waste is deemed to be a hazardous waste because it contains a substance listed in §§4109.12(e) or 4109.12(f), the waste shall be listed in either §§4109.5 through 4109.10 or §4109.11 or shall be identified as a hazardous waste by the characteristics set forth in §4108.
- (e) The commercial chemical products, manufacturing chemical intermediates or off-specification commercial chemical products or manufacturing chemical intermediates referred to in §§4109.12(a) through 4109.12(d), are identified as acute hazardous wastes (H) and are subject to the small quantity exclusion defined in §4102.5. For the convenience of the regulated community, the following formatting conventions have been used: (1) the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), and R (Reactivity). (2) Absence of a letter indicates that the compound only is listed for acute toxicity.

These wastes and their corresponding EPA Hazardous Waste Numbers are:

Hazardous waste No.	Chemical abstracts No.	Substance	
P023	107-20-0	Acetaldehyde, chloro-	
P002	591-08-2	Acetamide, N-(aminothioxomethyl)-	
P057	640-19-7	Acetamide, 2-fluoro-	
P05 <b>8</b>	62-74-8	Acetic acid, fluoro-, sodium salt	
P002	591-08-2	1-Acetyl-2-thiourea	
P003	107-02-8	Acrolein	

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Hazardous waste No.	Chemical abstracts No.	Substance
P0 <b>70</b>	116-06-3	Aldicarb
P203	<b>1646-88-</b> 4	Aldicarb sulfone.
P004	<b>309-</b> 00-2	Aldrin
P005	107-18-6	Allyl alcohol
P006	20859-73-8	Aluminum phosphide (R,T)
P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol
P008	504-24-5	4-Aminopyridine
P009	131-74-8	Ammonium picrate (R)
P119	7803-55-6	Ammonium vanadate
P099	506-61-6	Argentate(1-), bis(cyano-C)-, potassium
P010	7778-39-4	Arsenic acid H <sub>2</sub> AsO4
P012	1327-53-3	Arsenic oxide As <sub>2</sub> O <sub>3</sub>
P011	1303-28-2	Arsenic oxide As <sub>2</sub> O <sub>5</sub>
P011	1303-28-2	Arsenic pentoxide
P012	1327-53-3	Arsenic trioxide
P038	<b>692</b> -42-2	Arsine, diethyl-
P036	<del>69</del> 6-28-6	Arsonous dichloride, phenyl-
P054	151-56-4	Aziridine
P067	75-55-8	Aziridine, 2-methyl-
P013	542-62-1	Barium cyanide
P024	1 <b>06-47-</b> 8	Benzenamine, 4-chloro-
P0 <b>7</b> 7	100-01-6	Benzenamine, 4-nitro-
P02 <b>8</b>	100-44-7	Benzene, (chloromethyl)-
P042 .	51-43-4	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)-
P <b>046</b>	122-09-8	Benzeneethanamine, alpha,alpha-dimethyl-
P014	1 <b>08</b> -98-5	- Benzenethiol
P127	1563-66-2	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate.
P188	57-64-7	Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo[2,3-b]indol-5-yl methylcarbamate ester (1:1).
P001	<b>'81-8</b> 1-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts, when present at concentrations greater than 0.3%
P028	100-44-7	Benzyl chloride
P015	7440-41-7	Beryllium powder
P017	5 <b>98-3</b> 1-2	Bromoacetone
P01 <b>8</b>	<b>357-</b> 57-3	Brucine
P045	<b>39196-</b> 18-4	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-[methylamino)carbonyl] oxime
P021	<b>59</b> 2-01-8	Calcium cyanide
P021	<b>592-</b> 01-8	Calcium cyanide Ca(CN),

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	ardous te No.	Chemical abstracts No.	Substance
P189	,	55285-14-8	Carbamic acid, [(dibutylamino)- thio]methyl-, 2,3-dihydro-2,2-dimethyl- 7-benzofuranyl ester.
P191		644-64-4	Carbamic acid, dimethyl-, 1-[(dimethyl-amino)carbonyl]- 5-methyl-1H- pyrazol-3-yl ester.
P1 <b>92</b>	2	119-38-0	Carbamic acid, dimethyl-, 3-methyl-1- (1-methylethyl)-1H- pyrazol-5-yl ester.
P190		1129-41-5	Carbamic acid, methyl-, 3-methylphenyl ester.
P127		1563-66-2	Carbofuran.
P022		75-15-0	Carbon disulfide
P0 <b>95</b>		75-44-5	Carbonic dichloride
P189		55285-14-8	Carbosul fan.
P023		107-20-0	Chloroacetaldehyde
P024		106-47- <b>8</b>	p-Chloroaniline
P0 <b>26</b>		5344-82-1	1-(o-Chlorophenyl)thiourea
P027		542-76-7	3-Chloropropionitrile
P <b>029</b>		544-92-3	Copper cyanide
P0 <b>29</b>		544-92-3	Copper cyanide Cu(CN)
P202		64-00-6	m-Cumenyl methylcarbamate.
P <b>03</b> 0			Cyanides (soluble cyanide salts), not otherwise specified
P0 <b>31</b>		460-19-5	Cyanogen
P0 <b>33</b>		506-77-4	Cyanogen chloride
P033		506-77-4	Cyanogen chloride (CN)Cl
P034		131-89-5	2-Cyclohexyl-4,6-dinitrophenol
P016		542-88-1	Dichloromethyl ether
P0 <b>36</b>		696-28-6	Dichlorophenylarsine
P037		60-57-1	Dieldrin
P038		692-42-2	Diethylarsine
P041		311-45-5	Diethyl-p-nitrophenyl phosphate
P040		297-97-2	0,0-Diethyl O-pyrazinyl phosphorothioate
P043		55-91-4	Diisopropylfluorophosphate (DFP)
P004		309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa- chloro-1,4,4a,5,8,8a,- hexahydro-, (1alpha,4alpha,4abeta,5alpha,8alpha,8abeta)-
P0 <b>6</b> 0		465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa- chloro-1,4,4a,5,8,8a- hexahydro-, (1alpha,4alpha,4abeta,5beta,8beta,8abeta)-
P037		60-57-1	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro- 1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta, 7aalpha)-
P051		<sup>1</sup> 72-20-8	2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6,9,9-hexachloro- 1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta, 7aalpha)-, & metabolites
P044		60-51-5	Dimethoate
P046		122-09-8	alpha,alpha-Dimethylphenethylamine
P191		644-64-4	Dimetilan.

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Hazardous waste No.	Chemical abstracts No.	Substance
P047	<sup>1</sup> 534-52-1	4,6-Dinitro-o-cresol, & salts
P048	51-28-5	2,4-Dinitrophenol
P020	88-85-7	Dinoseb
P085	152-16-9	Diphosphoramide, octamethyl-
P111	107-49-3	Diphosphoric acid, tetraethyl ester
P039	298-04-4	Disulfoton
P049	541-53-7	Dithiobiuret
P185	26419-73-8	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O- [(methylamino)- carbonyl]oxime.
P050	115-29-7	Endosul fan
P088	145-73-3	Endothall
P051	, 72-20-8	Endrin
P051	72-20-8	Endrin, & metabolites
P042	51-43-4	Epinephrine
P031	<b>460-19-</b> 5	Ethanedinitrile
P194	23135-22-0	Ethanimidothioc acid, 2-(dimethylamino)-N-[[(methylamino) carbonyl]oxy]-2-oxo-, methyl ester.
P066	16752-77-5	Ethanimidothioic acid, N-[[(methylamino)carbonyl]oxy]-, methyl ester
P101	107-12-0	Ethyl cyanide
P054	151-56-4	Ethyleneimine
P097	52-85-7	Famphur
P <b>056</b>	7782-41-4	Fluorine
P057	640-19-7	Fluoroacetamide
P058	62-74-8	Fluoroacetic acid, sodium salt
P198	23422-53-9	Formetanate hydrochloride.
P197	17702-57-7	Formparanate.
P065	628-86-4	Fulminic acid, mercury(2+) salt (R,T)
P <b>059</b>	76-44-8	Heptachlor
P062	757-58-4	Hexaethyl tetraphosphate
P116	79-19-6	Hydrazinecarbothioamide
P068	60-34-4	Hydrazine, methyl-
P063	74-90-8	Hydrocyanic acid
P063	74-90-8	Hydrogen cyanide
P096	7803-51-2	Hydrogen phosphide
P060	465-73-6	Isodrin
P192	119-38-0	Isolan.
P20 <b>2</b>	64-00-6	3-Isopropylphenyl N-methylcarbamate.
P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-
P196	15339-36-3	Manganese, bis(dimethylcarbamodithioato-S,S')-,

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Hazardous waste No.	Chemical abstracts No.	Substance
P1 <b>9</b> 6	15339-36-3	Manganese dimethyldithiocarbamate.
P092	62-38-4	Mercury, (acetato-0)phenyl-
P065	628-86-4	Mercury fulminate (R,T)
P082	62-75-9	Methanamine, N-methyl-N-nitroso-
P0 <b>64</b>	624-83-9	Methane, isocyanato-
P016	542-88-1	Methane, oxybis[chloro-
P112	509-14-8	Methane, tetranitro- (R)
P118	75-70-7	Methanethiol, trichloro-
P198	23422-53-9	Methanimidamide, N,N-dimethyl-N'-[3-[[(methylamino)-carbonyl]oxy]phenyl]-, monohydrochloride.
P197	17702-57-7	Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-[[(methylamino)carbonyl]oxy]phenyl]-
P050	115-29-7	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10- hexachloro- 1,5,5a,6,9,9a-hexahydro-, 3-oxide
P059	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro- 3a,4,7,7a-tetrahydro-
P199	2032-65-7	Methiocarb.
P066	16 <b>7</b> 52-77-5	Methomyl
P068	60-34-4	Methyl hydrazine
P0 <b>64</b>	624-83-9	Methyl isocyanate
P069	75-86-5	2-Methyllactonitrile
P071	<b>298-</b> 00-0	Methyl parathion
P190	1129-41-5	Metolcarb.
P128	315-18-4	Mexacarbate.
P072	86-88-4	alpha-Naphthylthiourea
P073	13463-39-3	Nickel carbonyl
P073	13463-39-3	Nickel carbonyl Ni(CO), (T-4)-
P074	557-19-7	Nickel cyanide
P074	557-19-7	Nickel cynaide Ni(CN),
P0 <b>75</b>	54-11-5	Nicotine, & salts
P076	10102-43-9	Nitric oxide
P077	100-01-6	p-Nitroaniline
P0 <b>78</b>	10102-44-0	Nitrogen dioxide
P076	10102-43-9	Nitrogen oxide NO
P078	10102-44-0	Nitrogen oxide NO <sub>2</sub>
P081	55-63-0	Nitroglycerine (R)
P082	62-75-9	N-Nitrosodimethylamine
P084	4549-40-0	N-Nitrosomethylvinylamine
P085	152-16-9	Octamethylpyrophosphoramide
P087	20816-12-0	Osmíum oxide OsO,, (T-4)-
087	20816-12-0	Osmium tetroxide

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Hazardous waste No.	Chemical abstracts No.	Substance
P088	145-73-3	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
P <b>19</b> 4	23135-22-0	Oxamyl.
P089	56-38-2	Parathion
P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-
P048	51-28-5	Phenol, 2,4-dinitro-
P047	534-52-1	Phenol, 2-methyl-4,6-dinitro-, & salts
P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P128	315-18-4	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester).
P199	2032-65-7	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate
P202	64-00-6	Phenol, 3-(1-methylethyl)-, methyl carbamate.
P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate.
P092	62-38-4	Phenylmercury acetate
P093	103-85-5	Phenylthiourea
P <b>09</b> 4	298-02-2	Phorate
P <b>095</b>	75-44-5	Phosgene
P <b>096</b>	7803-51-2	Phosphine
P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester
P039	298-04-4	Phosphorodithioic acid, 0,0-diethyl S-[2-(ethylthio)ethyl] ester
P094	298-02-2	Phosphorodithioic acid, 0,0-diethyl S-[(ethylthio)methyl] ester
P044	60-51-5	Phosphorodithioic acid, 0,0-dimethyl S-[2-(methylamino)-2-oxoethyl] ester
P043	55-91-4	Phosphorofluoridic acid, bis(1-methylethyl) ester
P089	56-38-2	Phosphorothioic acid, 0,0-diethyl 0-(4-nitrophenyl) ester
P040	297-97-2	Phosphorothioic acid, 0,0-diethyl 0-pyrazinyl ester
P <b>097</b>	52-85-7	Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl] 0,O-dimethyl ester
P071	298-00-0	Phosphorothioic acid, 0,0,-dimethyl 0-(4-nitrophenyl) ester
P204	57-47-6	Physostigmine.
P188	57-64-7	Physostigmine salicylate.
P110	78-00-2	Plumbane, tetraethyl-
P0 <b>98</b>	151-50-8	Potassium cyanide
P098	151-50-8	Potassium cyanide K(CN)
P099	506-61-6	Potassium silver cyanide
P201	2631-37-0	Promecarb
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, 0-[(methylamino)carbonyl]oxime
P203	1646-88-4	Propanal, 2-methyl-2-(methyl-sulfonyl)-, 0-[(methylamino)carbonyl] oxime.
P101	107-12-0	Propanenitrile
P027	542-76-7	Propanenitrile, 3-chloro-
P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl-

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Hazardous waste No.	Chemical abstracts No.	Substance
P081	55- <b>63-</b> 0	1,2,3-Propanetriol, trinitrate (R)
P017	598-31-2	2-Propanone, 1-bromo-
P102	107-1 <b>9</b> -7	Propargyl alcohol
P <b>003</b>	107-02-8	2-Propenal
P005	107-18-6	2-Propen-1-ol
P067	75-55-8	1,2-Propylenimine
P102	107-19-7	2-Propyn-1-ol
P008	504-24-5	4-Pyridinamine
P075	<sup>1</sup> 54-11-5	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts
P204	57-47-6	Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)
P114	12 <b>039-</b> 52-0	Selenious acid, dithallium(1+) salt
P10 <b>3</b>	630-10-4	Selenourea
P104	506-64-9	Silver cyanide
P104	506-64-9	Silver cyanide Ag(CN)
P105	26628-22-8	Sodium azide
P106	143-33-9	Sodium cyanide
P106	143-33-9	Sodium cyanide Na(CN)
P108	<sup>1</sup> 57-24-9	Strychnidin-10-one, & salts
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-
P108	<sup>1</sup> 57-24-9	Strychnine, & salts
P115	7446-18-6	Sulfuric acid, dithallium(1+) salt
P109	3689-24-5	Tetraethyldithiopyrophosphate
P <b>1</b> 10	78-00-2	Tetraethyl lead
P111	107-49-3	Tetraethyl pyrophosphate
P112	509-14-8	Tetranitromethane (R)
P062	757-58-4	Tetraphosphoric acid, hexaethyl ester
P113	1314-32-5	Thallic oxide
P113	1314-32-5	Thallium oxide Tl <sub>2</sub> O3
P114	12039-52-0	Thallium(I) selenite •
P1'15	7446-18-6	Thallium(I) sulfate
P10 <b>9</b>	3689-24-5	Thiodiphosphoric acid, tetraethyl ester
P045	39196-18-4	Thiofanox
P049	541-53-7	Thioimidodicarbonic diamide [(H2N)C(S)]2NH
P014	108-98-5	Thiophenol
P116	79-19-6	Thiosemicarbazide
P026	5344-82-1	Thiourea, (2-chlorophenyl)-
P072	8 <del>0</del> -88-4	Thiourea, 1-naphthalenyl-
P <b>093</b>	103-85-5	Thiourea, phenyl-

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Hazardous waste No.	Chemical abstracts No.	Substance
P185	2641 <b>9-73-8</b>	Tirpate.
P123	8001-35-2	Toxaphene
P118	75-70-7	Trichloromethanethiol
P119	7803-55-6	Vanadic acid, ammonium salt
P120	1 <b>314-</b> 62-1	Vanadium oxide V205
P120	1 <b>314-62-</b> 1	Vanadium pentoxide
P0 <b>8</b> 4	4 <b>549-40-</b> 0	Vinylamine, N-methyl-N-nitroso-
P001	<sup>1</sup> 81-81-2	Warfarin, & salts, when present at concentrations greater than 0.3%
P205	137-30-4	Zinc, bis(dimethylcarbamodithioato-S,S')-,
P121	557-21-1	Zinc cyanide
P121	557-21-1	Zinc cyanide Zn(CN) <sub>2</sub>
P122	1314-84-7	Zinc phosphide $Zn_{3}P_{2}$ , when present at concentrations greater than 10% (R,T)
P205	137-30-4	Ziram.

<sup>1</sup>CAS Number given for parent compound only.

(f)' The commercial chemical products, manufacturing chemical intermediates, or off-specification commercial chemical products referred to in §§4109.12(a) through 4109.12(d), are identified as toxic wastes (T), unless otherwise designated and are subject to the small quantity generator exclusion defined in §§4102.1 and 4102.7. For the convenience of the regulated community, the following formatting conventions have been used: (1) the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), R (Reactivity), I (Ignitability) and C (Corrosivity). (2) Absence of a letter indicates that the compound is only listed for toxicity.

These wastes and their corresponding EPA Hazardous Waste Numbers are:

Hazardous waste No.	Chemical abstracts No.	Substance
J <b>394</b>	30558-43-1	A2213.
U001	75-07-0	Acetaldehyde (I)
U <b>03</b> 4	75-87-6	Acetaldehyde, trichloro-
U187	<b>62-</b> 44-2	Acetamide, N-(4-ethoxyphenyl)-
U005	53-96-3	Acetamide, N-9H-fluoren-2-yl-
U240	' <b>94-75-</b> 7	Acetic acid, (2,4-dichlorophenoxy)-, salts & esters
U112	141-78-6	Acetic acid ethyl ester (I)
U144	<b>301</b> -04-2	Acetic acid, lead(2+) salt
U214	563-68-8	Acetic acid, thallium(1+) salt
s <b>ee</b> F027	<b>93</b> -76-5	Acetic acid, (2,4,5-trichlorophenoxy)-
U002	67-64-1	Acetone (1)
U003	75-05-8	Acetonitrile (I,T)

TABLE 7

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Hazardous waste No.	Chemical abstracts No.	Substance
U004	98-86-2	Acetophenone
U <b>005</b>	53-96-3	2-Acetylaminofluorene
U006	75- <b>36</b> -5	Acetyl chloride (C,R,T)
U007	79-06-1	Acrylamide
U00 <b>8</b>	79-10-7	Acrylic acid (I)
U009	107-13-1	Acrylonitrile
U011	61-82-5	Amitrole
U <b>01</b> 2	62-53-3	Aniline (I,T)
U136	75-60-5	Arsinic acid, dimethyl-
U014	492-80-8	Auramine
U015	115-02-6	Azaserine
U <b>36</b> 5	2212-67-1	H-Azepine-1-carbothioic acid, hexahydro-, S-ethyl ester.
U010	50-07-7	Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, 6-amino-8- [[(aminocarbonyl)oxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, [1aS-(1aalpha, 8beta,8aalpha,8balpha)]-
U280	101-27-9	Barban.
U278	22781-23-3	Bendiocarb.
U <b>36</b> 4	22961-82-6	Bendiocarb phenol.
U271	17804-35-2	Benomyl.
U157	56-49-5	<pre>Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-</pre>
U016	225-51-4	Benz[c]acridine
U017	98-87-3	Benzal chloride
U192	2 <b>39</b> 50-5 <b>8-5</b>	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-
U018	56-55-3	Benz [a] anthracene
U094	57-97-6	Benz[a]anthracene, 7,12-dimethyl-
U012	62-53-3	Benzenamine (1,T)
UØ14	492-80-8	Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl-
U049	3165-93-3	Benzenamine, 4-chloro-2-methyl-, hydrochloride
0093	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
J328	95-53-4	Benzenamine, 2-methyl-
J353	106- <b>49-0</b>	Benzenamine, 4-methyl-
J158	101-14-4	Benzenamine, 4,4'-methylenebis[2-chloro-
1222	636-21-5	Benzenamine, 2-methyl-, hydrochloride
181	99-55-8	Benzenamine, 2-methyl-5-nitro-
1019	71-43-2	Benzene (I,T)
1038	510-15-6	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester
1030	101-55-3	Benzene, 1-bromo-4-phenoxy-
035	305- <b>03-3</b>	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-
037	108-90-7	Benzene, chloro-

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Hazardous waste No.	Chemical abstracts No.	Substance
U221	25376-45-8	Benzenediamine, ar-methyl-
U028	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester
U069	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
U088	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester
U102	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester
U107	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester
U0 <b>70</b>	95-50-1	Benzene, 1,2-dichloro-
U <b>071</b>	541- <b>73-</b> 1	Benzene, 1,3-dichloro-
U072	106-46-7	Benzene, 1,4-dichloro-
0060	72-54-8	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-
U017	98-87-3	Benzene, (dichloromethyl)-
U223	26471-62-5	Benzene, 1,3-diisocyanatomethyl- (R,T)
U2 <b>3</b> 9	1 <b>330</b> -20-7	Benzene, dimethyl- (1,T)
U201	108-46-3	1,3-Benzenediol
U127	118-74-1	Benzene, hexachloro-
U056	110-82-7	Benzene, hexahydro- (1)
U220	108-88-3	Benzene, methyl-
U105	121-14-2	Benzene, 1-methyl-2,4-dinitro-
U106	606-20-2	Benzene, 2-methyl-1,3-dinitro-
U0 <b>5</b> 5	98-82-8	Benzene, (1-methylethyl)- (I)
J <b>16</b> 9	98-95-3	Benzene, nitro-
J183	608-93-5	Benzene, pentachloro-
U185	82-68-8	Benzene, pentachloronitro-
U <b>02</b> 0	98-09-9	Benzenesulfonic acid chloride (C,R)
U0 <b>20</b>	98-09-9	Benzenesulfonyl chloride (C,R)
U207	95-94-3	Benzene, 1,2,4,5-tetrachloro-
U061	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-
U247	72-43-5	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4- methoxy-
U0 <b>23</b>	98-07-7	Benzene, (trichloromethyl)-
U2 <b>3</b> 4	99-35-4	Benzene, 1,3,5-trinitro-
U021	92-87-5	Benzidine
U <b>202</b>	<sup>1</sup> 81-07-2	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide, & salts
U278	22781-23-3	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate.
U364	22961-82-6	1, <b>3-Benz</b> odioxol-4-ol, 2,2-dimethyl-,
U20 <b>3</b>	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-
U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-
U367	1563-38-8	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-
U090	94-58-6	1,3-Benzodioxole, 5-propyl-
U064	189-55-9	Benzo[rst]pentaphene

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Hazardous waste No.	Chemical abstracts No.	Substance
U248	'81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations of 0.3% or less
U022	50-32-8	Benzo[a] pyrene
U197	106-51-4	p-Benzoquinone
U023	98-07-7	Benzotrichloride (C,R,T)
U085	1464-53-5	2,2'-Bioxirane
U021	92-87-5	[1,1'-Biphenyl]-4,4'-diamine
U073	91-94-1	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-
U091	119-90-4	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-
U <b>095</b>	119-93-7	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-
U401	97-74-5	Bis(dimethylthiocarbamoyl) sulfide.
U400	120-54-7	Bis(pentamethylene)thiuram tetrasulfide.
U225	75-25-2	Bromoform
U0 <b>3</b> 0	101-55-3	4-Bromophenyl phenyl ether
U128	87-68-3	1,3-Butadienė, 1,1,2,3,4,4-hexachloro-
U172	924-16-3	1-Butanamine, N-butyl-N-nitroso-
U <b>031</b>	71-36-3	1-Butanol (I)
U159	78-93-3	2-Butanone (I,T)
U <b>16</b> 0	1338-23-4	2-Butanone, peroxide (R,T)
U0 <b>53</b>	4170-30-3	2-Butenal
U074	764-41-0	2-Butene, 1,4-dichloro- (I,T)
U143	303-34-4	2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy- 2-(1-methoxyethyl)-3-methyl- 1-oxobutoxyjmethyl]- 2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S- [1alpha(Z),7(2S*,3R*),7aalpha]]-
U <b>0</b> 31	71-36-3	n-Butyl alcohol (I)
U392	2008-41-5	Butylate.
U136	75-60-5	Cacodylic acid
U032	13765-19-0	Calcium chromate
J372	10605-21-7	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester.
J271	17804-35-2	Carbamic acid, [1-[(butylamino)carbonyl]-1H-benzimidazol-2- yl]-, methyl ester.
J375	55406-53-6	Carbamic acid, butyl-, 3-iodo-2-propynyl ester.
J2 <b>8</b> 0	101-27-9	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester.
J238 .	51-79-6	Carbamic acid, ethyl ester
J178	615-53-2	Carbamic acid, methylnitroso-, ethyl ester
J373	122-42-9	Carbamic acid, phenyl-, 1-methylethyl ester.
1409	23564-05-8	Carbamic acid, [1,2-phenylenebis (iminocarbonothioyl)]bis-, dimethyl ester.
1097	79-44-7	Carbamic chloride, dimethyl-
1379	136-30-1	Carbamodithioic acid, dibutyl, sodium salt.
277	95-06-7	Carbamodithioic acid, diethyl-, 2-chloro-2-propenyl ester.

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Hazardous waste No.	Chemical abstracts No.	Substance
U <b>38</b> 1	148-18-5	Carbamodithioic acid, diethyl-, sodium salt.
U <b>383</b>	128-03-0	Carbamodithioic acid, dimethyl, potassium salt.
U <b>38</b> 2	128-04-1	Carbamodithioic acid, dimethyl-, sodium salt.
U <b>3</b> 76	144-34-3	Carbamodithioic acid, dimethyl-, tetraanhydrosulfide with orthothioselenious acid.
U <b>378</b>	51026-28-9	Carbamodithioic acid, (hydroxymethyl)methyl-, monopotassium salt.
U384	137-42-8	Carbamodithioic acid, methyl-, monosodium salt.
U377	137-41-7	Carbamodithioic acid, methyl, monopotassium salt.
U <b>389</b>	2303-17-5	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester.
U <b>39</b> 2	2008-41-5	Carbamothioic acid, bis(2-methylpropyl)-, S-ethyl ester.
U <b>391</b>	1114-71-2	Carbamothioic acid, butylethyl-, S-propyl ester.
U <b>386</b>	1134-23-2	Carbamothioic acid, cyclohexylethyl-, S-ethyl ester.
U <b>390</b>	759-94-4	Carbamothioic acid, dipropyl-, S-ethyl ester.
U <b>38</b> 7	52888-80-9	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester.
U <b>385</b>	1929-77-7	Carbamothioic acid, dipropyl-, S-propyl ester.
U114	111-54-6	Carbamodithioic acid, 1,2-ethanediylbis-, salts & esters
U <b>06</b> 2	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester
U279	63-25-2	Carbaryt.
U <b>37</b> 2	10605-21-7	Carbendazim.
U367	1563-38-8	Carbofuran phenol.
U215	6533-73-9	Carbonic acid, dithallium(1+) salt
U <b>033</b>	353-50-4	Carbonic difluoride
U156	79-22-1	Carbonochloridic acid, methyl ester (I,T)
U <b>033</b>	353-50-4	Carbon oxyfluoride (R,T)
U211	56-23-5	Carbon tetrachloride
U034	75-87-6	Chloral
u0 <b>35</b>	305-03-3	Chlorambucil
U036	57-74-9	Chlordane, alpha & gamma isomers
U026	494-03-1	Chlornaphazin
U <b>037</b>	108-90-7	Chlorobenzene
U0 <b>38</b>	510-15-6	Chlorobenzilate
039	59-50-7	p-Chloro-m-cresol
U042	110-75-8	2-Chloroethyl vinyl ether
U <b>044</b>	67-66-3	Chloroform
J046	107-30-2	Chloromethyl methyl ether
J047	91-58-7	beta-Chloronaphthalene
1048	95-57-8	o-Chlorophenol
1049	3165-93-3	4-Chloro-o-toluidine, hydrochloride

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Hazardous waste No.	Chemical abstracts No.	Substance
U <b>032</b>	13765-19-0	Chromic acid H,CrO,, calcium salt
U <b>050</b>	218-01-9	Chrysene
U <b>393</b>	137-29-1	Copper, bis(dimethylcarbamodithioato-S,S')-,
U <b>393</b>	137-29-1	Copper dimethyldithiocarbamate.
U051		Creosote
U0 <b>52</b>	1319-77-3	Cresol (Cresylic acid)
U053	4170-30-3	Crotonaldehyde
U055	98-82-8	Cumene (I)
U <b>246</b>	506-68-3	Cyanogen bromide (CN)Br
U <b>386</b>	1134-23-2	Cycloate.
U <b>197</b>	106-51-4	2,5-Cyclohexadiene-1,4-dione
U0 <b>56</b>	110-82-7	Cyclohexane (I)
U1 <b>29</b>	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4al <b>pha,5alpha</b> ,6beta)-
U <b>057</b>	108-94-1	Cyclohexanone (1)
U130	• 77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
U <b>058</b>	50-18-0	Cyclophosphamide -
U <b>240</b>	<sup>1</sup> 94-75-7	2,4-D, salts & esters
U <b>059</b>	20 <b>830-</b> 81-3	Daunomycin
U366	533-74-4	Dazomet.
U060	72-54-8	DDD
U061	50-29-3	DDT
U062	2303-16-4	Diallate
U063	53-70-3	Dibenz[a,h]anthracene
U064	189-55-9	Dibenzo[a,i]pyrene
U066	96-12-8	1,2-Dibromo-3-chloropropane
U069	84-74-2	Dibutyl phthalate
U0 <b>70</b>	95-50-1	o-Dichlorobenzene
U071	541-73-1	m-Dichlorobenzene
U <b>0</b> 72	106-46-7	p-Dichlorobenzene
U07 <b>3</b>	91-94-1	3,3'-Dichlorobenzidine
U0 <b>7</b> 4	764-41-0	1,4-Dichloro-2-butene (I,T)
U075	75-71-8	Dichlorodifluoromethane
U078	75-35-4	1,1-Dichloroethylene
U0 <b>79</b>	156-60-5	1,2-Dichloroethylene
U025	111-44-4	Dichloroethyl ether
U0 <b>2</b> 7	108-60-1	Dichloroisopropyl ether
U024	111-91-1	Dichloromethoxy ethane
U081	120-83-2	2,4-Dichlorophenol

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Hazardous waste No.	Chemical abstracts No.	Substance
U0 <b>82</b>	<b>87-65-</b> 0	2,6-Dichlorophenol
U <b>084</b>	542-75-6	1,3-Dichloropropene
U0 <b>85</b>	1464-53-5	1,2:3,4-Diepoxybutane (I,T)
U108	123-91-1	1,4-Diethyleneoxide
U028	117-81-7	Diethylhexyl phthalate
U3 <b>95</b>	5952-26-1	Diethylene glycol, dicarbamate.
U0 <b>86</b>	1615-80-1	N,N'-Diethylhydrazine
U0 <b>87</b>	<b>3288</b> -58-2	0,0-Diethyl S-methyl dithiophosphate
U088	84-66-2	Diethyl phthalate
U089	56-53-1	Diethylstilbesterol
U090	94-58-6	Dihydrosafrole
U091	11 <del>9</del> -90-4	3,3'-Dimethoxybenzidine
U092	124-40-3	Dimethylamine (1)
U0 <b>93</b>	60-11-7	p-Dimethylaminoazobenzene
U094	57-97-6	7,12-Dimethylbenz[a]anthracene
U0 <b>95</b>	119-93-7	3,3'-Dimethylbenzidine
U0 <b>96</b>	80-15-9	alpha,alpha-Dimethylbenzylhydroperoxide (R)
U097	79-44-7	Dimethylcarbamoyl chloride
U098	57-14-7	1,1-Dimethylhydrazine
U099	540-73-8	1,2-Dimethylhydrazine
U101	105-67-9	2,4-Dimethylphenol
U102	131-11-3	Dimethyl phthalate
U103	77-78-1	Dimethyl sulfate
U105	121-14-2	2,4-Dinitrotoluene
U106	606-20-2	2,6-Dinitrotoluene
u10 <b>7</b>	117-84-0	Di-n-octyl phthalate
U108	123-91-1	1,4-Dioxane *
U109	122-66-7	1,2-Diphenylhydrazine
U110	142-84-7	Dipropylamine (I)
U111	621-64-7	Di-n-propylnitrosamine
U403	97-77-8	Disulfiram.
U <b>390</b>	759-94-4	EPTC.
U041	106-89-8	Epichlorohydrin
U001	75-07-0	Ethanal (I)
U40 <b>4</b>	121-44-8	Ethanamine, N,N-diethyl-
U174	55-18-5	Ethanamine, N-ethyl-N-nitroso-
U155	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-
U067	106-93-4	Ethane, 1,2-dibromo-
U076	75-34-3	Ethane, 1,1-dichloro-

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Hazardous waste No.	Chemical abstracts No.	Substance
U077	107-06-2	Ethane, 1,2-dichloro-
U131	67-72-1	Ethane, hexachioro-
U <b>02</b> 4	111-91-1	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-
U117	60-29-7	Ethane, 1,1'-oxybis-(!)
U02 <b>5</b>	111-44-4	Ethane, 1,1'-oxybis[2-chloro-
U184	76-01-7	Ethane, pentachloro-
U <b>208</b>	630-20-6	Ethane, 1,1,1,2-tetrachloro-
U2 <b>09</b>	79-34-5	Ethane, 1,1,2,2-tetrachioro-
U218	62-55-5	Ethanethioamide
U2 <b>26</b>	71-55-6	Ethane, 1,1,1-trichloro-
U22 <b>7</b>	79-00-5	Ethane, 1,1,2-trichloro-
U410	59669-26-0	Ethanimidothioic acid, N,N'- [thiobis[(methylimino)carbonyloxy]]bis-, dimethyl ester
U <b>39</b> 4	30558-43-1	Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester.
U <b>359</b>	110-80-5	Ethanol, 2-ethoxy-
U1 <b>73</b>	1116-54-7	Ethanol, 2,2'-(nitrosoimino)bis-
U <b>395</b>	5952-26-1	Ethanol, 2,2'-oxybis-, dicarbamate.
U004	98-86-2	Ethanone, 1-phenyl-
U043	75-01-4	Ethene, chloro-
U042	110-75-8	Ethene, (2-chloroethoxy)-
U0 <b>78</b>	75-35-4	Ethene, 1,1-dichloro-
U0 <b>79</b>	156-60-5	Ethene, 1,2-dichloro-, (E)-
U210	127-18-4	Ethene, tetrachloro-
U228	79-01-6	Ethene, trichloro-
U112	141-78-6	Ethyl acetate (1)
U113	140-88-5	Ethyl acrylate (I)
U238	51-79-6	Ethyl carbamate (urethane)
U117	60-29-7	Ethyl ether (I)
U1 <b>14</b>	'111-54-6	Ethylenebisdithiocarbamic acid, salts & esters
U067	106-93-4	Ethylene dibromíde
U0 <b>77</b>	107-06-2	Ethylene dichloride
U359	110-80-5	Ethylene glycol monoethyl ether
U <b>115</b>	75-21-8	Ethylene oxide (I,T)
U116	96-45-7	Ethylenethiourea
U <b>076</b>	75-34-3	Ethylidene dichloride
U118	97-6 <b>3</b> -2	Ethyl methacrylate
U119	62-50-0	Ethyl methanesulfonate
U4 <b>07</b>	14324-55-1	Ethyl Ziram.
U <b>39</b> 6	14484-64-1	Ferbam.

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Hazardous waste No.	Chemical abstracts No.	Substance
U120	206-44-0	Fluoranthene
U122	50-00-0	Formaldehyde
U123	64-18-6	Formic acid (C,T)
U <b>12</b> 4	110-00-9	Furan (1)
U125	98-01-1	2-Furancarboxaldehyde (1)
U147	108-31-6	2,5-furandione
U213	109-99-9	Furan, tetrahydro-(I)
U125	98-01-1	Furfural (I)
U124	110-00-9	Furfuren (I)
U2 <b>06</b>	18883-66-4	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D-
U206	18883-66-4	D-Glucose, 2-deoxy-2-[[(methylnitrosoamino)- carbonyl]amino]-
U126	765-34-4	Glycidylaldehyde
U16 <b>3</b>	70-25-7	Guanidine, N-methyl-N'-nitro-N-nitroso-
U127	118-74-1	Hexachlorobenzene
U128	87-68-3	Kexach Lorobutadiene
U130	77-47-4	Hexach Lorocyclopentadiene
U131	67-72-1	Hexachloroethane
U <b>132</b>	70-30-4	Hexachlorophene
U24 <b>3</b>	1888-71-7	Hexachloropropene
U133	302-01-2	Hydrazine (R,T)
U086	1615-80-1	Hydrazine, 1,2-diethyl-
U <b>098</b>	57-14-7	Hydrazine, 1,1-dimethyl-
U0 <b>99</b>	540-73-8	Hydrazine, 1,2-dimethyl-
U109	122-66-7	Hydrazine, 1,2-diphenyl-
U134	7664-39-3	Hydrofluoric acid (C,T)
U134	7664-39-3	Hydrogen fluoride (C,T)
U1 <b>35</b>	7783-06-4	Hydrogen sulfide
U <b>135</b>	7783-06-4	Hydrogen sulfide H <sub>2</sub> S
U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl- (R)
U116	96-45-7	2-Imidazolidinethione
U137	193-39-5	Indeno[1,2,3-cd]pyrene
U <b>37</b> 5	55406-53-6	3-Iodo-2-propynyl n-butylcarbamate.
U <b>39</b> 6	14484-64-1	Iron, tris(dimethylcarbamodithioato-S,S')-,
U190	85-44-9	1,3-Isobenzofurandione
U140	78-83-1	Isobutyl alcohol (I,T)
U141	120-58-1	Isosafrole
U142	143-50-0	Ķepone
U143	303-34-4	Lasiocarpine
U144	301-04-2	Lead acetate

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Hazardous waste No.	Chemical abstracts No.	Substance
U146	1335-32-6	Lead, bis(acetato-0)tetrahydroxytri-
U145	7446-27-7	Lead phosphate
U <b>146</b>	1335-32-6	Lead subacetate
U129	58-89-9	Lindane
U163	70-25-7	MNNG
U147	108-31-6	Maleic anhydride
U148	123-33-1	Maleic hydrazīde
U149	109-77-3	Malononitrile
U150	148-82-3	Melphalan
U151	7439-97-6	Mercury
U <b>3</b> 84	137-42-8	Metam Sodium.
U152	126-98-7	Methacrylonitrile (I, T)
U092	124-40-3	Methanamine, N-methyl- (1)
U029	74-83-9	Methane, bromo-
U045	74-87-3	Methane, chloro- (I, T)
U046	107-30-2	Methane, chloromethoxy-
U068	74-95-3	Methane, dibromo-
U080	75-09-2	Methane, dichloro-
U0 <b>7</b> 5	75-71-8	Methane, dichlorodifluoro-
U138	74-88-4	Methane, iodo-
U119	62-50-0	Methanesulfonic acid, ethyl ester
U211	56-23-5	Methane, tetrachloro-
U15 <b>3</b>	74-93-1	Methanethiol (1, T)
U225	75-25-2	Methane, tribromo-
U044	67-66-3	Methane, trichloro-
U121	75-69-4	Methane, trichlorofluoro-
U036	57-74-9	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-
U <b>15</b> 4	67-56-1	Methanol (1)
U155	91-80-5	Methapyrilene
U142	143-50-0	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6- decachlorooctahydro-
U247	72-43-5	Methoxychlor
U154	67-56-1	Methyl alcohol (1)
U029	74-83-9	Methyl bromide
U186	504-60-9	1-Methylbutadiene (I)
U045	74-87-3	Methyl chloride (I,T)
U156	79-22-1	Methyl chlorocarbonate (I,T)
U226	71-55-6	Methyl chloroform
U157	56-49-5	3-Methylcholanthrene

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Hazardous waste No.	Chemical abstracts No.	Substance
U158	101-14-4	4,4'-Methylenebis(2-chloroaniline)
U068	74-95-3	Methylene bromide
U080	75-09-2	Methylene chloride
u1 <b>59</b>	78-93-3	Methyl ethyl ketone (MEK) (I,T)
U160	1338-23-4	Methyl ethyl ketone peroxide (R,T)
U138	74-88-4	Methyl iodide
U161	108-10-1	Methyl isobutyl ketone (1)
U162	80-62-6	Methyl methacrylate (I,T)
U161	108-10-1	4-Methyl-2-pentanone (1)
U164	56-04-2	Methylthiouracil
U010	50-07-7	Mitomycin C
U <b>36</b> 5	2212-67-1	Molinate.
U059	20830-81-3	5,12-Naphthacenedione, 8-acetyl-10-[(3-amino-2,3,6-trideoxy)-alpha-L-lyxo- hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S- cís)-
U167	134-32-7	1-Naphthalenamine
U168	91-59-8	2-Naphthalenamine
U026	494-03-1	Naphthalenamine, N,N'-bis(2-chloroethyl)-
U165	91-20-3	Naphthalene
U047	91-58-7	Naphthalene, 2-chloro-
U166	130-15-4	1,4-Naphthalenedione
u2 <b>36</b>	72-57-1	2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'- dimethyl[1,1'-biphenyl]-4,4'- diyl)bis(azo)bis[5-amino-4-hydroxy]-, tetrasodium salt
u279	63-25-2	1-Naphthalenol, methylcarbamate.
U166	130-15-4	1,4-Naphthoquinone
U167	134-32-7	alpha-Naphthylamine
U168	91-59-8	beta-Waphthylamine
u <b>2</b> 17	10102-45-1	Nitric acid, thallium(1+) salt
U169	98-95-3	Nitrobenzene (I,T)
U170	100-02-7	p-Nitrophenol
U1 <b>71</b>	79-46-9	2-Nitropropane (I,T)
U172	924-16-3	N-Nitrosodi-n-butylamine
U173	1116-54-7	N-Nitrosodiethanolamine
U174	55-18-5	N-Nitrosodiethylamine
U1 <b>76</b>	759-73-9	N-Nitroso-N-ethylurea
U177	684-93-5	N-Nitroso-N-methylurea
U178	615-53-2	N-Nitroso-N-methylurethane
U1 <b>79</b>	100-75-4	N-Nitrosopiperidine
U180	<b>93</b> 0-55-2	N-Nitrosopyrrolidine
U <b>18</b> 1	99-55-8	5-Nitro-o-toluidine

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Hazardous waste No.	Chemical abstracts No.	Substance
U1 <b>93</b>	1120-71-4	1,2-Oxathiolane, 2,2-dioxide
U058	50-18-0	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxid
U115	75-21-8	Oxirane (I,T)
U <b>126</b>	765-34-4	Oxiranecarboxyaldehyde
.U041	106-89-8	Oxirane, (chloromethyl)-
U182	123-63-7	Paraldehyde
U <b>3</b> 91	1114-71-2	Pebulate.
U183	608-93-5	Pentachlorobenzene
U1 <b>8</b> 4	76-01-7	Pentachloroethane
U185	82-68-8	Pentachloronitrobenzene (PCNB)
See F027	87- <b>86-</b> 5	Pentachlorophenol
U161	108-10-1	Pentanol, 4-methyl-
U186	504-60-9	1,3-Pentadiene (I)
U1 <b>87</b>	62-44-2	Phenacet in
U188	108-95-2	Phenol
U048	<b>95-57-</b> 8	Phenol, 2-chloro-
U0 <b>39</b>	59-50-7	Phenol, 4-chloro-3-methyl-
U081	120-83-2	Phenol, 2,4-dichloro-
U0 <b>82</b>	87-65-0	Phenol, 2,6-dichloro-
U089	56-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-
U1 <b>01</b>	105-67-9	Phenol, 2,4-dimethyl-
U052	1319-77-3	Phenol, methyl-
U1 <b>3</b> 2	70-30-4	Phenol, 2,2'-methylenebis[3,4,6-trichloro-
U411	114-26-1	Phenol, 2-(1-methylethoxy)-, methylcarbamate.
U170	100-02-7	Phenol, 4-nitro-
See F027	87-86-5	Phenol, pentachloro-
See F027	58-90-2	Phenol, 2,3,4,6-tetrachloro-
See F027	95-95-4	Phenol, 2,4,5-trichloro-
See F027	88-06-2	Phenol, 2,4,6-trichloro-
U1 <b>50</b>	148-82-3	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-
U145	7446-27-7	Phosphoric acid, lead(2+) salt (2:3)
U <b>087</b>	<b>3288-58-</b> 2	Phosphorodithioic acid, 0,0-diethyl S-methyl ester
U189	1314-80-3	Phosphorus sulfide (R)
U190	85-44-9	Phthalic anhydride
U1 <b>91</b>	109-06-8	2-Picoline
U1 <b>79</b>	100-75-4	Piperidine, 1-nitroso-
U4 <b>0</b> 0	120-54-7	Piperidine, 1,1'-(tetrathiodicarbonothioyl)-bis-
U383	128-03-0	Potassium dimethyldithiocarbamate.
U <b>378</b>	510 <b>26-28-9</b>	Potassium n-hydroxymethyl- n-methyldi-thiocarbamate.

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Hazardous waste No.	Chemical abstracts No.	Substance
U <b>3</b> 77	137-41-7	Potassium n-methyldithiocarbamate.
U1 <b>9</b> 2	23950-58-5	Pronamide
υ1 <b>9</b> 4	107-10-8	1-Propanamine (I,T)
U1 <b>1</b> 1	621-64-7	1-Propanamine, N-nitroso-N-propyl-
U110	142-84-7	1-Propanamine, N-propyl- (I)
U066	<b>96-1</b> 2-8	Propane, 1,2-dibromo-3-chloro-
U0 <b>83</b>	78-87-5	Propane, 1,2-dichloro-
U149	109-77-3	Propanedinitrile
U171	<del>79</del> -46-9	Propane, 2-nitro- (I,T)
U027	108-60-1	Propane, 2,2'-oxybis[2-chloro-
U193	1120-71-4	1,3-Propane sultone
See F027	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-
U235	126-72-7	1-Propanol, 2,3-dibromo-, phosphate (3:1)
u140	78-83-1	1-Propanol, 2-methyl- (I,T)
U0 <b>0</b> 2	67-64-1	2-Propanone (1)
U007	79-06-1	2-Propenamide
U084	542-75-6	1-Propene, 1,3-dichloro-
U24 <b>3</b>	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-
U009	107-13-1	2-Propenenitrile
U152	126-98-7	2-Propenenitrile, 2-methyl- (1,T)
U008	79-10-7	2-Propenoic acid (1)
U <b>113</b>	140-88-5	2-Propenoic acid, ethyl ester (I)
U118	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester
U162	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester (I,T)
U373	122-42-9	Propham.
U411	114-26-1	Propoxur.
U <b>19</b> 4	1 <b>07-1</b> 0-8	n-Propylamine (I,T)
U083	78-87-5	Propylene dichloride
U <b>387</b>	52888-80-9	Prosulfocarb.
U148	123-33-1	3,6-Pyridazinedione, 1,2-dihydro-
U196	110-86-1	Pyridine
U191	109-06-8	Pyridine, 2-methyl-
U2 <b>37</b>	66-75-1	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2- chloroethyl)amino]-
U <b>16</b> 4	56-04-2	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-
U180	930-55-2	Pyrrolidine, 1-nitroso-
U <b>20</b> 0	50 <b>-5</b> 5-5	Reserpine
U201 ·	108-46-3	Resorcinol
U202	'81-07-2	Saccharin, & salts
U203	94-59-7	Safrole

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Hazardous waste No.	Chemical abstracts No.	Substance
U204	7783-00-8	Selenious acid
U204	7783-00-8	Selenium dioxide
U205	7488-56-4	Selenium sulfide
U205	7488-56-4	Selenium sulfide SeS <sub>2</sub> (R,T)
U <b>37</b> 6	144-34-3	Selenium, tetrakis(dimethyldithiocarbamate).
U015	115-02-6	L-Serine, diazoacetate (ester)
See F027	93-72-1	Silvex (2,4,5-TP)
U <b>379</b>	136-30-1	Sodium dibutyldithiocarbamate.
U <b>3</b> 81	148-18-5	Sodium diethyldithiocarbamate.
U <b>38</b> 2	128-04-1	Sodium dimethyldithiocarbamate.
U206	18883-66-4	Streptozotocin
U277	95-06-7	Sulfallate.
U103	77-78-1	Sulfuric acid, dimethyl ester
U189	1314-80-3	Sulfur phosphide (R)
See F027	93-7 <b>6-5</b>	2,4,5-T
U402	1634-02-2	Tetrabutylthiuram disulfide.
U207	95-94-3	1,2,4,5-Tetrachlorobenzene
U208	630-20-6	1,1,1,2-Tetrachloroethane
U209	79-34-5	1,1,2,2-Tetrachloroethane
U210	127-18-4	Tetrachloroethylene
See F027	58-90-2	2,3,4,6-Tetrachlorophenol
U213	109-99-9	Tetrahydrofuran (I)
U4 <b>01</b>	97-74-5	Tetramethylthiuram monosulfide.
U214	563-68-8	Thailium(I) acetate
U215	6533-73-9	Thallium(!) carbonate
U216	7791-12-0	Thallium(I) chloride
U216	7791-12-0	Thallium chloride TLCL
U <b>2</b> 17	10102-45-1	Thailium(I) nitrate
U366	533-74-4	2H-1,3,5-Thiadiazine- 2-thione, tetrahydro-3,5-dimethyl-
U218	62-55-5	Thioacetamide
U410	5 <b>9669</b> -26-0	Thiodicarb.
U153	74-93-1	Thiomethanol (I,T)
U244	137-26-8	Thioperoxydicarbonic diamide $[(H_2N)C(S)]_2S_2$ , tetramethyl-
U402	1634-02-2	Thioperoxydicarbonic diamide, tetrabutyl.
U4 <b>03</b>	97-77-8	Thioperoxydicarbonic diamide, tetraethyl.
U409	23564-05-8	Thiophanate-methyl.
U219	62-56-6	Thiourea
U244	137-26-8	Thiram

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Hazardous waste No.	Chemical abstracts No.	Substance
U220	108-88-3	Toluene
U221	25376-45-8	Toluenediamine
U223	26471-62-5	Toluene diisocyanate (R,T)
U <b>3</b> 28	95-53-4	o-Toluidine
U <b>353</b>	106-49-0	p-Toluidine
U222	636-21-5	o-Toluidine hydrochloride
U <b>389</b>	2303-17-5	Triallate.
U011	61-82-5	1H-1,2,4-Triazol-3-amine
u408	118-79-6	2,4,6-Tribromophenol
U227	79-00-5	1,1,2-Trichloroethane
U228	79-01-6	Trichloroethylene
U121	75-69-4	Trichloromonofluoromethane
See F027	95-95-4	2,4,5-Trichlorophenol
See F027	88-06-2	2,4,6-Trichlorophenol
U404	121-44-8	Triethylamine.
U2 <b>3</b> 4	99-35-4	1,3,5-Trinitrobenzene (R,T)
U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-
U235	126-72-7	Tris(2,3-dibromopropyl) phosphate
U2 <b>36</b>	72-57-1	Trypan blue
U2 <b>3</b> 7	66-75-1	Uracil mustard
U176	759-73-9	Urea, N-ethyl-N-nitroso-
U177	684-93-5	Urea, N-methyl-N-nitroso-
U385	1 <b>92</b> 9-77-7	Vernolate.
U04 <b>3</b>	75-01-4	Vinyl chloride
U248	'81- <b>8</b> 1-2	Warfarin, & salts, when present at concentrations of 0.3% or less
U239	1330-20-7	Xylene (I)
U200	50- <b>5</b> 5-5	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5- trimethoxybenzoyl)oxy]-, methyl ester, (3beta,16beta,17alpha,18beta,20alpha)-
U407	14324-55-1	Zinc, bis(diethylcarbamodithioato-S,S')-
J249	1314-84-7	Zinc phosphide $Zn_{3}P_{2,i}$ when present at concentrations of 10% or less

'CAS Number given for parent compound only.

#### 4110 DELETION OF CERTAIN HAZARDOUS WASTE CODES FOLLOWING EQUIPMENT CLEANING AND REPLACEMENT

4110.1 Wastes from wood preserving processes at plants that do not resume or initiate use of chlorophenolic preservatives shall not meet the listing definition of F032 once the generator has met all of the requirements of §§4110.2 through 4110.11. These wastes may, however,

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continue to meet another hazardous waste listing description or may exhibit one or more of the hazardous waste characteristics.

4110.2 Generators shall either clean or replace all process equipment that may have come into contact with chlorophenolic formulations or constituents thereof, including, but not limited to, treatment cylinders, sumps, tanks, piping systems, drip pads, fork lifts, and trams, in a manner that minimizes or eliminates the escape of hazardous waste or constituents, leachate, contaminated drippage, or hazardous waste decomposition products to the ground water, surface water, or atmosphere.

- 4110.3 Generators shall do one of the following:
  - (a) Prepare and follow an equipment cleaning plan and clean equipment in accordance with \$\$110.11;
  - (b) Prepare and follow an equipment replacement plan and replace equipment in accordance with §§4110.1 through 4110.11; or
  - (c) Document cleaning and replacement in accordance with §§4110.1 through 4110.11, carried out after termination of use of chlorophenolic preservations.
- 4110.4 The generator shall prepare and sign a written equipment cleaning plan that describes:
  - (a) The equipment to be cleaned;
  - (b) How the equipment will be cleaned;
  - (c) The solvent to be used in cleaning;
  - (d) How solvent rinses will be tested; and
  - (e) How cleaning residues will be disposed.
- 4110.5 Equipment shall be cleaned as follows:
  - (a) Remove all visible residues from process equipment;
  - (b) Rinse process equipment with an appropriate solvent until dioxins and dibenzofurans are not detected in the final solvent rinse.
- 4110.6 Analytical requirements.

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- (a) Rinses shall be tested in accordance with SW-846, Method 8290.
- (b) "Not detected" means at or below the lower method calibration limit (MCL) in Method 8290, Table 1.
- 4110.7 The generator shall manage all residues from the cleaning process as F032 waste.
- 4110.8 The generator shall prepare and sign a written equipment replacement plan that describes:

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- (a) The equipment to be replaced;
- (b) How the equipment will be replaced; and
- (c) How the equipment will be disposed.
- 4110.9 The generator shall manage the discarded equipment as F032 waste.
- 4110.10 The generator shall document that previous equipment cleaning and/or replacement was performed in accordance with §§4110.1 through 4110.11 and occurred after cessation of use of chlorophenolic preservatives.
- 4110.11 The generator shall maintain the following records documenting the cleaning and replacement as part of the facility's operating record:
  - (a) The name and address of the facility;
  - (b) Formulations previously used and the date on which their use ceased in each process at the plant;
  - (c) Formulations currently used in each process at the plant;
  - (d) The equipment cleaning or replacement plan;
  - (e) The name and address of any persons who conducted the cleaning and replacement;
  - (f) The dates on which cleaning and replacement were accomplished;
  - (g) The dates of sampling and testing;
  - (h) A description of the sample handling and preparation techniques, including techniques used for extraction, containerization, preservation, and chain-of-custody of the samples;
  - (i) A description of the tests performed, the date the tests were performed, and the results of the tests;
  - (j) The name and model numbers of the instrument(s) used in performing the tests;
  - (k) QA/QC documentation; and
  - (1) The following statement signed by the generator or his or her authorized representative:

I certify under penalty of law that all process equipment required to be cleaned or replaced under §§4110.1 through 4110.11 was cleaned or replaced as represented in the equipment cleaning and replacement plan and accompanying documentation. I am aware that there are significant penalties for providing false information, including the possibility of fine or imprisonment.

#### 4111 COMPARABLE/SYNGAS FUEL EXCLUSION

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#### 4111.1 Wastes that meet the following comparable/syngas fuel requirements are not solid wastes:

- (a) Comparable fuel specifications are as follows:
  - (1) Comparable fuel shall:
    - (A) Have a heating value that exceeds five thousand (5,000) BTU/lbs. eleven thousand five hundred (11,500 J/g); and
    - (B) Have a viscosity that does not exceed fifty (50) cs, as fired.
  - (2) Comparable fuel shall also meet the constituent specification levels and, where non-detect is the specification level, minimum required detection limits for the compounds listed in §4111.1, Table 8.
- (b) Synthesis gas fuel (that is, syngas fuel) that is generated from hazardous waste shall:
  - (1) Have a minimum Btu value of 100 Btu/Scf;
  - (2) Contain less than 1 ppmv of total halogen;
  - (3) Contain less than 300 ppmv of total nitrogen other than diatomic nitrogen (N<INF>2</INF>);
  - (4) Contain less than 200 ppmv of hydrogen sulfide; and
  - (5) Contain less than 1 ppmv of each hazardous constituent in the target list of Appendix II constituents of Chapter 41.

# TABLE 8 to §4111.1: Detection and Detection Limit Values for Comparable Fuel Specification

Chemical name	CAS NO.	Concen-tration limit (mg/kg at 10,000 BTU/lb)	Minimum required detection limit (mg/kg)
Total Nitrogen as N	na	4900	72
Total Halogens as Cl	na	540	
Total Organic Halogens as Cl	'na	25 or individual halogenated organics listed below.	1
Polychlorinated biphenyls, total [Arocolors, total]*	1336-36-3	Non-detect	1.4
Cyanide, total	57-12-5	Non-detect	1.0
Metals:			
Antimony, total	7440-36-0	7.9	
Arsenic, total	7440-38-2	0.23	

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Chemical name	CAS No.	Concen-tration limit (mg/kg at 10,000 BTU/lb)	Minimum required detection limit (mg/kg)
Barium, total	7440-39-3	23	
Beryllium, total	7440-41-7	1.2	
Cadmium, total	7440-43-9	1.2	
Chromium, total	7440-47-3	2.3	
Cobalt	7440-48-4	4.6	
Lead, total	7439-92-1	31	
Manganese	7439-96-5	1.2	
Mercury, total	7439-97-6	0.24	
Nickel, total	7440-02-0	58	
Selenium, total	7782-49-2	0.15	
Silver, total ,	7440-22-4	2.3	
Thailium, total	7440-28-0	23	L
Hydrocarbons:			
Benzo (a) anthracene	56-55-3	1100	
Benzene	71-43-2	4100	
Benzo(b)fluoranthene	205-99-2	960	
Benzo[k]fluoranthene	207-08-9	1900	
Benzo [a] pyrene	50-32-8	960	
Chrysene	218-01-9	1400	
Dibenzo[a,h]anthracene	53-70-3	960	
7,12-Dimethylbenz[a]anthracene	57-97-6	1900	
Fluoranthene	206-44-0	1900	
Indeno(1,2,3-cd)pyrene	193-39-5	960	
3-Methylcholanthrene	56-49-5	1900	
Naphthalene	91-20-3	3200	3
Toluene	108-88-3	36000	
Oxygetes:		<u></u>	
Acetophenone	98-86-2	1900	
. Acrolein	107-02-8	37	
Allyl alcohol	107-18-6	30	
Bis(2-ethylhexyl)phthalate [Di-2-ethylhexyl phthalate]	117-81-7	1900 '	
Butyl benzyl phthalate	85-68-7	1900	
o-Cresol (2-Methyl phenol)	95-48-7	220	
m-Cresol [3-Hethyl phenol]	108-39-4	220	

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Chémical name	CAS NO.	Concen-tration limit (mg/kg at 10,000 BTU/lb)	Minimum required detection limit (mg/kg)
p-Cresol [4-Methyl phenol]	106-44-5	220	
Di-n-butyl phthalate	84-74-2	1900	
Diethyl phthalate	84-66-2	1900	
2,4-Dimethylphenol	105-67-9	1900	
Dimethyl phthalate	131-11-3	1900	
Di-n-octyl phthalate	117-84-0	960	
Endothall	145-73-3	100	
Ethyl methacrylate	97-63-2	37	
2-Ethoxyethanol [Ethylene glycol monoethyl ether ] .	110-80-5	100	
Isobutyl alcohol	78-83-1	37	
Isosafrole	120-58-1	1900	
Methyl ethyl ketone [2-Butanone]	78-93-3	37	
Methyl methacrylate	80-62-6	37	
1,4-Naphthoquinone	130-15-4	1900	
Phenol	108-95-2	1900	
Propargyl alcohol [2-Propyn-1-ol]	107-19-7	30	
Safrole	94-59-7	1900	
Sulfoted Organics:			
Carbon disulfide	75-15-0	Non-detect	37
Disulfoton	298-04-4	Non-detect	1900
Ethyl methanesulfonate	62-50-0	Non-detect	1900
Methyl methanesulfonate	66-27-3	Non-detect	1900
Phorate	298-02-2	Non-detect	1900
1,3-Propane sultone	1120-71-4	Non-detect	100
Tetraethyldithiopyrophosphate [Sulfotepp]	3689-24-5	Non-detect	1900
Thiophenol [Benzenethiol]	108-98-5	Non-detect	30
0,0,0-Triethyl phosphorothioate	126-68-1	Non-detect	1900
Nitrogenated Organics:			
Acetonitrile [Methyl cyanide]	75-05-8	Non-detect	37
2-Acetylaminofluorene [2-AAF]	53-96-3	Non-detect	1900
Acrylonitrile	107-13-1	Non-detect	37
4-Aminobiphenyl	92-67-1	Non-detect	1900
4-Aminopyridine	504-24-5	Non-detect	100
Aniline	62-53-3	Non-detect	1900

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Chemical name	CAS NO.	Concen-tration limit (mg/kg at 10,000 BTU/lb)	Minimum required detection limit (mg/kg)
Benzidine	92-87-5	Non-detect	1900
Dibenz[a,j]acridine	224-42-0	Non-detect	1900
0,0-Diethyl O-pyrazinyl phophoro-thioate (Thio nazin )	297-97-2	Non-detect	1900
Dimethoate	60-51-5	Non-detect	1900
p-(Dimethylamino)azobenzene [4-Dimethylaminoazobenzene]	60-11-7	Non-detect	1900
3,3'-Dimethylbenzidine	119-93-7	Non-detect	1900
σ,α-Dimethylphenethylamine	122-09-8	Non-detect	1900
3,3'-Dimethoxybenzidine	119-90-4	Non-detect	100
1,3-Dinitrobenzene [m-Dinitrobenzene]	99-65-0	Non-detect	1900
4,6-Dinitro-o-cresol	534-52-1	Non-detect	1900
2,4-Dinitrophenol	51-28-5	Non-detect	1900
2,4-Dinitrotoluene	121-14-2	Non-detect	1900
2,6-Dinitrotoluene	606-20-2	Non-detect	1900
Dinoseb [2-sec-Butyl-4,6-dinitrophenol]	88-85-7	Non-detect	1900
Diphenylamine	122-39-4	Non-detect	1900
Ethyl carbamate (Urethane)	51-79-6	Non-detect	100
Ethylenethiourea (2-Imidazolidinethione)	96-45-7	Non-detect	110
Famphur	52-85-7	Non-detect	1900
Methacrylonitrile	126-98-7	Non-detect	37
Methapyrilene	91-80-5	Non-detect	1900
Methomyl	16752-77-5	Non-detect	57
2-Methyllactonitrile [Acetone cyanohydrin]	75-86-5	Non-detect	100
Methyl parathion	298-00-0	Non-detect	1900
MNNG (N-Metyl-N-nitroso-N/-nitroguanidine)	• 70-25-7	Non-detect	110
1-Naphthylamine, [a-Naphthylamine]	134-32-7	Non-detect	1900
2-Naphthylamine, [B-Naphthylamine]	91-59-8	Non-detect	1900
Nicotine	54-11-5	Non-detect	100
4-Nitroaniline, (p-Nitroaniline)	.10D-01-6	Non-detect	1900
Nitrobenzene	98-95-3	Non-detect	1900
p-Nitrophenol, [p-Nitrophenol]	10D-02-7	Non-detect	1900
5-Nitro-o-toluidine	99-55-8	Non-detect	1900
N-Nitrosodi-n-butylamine	924-16-3	Non-detect	1900
N-Nitrosodiethylamine	55-18-5	Non-detect	1900

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Chemical name	CAS NO.	Concen-tration limit (mg/kg at 10,000 BTU/lb)	Minimum required detection limit (mg/kg)
N-Nitrosodiphenylamine, [Diphenylnitrosamine]	86-30-6	Non-detect	1900
N-Nitroso-N-methylethylamine	10595-95-6	Non-detect	1900
N-Nitrosomorpholine	59-89-2	Non-detect	1900
N-Nitrosopiperidine	100-75-4	Non-detect	1900
N-Nitrosopyrrolidine	930-55-2	Non-detect	1900
2-Nitropropane	79-46-9	Non-detect	30
Parathion	56-38-2	Non-detect	1900
Phenacetin	62-44-2	Non-detect	1900
1,4-Phenylene diamine, [p-Phenylenediamine]	106-50-3	Non-detect	1900
N-Phenylthiourea	103-85-5	Non-detect	57
2-Picoline [alpha-Picoline]	109-06-8	Non-detect	1900
Propythioracil [6-Propyl-2-thiouracil]	51-52-5	Non-detect	100
Pyridine	110-86-1	Non-detect	1900
Strychnine	57-24-9	Non-detect	100
Thioacetamide	62-55-5	Non-detect	57
Thiofanox	39196-18-4	Non-detect	100
Thiourea	62-56-6	Non-detect	57
Toluene-2,4-diamine [2,4-Diaminotoluene]	95-80-7	Non-detect	57
Toluene-2,6-diamine [2,6-Diaminotoluene]	823-40-5	Non-detect	57
o-Toluidine	95-53-4	Non-detect	2200
p-Toluidine	106-49-0	Non-detect	100
1,3,5-Trinitrobenzene, [sym-Trinitobenzene]	99-35-4	Non-detect	2000
Halogenated Organics ':			
Allyl chloride	107-05-1	Non-detect	37
Aramite	104-57-8	Non-detect	1900
Benzal chloride [Dichloromethyl benzene]	98-87-3	Non-detect	100
Benzyl chloride	100-44-77	Non-detect	100
Bis(2-chloroethyl)ether [Dichloroethyl ether]	111-44-4	Non-detect	1900
Bromoform [Tribromomethane]	75-25-2	Non-detect	37
Bromomethane (Methyl bromide)	74-83-9	Non-detect	37
4-Bromophenyl phenyl ether [p-Bromo diphenyl ether ] .	101-55-3	Non-detect	1900
Carbon tetrachloride	56-23-5	Non-detect	37
Chlordane	57-74-9	Non-detect	14
p-Chloroaniline	106-47-8	Non-detect	1900

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Chemical name	CAS NO.	Concen-tration limit (mg/kg at 10,000 BTU/lb)	Minimum required detection limmit (mg/kg)
Chlorobenzene	108-90-7	Non-detect	37
Chlorobenzilate	510-15-6	Non-detect	1900
p-Chloro-m-cresol	59-50-7	Non-detect	1900
2-Chloroethyl vinyl ether	110-75-8	Non-detect	37
Chloroform	67-66-3	Non-detect	37
Chloromethane [Methyl chloride]	74-87-3	Non-detect	37
2-Chlorophthalene [beta-Chlorophthalene]	91-58-7	Non-detect	1900
2-Chlorophenol [o-Chlorophenol]	95-57-8	Non-detect	1900
Chloroprene [2-Chloro-1,3-butadiene]	1126-99-8	Non-detect	37
2,4-D [2,4-Dichlorophenoxyacetic acid]	94-75-7	Non-detect	7.0
Diallate	2303-16-4	Non-detect	1900
1,2-Dibromo-3-chloropropane	96-12-8	Nòn-detect	37
1,2-Dichlorobenzene [o-Dichlorobenzene]	95-50-1	Non-detect	1900
1,3-Dichlorobenzene [m-Dichlorobenzene]	541-73-1	Non-detect	1900
1,4-Dichlorobenzene [p-Dichlorobenzene]	106-46-7	Non-detect	1900
3,3'-Dichlorobenzidine	91-94-1	Non-detect	1900
Dichlorodifluoromethane [CFC-12]	75-71-8	Non-detect	37
1,2-Dichloroethane (Ethylene dichloride)	107-06-2	Non-detect	37
1,1-Dichloroethylene [Vinylidene chloride]	75-35-4	Non-detect	37
Dichloromethoxy ethane [Bis(2-chloroethoxy)methane	111-91-1	Non-detect	1900
2,4-Dichlorophenol	120-83-2	Non-detect	1900
2,6-Dichlorophenol	87-65-0	Non-detect	1900
1,2-Dichloropropane (Propylene dichloride]	78-87-5	Non-detect	37
cis-1,3-Dichloropropylene	10061-01-5	Non-detect	37
trans-1,3-Dichloropropylene	10061-02-6	Non-detect	37
1,3-Dichloro-2-propanol	96-23-1	Non-detect	30
Endosulfan I	959-98-8	Non-detect	1.4
Endosulfan II	33213-65-9	Non-detect	1.4
Endrin	72-20-8	Non-detect	1.4
Endrin aldehyde	7421-93-4	Non-detect	1.4
Endrin Ketone	53494-70-5	Non-detect	1.4
Epichlorohydrin [1-Chloro-2,3-epoxy propane]	106-89-8	Non-detect	30
Ethylidene dichloride [1,1-Dichloroethane]	75-34-3	Non-detect	37
2-Fluoroasetamide	640-19-7	Non-detect	100
Heptachlor	76-44-8	Non-detect	1.4

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Chemical name	CAS NO.	Concen-tration limit (mg/kg at 10,000 BTU/lb)	Minimum required detection limit (mg/kg)
Heptachlor epoxide	1024-57-3	Non-detect	2.8
Hexachlorobenzene	118-74-1	Non-detect	1900
Hexachloro-1,3-butadiene [Hexachlorobutadiene]	87-68-3	Non-detect	1900
Hexachlorocyclopentadiene	77-47-4	Non-detect	1900
Hexachloroethane	67-72-1	Non-detect	1900
Hexachlorophene	70-30-4	Non-detect	10 <b>00</b>
Hexachloropropene [Hexachloropropylene]	1888-71-7	Non-detect	1900
Isodrín	465-73-6	Non-detect	1900
Kepone [Chlordecone]	143-50-0	Non-detect	3600
Lindane [gamma-Hexachlorocyclohexane] [gamma-BHC] .	58-89-9	Non-detect	1.4
Methylene chloride (Dichloromethane)	75-09-2	Non-detect	37
4,4'-methylene-bis(2-chloroaniline)	101-14-4	Non-detect	100
Methyl iodide [[odomethane]	74-88-4	Non-detect	37
Pentachlorobenzene	608-93-5	Non-detect	1900
Pentachloroethane	76-01-7	Non-detect	37
Pentachloronitrobenzene [PCNB] [Quintobenzene] [Quin tozen e].	82-68-8	Non-detect	1900
Pentachlorophenol	87-86-5	Non-detect	1900
Pronamide	23950-58-5	Non-detect	1900
Silvex [2,4,5-Trichlorophenoxypropionic acid]	93-72-1	Non-detect	7.0
2,3,7,8-Tetrachlorodibenzo-p-dioxin [2,3,7,8-TCDD]	1746-01-6	Non-detect	30
1,2,4,5-Tetrachlorobenzene	95-94-3	Non-detect	1900
1,1,2,2-Tetrachloroethane	79-34-5	Non-detect	37
Tetrachloroethylene [Perchloroethylene]	127-18-4	Non-detect	37
2,3,4,6-Tetrachlorophenol	58-90-2	Non-detect	1900
1,2,4-Trichlorobenzene	120- <b>82</b> -1	Non-detect	1900
1,1,1-Trichloroethane [Methyl chloroform]	71-55-6	Non-detect	<sup>*</sup> 37
1,1,2-Trichloroethane [Vinyl trichloride]	79-00-5	Non-detect	37
Trichloroethylene	79-01-6	Non-detect	37
Trichlorofluoromethane [Trichlormonofluoromethane]	75-69-4	Non-detect	37
2,4,5-Trichlorophenol	95-95-4	Non-detect	1900
2,4,6-Trichlorophenol	88-06-2	Non-detect	1900
1,2,3-Trichloropropane	96-18-4	Non-detect	37
Vinyl Chloride	75-01-4	Non-detect	37

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<sup>1</sup> Absence of PCBs can also be demonstrated by using appropriate screening methods, e.g., immunoassay kit for PCB in oils (Method 4020) or colorimetric analysis for PCBs in oil (Method 9079).

<sup>3</sup> Some minimum required detection limits are above the total halogen limit of 540 ppm. The detection limits reflect what was achieved during EPA testing and analysis and also analytical complexity associated with measuring all halogen compounds on Appendix II at low levels. EPA recognizes that in practice the presence of these compounds will be functionally limited by the molecular weight and the total halogen limit of 540 ppm.

- (c) Waste that meets the comparable or syngas fuel specifications provided by §§4111.1(a) or (b) (these constituent levels must be achieved by the comparable fuel when generated, or as a result of treatment or blending, as provided in §§4111.1(c) or (c)(4)) is excluded from the definition of solid waste provided that the following requirements are met:
  - (1) For purposes of §4111, the person claiming and qualifying for the exclusion is called the comparable/syngas fuel generator and the person burning the comparable/syngas fuel is called the comparable/syngas burner. The person who generates the comparable fuel or syngas fuel shall claim and certify to the exclusion as follows:
    - (A) The generator shall submit a one-time notice to the Director. in whose jurisdiction the exclusion is being claimed and where the comparable/syngas fuel will be burned, certifying compliance with the conditions of the exclusion and providing documentation as required by §4111.1(c)(1)(C);
    - (B) If the generator is a company that generates comparable/syngas fuel at more than one facility, the generator shall specify at which sites the comparable/syngas fuel will be generated;
    - (C) A comparable/syngas fuel generator's notification to the Directors shall contain the following items:
      - (i) The name, address, and RCRA ID number of the person/facility claiming the exclusion;
      - (ii) The applicable EPA Hazardous Waste Codes for the hazardous waste;
      - (iii) Name and address of the units, meeting the requirements of \$4111.1(c)(2), that will burn the comparable/syngas fuel; and
      - (iv) The following statement is signed and submitted by the person claiming the exclusion or by his authorized representative:

Under penalty of criminal and civil prosecution for making or submitting false statements, representations, or omissions, I certify that the requirements of §4111 have been met for all waste identified in this notification. Copies of the records and information required at \$4111.1(c)(10) are available at the comparable/syngas fuel generator's facility. Based on my inquiry of the individuals immediately responsible for obtaining the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false

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information, including the possibility of fine and imprisonment for knowing violations.

(D) Before burning an excluded comparable/syngas fuel, the burner shall publish in a major newspaper of general circulation local to the site where the fuel will be burned, a notice entitled "Notification of Burning a Comparable/Syngas Fuel Excluded Under the Resource Conservation and Recovery Act" containing the following information:

- (i) Name, address, and RCRA ID number of the generating facility;
- (ii) Name and address of the unit(s) that will burn the comparable/syngas fuel;
- (iii) A brief, general description of the manufacturing, treatment, or other process generating the comparable/syngas fuel;
- (iv) An estimate of the average and maximum monthly and annual quantity of the waste claimed to be excluded; and
- (v) Name and mailing address of the Director(s) to whom the claim was submitted.
- (2) The comparable/syngas fuel exclusion for fuels meeting the requirements of §§4111.1(a) or (b) and (c)(1) apply only if the fuel is burned in the following units that also shall be subject to Federal/State/local air emission requirements, including all applicable CAA MACT requirements:
  - (A) Industrial furnaces as defined in §5400.1, that are located outside the District of Columbia;
  - (B) Boilers, as defined in §5400.1, that are located outside the District of Columbia and are further defined as follows:
    - Industrial boilers located on the site of a facility engaged in a manufacturing process where substances are transformed into new products, including the component parts of products, by mechanical or chemical processes; or
    - (ii) Utility boilers used to produce electric power, steam, heated or cooled air, or other gases or fluids for sale;
  - (C) Hazardous waste incinerators subject to regulation under subpart O of 40 CFR Part 264 or 265 or state equivalent or applicable CAA MACT standards and are located outside the District of Columbia.
- (3) A hazardous waste blended to meet the viscosity specification shall:

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- (A) As generated and prior to any blending, manipulation, or processing meet the constituent and heating value specifications of §§4411.1(a)(1)(A) and 4111.1(a)(2);
- (B) Be blended at a facility that is subject to the applicable requirements of Chapter 44 or §§4202.6 through 4202.8; and
- (C) Not violate the dilution prohibition of §4111.1(c)(6).
- (4) The following requirements apply to treatment to meet the comparable fuel exclusion specifications.
  - (A) A hazardous waste may be treated to meet the exclusion specifications of §§4111.1(a)(1) and (a)(2) provided the treatment:
    - Destroys or removes the constituent listed in the specification or raises the heating value by removing or destroying hazardous constituents or materials;
    - (ii) Is performed at a facility that is subject to the applicable requirements of Chapter 44, or §4202.6 through 4202.8; and
    - (iii) Does not violate the dilution prohibition of §4111.1(c)(6).
  - (B) Residuals resulting from the treatment of a hazardous waste listed in §§4109 through 4111 to generate a comparable fuel remain a hazardous waste.
- (5) The following requirements apply to generation of a syngas fuel.
  - (A) A syngas fuel can be generated from the processing of hazardous wastes to meet the exclusion specifications of §4111.1(b) provided the processing:
    - Destroys or removes the constituent listed in the specification or raises the heating value by removing or destroying constituents or materials;
    - (ii) Is performed at a facility that is subject to the applicable requirements of Chapter 44, or §4202.6 through 4202.8 or is an exempt recycling unit pursuant to §§4103.5 and 4103.6; and
    - (iii) Does not violate the dilution prohibition 4111.1(c)(6).
  - (B) Residuals resulting from the treatment of a hazardous waste listed in §§4109 through 4111 to generate a syngas fuel remain a hazardous waste.
- (6) No generator, transporter, handler, or owner or operator of a treatment, storage, or disposal facility shall in any way dilute a hazardous waste to meet the exclusion specifications of §§4111.1(a)(1)(A), 4111.1(a)(2) or 4111.1(b).

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- (7) The generator of a comparable/syngas fuel shall develop and follow a written waste analysis plan that describes the procedures for sampling and analysis of the hazardous waste to be excluded. The waste analysis plan shall be developed in accordance with the applicable sections of the "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-846). The plan shall be followed and retained at the facility excluding the waste. The following requirements apply to the waste analysis plan:
  - (A) At a minimum, the plan shall specify:
    - (i) The parameters for which each hazardous waste will be analyzed and the rationale for the selection of those parameters;
    - (ii) The test methods that will be used to test for these parameters;
    - (iii) The sampling method that will be used to obtain a representative sample of the waste to be analyzed;
    - (iv) The frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up to date; and
    - (v) If process knowledge is used in the waste determination, any information prepared by the generator in making the determination.
  - (B) The waste analysis plan shall also contain records of the following:
    - (i) The dates and times waste samples were obtained, and the dates the samples were analyzed;
    - (ii) The names and qualifications of the person(s) who obtained the samples;
    - (iii) A description of the temporal and spatial locations of the samples;
    - (iv) The name and address of the laboratory facility that performed the sample analyses;
    - (v) A description of the analytical methods the laboratory facility used, including any clean-up and sample preparation methods;
    - (vi) All quantitation limits achieved and all other quality control results for the analysis (including method blanks, duplicate analyses, matrix spikes, etc.), laboratory quality assurance data, and description of any deviations from analytical methods written in the plan or from any other activity written in the plan that occurred;
    - (vii) All laboratory results demonstrating that the exclusion specifications have been met for the waste; and

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- (viii) All laboratory documentation that support the analytical results, unless a contract between the claimant and the laboratory provides for the laboratory to maintain the documentation for the period specified in §4111.1(c)(11) and also provides for the availability of the documentation to the claimant upon request.
- (C) Syngas fuel generators shall submit for approval, before performing sampling, analysis, or any management of a syngas fuel as an excluded waste, a waste analysis plan containing the elements of §4111.1(c)(7)(A) to the appropriate regulatory authority. The approval of waste analysis plans shall be stated in writing and received by the facility before sampling and analysis to demonstrate the exclusion of a syngas. The approval of the waste analysis plan may contain any provisions and conditions as the regulatory authority deems appropriate.
- (8) The following requirements apply to comparable fuel sampling and analysis:
  - (A) For each waste for which an exclusion is claimed, the generator of the hazardous waste shall test for all the constituents on Appendix II, except those that the generator determines, based on testing or knowledge, should not be present in the waste. The generator is required to document the basis of each determination that a constituent should not be present. Any claim under §4111.1 must be valid and accurate for all hazardous constituents. A determination not to test for a hazardous constituent will not shield a generator from liability should that constituent later be found in the waste above the exclusion specifications. The generator may not determine that any of the following categories of constituents should not be present:
    - A constituent that triggered the toxicity characteristic for the waste constituents that were the basis of the listing of the waste stream, or constituents for which there is a treatment standard for the waste code in §5003;
    - (ii) A constituent detected in previous analysis of the waste;
    - (iii) Constituents introduced into the process that generates the waste; or
    - (iv) Constituents that are byproducts or side reactions to the process that generates the waste.
  - (B) For each waste for which the exclusion is claimed where the generator of the comparable/syngas fuel is not the original generator of the hazardous waste, the generator of the comparable/syngas fuel may not use process knowledge pursuant to §4111.1(c)(8)(A) and must test to determine that all of the constituent specifications of §§4111.1(a)(2) and 4111.1(b) have been met.
  - (C) The comparable/syngas fuel generator may use any reliable analytical method to demonstrate that no constituent of concern is present at concentrations above the specification levels. It is the responsibility of the generator to ensure that the sampling and analysis are unbiased, precise, and

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representative of the waste. For the waste to be eligible for exclusion, a generator shall demonstrate that:

- Each constituent of concern is not present in the waste above the specification level at the 95% upper confidence limit around the mean; and
- (ii) The analysis could have detected the presence of the constituent at or below the specification level at the 95% upper confidence limit around the mean.
- (D) Nothing in this paragraph preempts, overrides or otherwise negates the provision in §4200.10, which requires any person who generates a solid waste to determine if that waste is a hazardous waste.
- (E) In an enforcement action, the burden of proof to establish conformance with the exclusion specification shall be on the generator claiming the exclusion.
- (F) The generator shall conduct sampling and analysis in accordance with its waste analysis plan developed under §4111.1(c)(7).
- (G) Syngas fuel and comparable fuel that has not been blended to meet the kinematic viscosity specifications shall be analyzed as generated.
- (H) If a comparable fuel is blended to meet the kinematic viscosity specifications, the generator shall:
  - (i) Analyze the fuel as generated to ensure that it meets the constituent and heating value specifications; and
  - (ii) After blending, analyze the fuel again to ensure that the blended fuel continues to meet all comparable/syngas fuel specifications.
- Excluded comparable/syngas fuel must be re-tested, at a minimum, annually and must be retested after a process change that could change the chemical or physical properties of the waste.
- (9) Any persons handling a comparable/syngas fuel are subject to the speculative accumulation test under §4100.7(f).
- (10) The generator shall maintain records of the following information on-site:
  - (A) All information required to be submitted to the implementing authority as part of the notification of the claim:
    - (i) The owner/operator name, address, and RCRA facility ID number of the person claiming the exclusion;
    - (ii) The applicable EPA Hazardous Waste Codes for each hazardous waste excluded as a fuel; and

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- (iii) The certification signed by the person claiming the exclusion or his authorized representative.
- (B) A brief description of the process that generated the hazardous waste and process that generated the excluded fuel, if not the same;
- (C) An estimate of the average and maximum monthly and annual quantities of each waste claimed to be excluded;
- (D) Documentation for any claim that a constituent is not present in the hazardous waste as required under §4111.1(c)(8)(A);
- (E) The results of all analyses and all detection limits achieved as required under §4111.1(c)(8);
- (F) If the excluded waste was generated through treatment or blending, documentation as required under §4111.1(c)(3) or (4);
- (G) If the waste is to be shipped off-site, a certification from the burner as required under §4111.1(c)(12);
- (H) A waste analysis plan and the results of the sampling and analysis that includes the following:
  - (i) The dates and times waste samples were obtained, and the dates the samples were analyzed;
  - (ii) The names and qualifications of the person(s) who obtained the samples;
  - (iii) A description of the temporal and spatial locations of the samples;
  - (iv) The name and address of the laboratory facility that performed the sample analyses;
  - (v) A description of the analytical methods used, including any clean-up and sample preparation methods;
  - (vi) All quantitation limits achieved and all other quality control results for the analysis (including method blanks, duplicate analyses, matrix spikes, etc.), laboratory quality assurance data, and description of any deviations from analytical methods written in the plan or from any other activity written in the plan which occurred;
  - (vii) All laboratory analytical results demonstrating that the exclusion specifications have been met for the waste; and
  - (viii) All laboratory documentation that support the analytical results, unless a contract between the claimant and the laboratory provides for the laboratory to maintain the documentation for the period specified

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in §4111.1(c)(11) and also provides for the availability of the documentation to the claimant upon request; and

- (I) If the generator ships comparable/syngas fuel off-site for burning, the generator shall retain for each shipment the following information on-site:
  - (i) The name and address of the facility receiving the comparable/syngas fuel for burning;
  - (ii) The quantity of comparable/syngas fuel shipped and delivered;
  - (iii) The date of shipment or delivery;
  - (iv) A cross-reference to the record of comparable/syngas fuel analysis or other information used to make the determination that the comparable/syngas fuel meets the specifications as required under §4111.1(c)(8); and
  - (v) A one-time certification by the burner as required under \$4111.1(c)(12).
- (11) Records shall be maintained for three (3) years. A generator shall maintain a current waste analysis plan during that three-year period.
- (12) Before submitting a notification to the Director(s), a comparable/syngas fuel generator who intends to ship its fuel off-site for burning shall obtain a one-time written, signed statement from the burner:
  - (A) Certifying that the comparable/syngas fuel will only be burned in an industrial furnace or boiler, utility boiler, or hazardous waste incinerator, as required under §4111.1(c)(2);
  - (B) Identifying the name and address of the units that will burn the comparable/syngas fuel; and
  - (C) Certifying that the state in which the burner is located is authorized to exclude wastes as comparable/syngas fuel under the provisions of this section.
- (13) Wastes that are listed because of presence of dioxins or furans, as set out in Appendix I, are not eligible for this exclusion, and any fuel produced from or otherwise containing these wastes remains a hazardous waste subject to full hazardous waste management requirements.

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#### 4112 INCORPORATED BY REFERENCE

- 4112.1 When used in Chapters 40 through 54, the following Appendices from Title 40 of the Code of Federal Regulations are incorporated by reference:
  - (a) Appendix I of 40 CFR Part 261, "Representative Sampling Methods";
  - (b) Appendix II of 40 CFR Part 261, "EP Toxicity Test Procedures";
  - (c) Appendix III of 40 CFR Part 261 "Chemical Analysis Test Methods"; and
  - (d) Appendix IX of 40 CFR Part 261 "Waste Excluded Under §§260.20 and 260.22".

#### Appendix I to Chapter 41 - Basis for Listing Hazardous Waste

EPA hazardous waste No.	Hazardous constituents for which listed		
F001	Tetrachloroethylene, methylene chloride trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chlorinated fluorocarbons.		
F002 .	Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trichfluoroethane, ortho- dichlorobenzene, trichlorofluoromethane.		
F003	N.A.		
F004	Cresols and cresylic acid, nitrobenzene.		
F005	Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, 2-ethoxyethanol, benzene, 2-nitropropane.		
F006	Cadmium, hexavalent chromnium, nickel, cyanide (complexed).		
F007	Cyanide (salts).		
F008	Cyanide (salts).		
F00 <b>9</b>	Cyanide (salts).		
F010	Cyanide (salts).		
F011	Cyanide (salts).		
F012	Cyanide (complexed).		
F019	Hexavalent chromium, cyanide (complexed).		
F020	Tetra- and pentachlorodibenzo-p-dioxins; tetra and pentachlorodi-benzofurans; tri- and tetrachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.		
F021	Penta- and hexachlorodibenzo-p-dioxins; penta- and hexachlorodibenzofurans; pentachlorophenol and its derivatives.		
F022	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans.		
F023	Tetra-, and pentachlorodibenzo-p-dioxins; tetra- and pentachlorodibenzofurans; tri- and tetrachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.		
F024	Chloromethane, dichloromethane, trichloromethane, carbon tetrachloride, chloroethylene, 1,1-dichloroethane, 1,2-dichloroethane, trans-1-2-dichloroethylene, 1,1- dichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethylene, 1,1,1,2-tetra-chloroethane, 1,1,2,2-tetrachloroethane, tetrachloroethylene, pentachloroethane, hexachloroethane, allyl chloride (3-chloropropene), dichloropropane, dichloropropene, 2-chloro-1,3-butadiene, hexachloro-1,3-butadiene, hexachlorocyclopentadiene, hexachlorocyclohexane, benzene, chlorbenzene, dichlorobenzenes, 1,2,4-trichlorobenzene, tetrachlorobenzene, pentachlorobenzene, hexachlorobenzene, toluene, naphthalene.		
F025	Chloromethane; Dichloromethane; Trichloromethane; Carbon tetrachloride; Chloroethylene; 1,1-Dichloroethane; 1,2-Dichloroethane; trans-1,2-Dichloroethylene; 1,1- Dichloroethylene; 1,1,1-Trichloroethane; 1,1,2-Trichloroethane; Trichloroethylene; 1,1,1,2-Tetrachloroethane; 1,1,2,2-Tetrachloroethane; Tetrachloroethylene; Pentachloroethane; Hexachloroethane; Allyl chloride (3-Chloropropene); Dichloropropane; Dichloropropene; 2-Chloro-1,3-butadiene; Hexachloro-1,3-butadiene; Hexachlorocyclopentadiene; Benzene; Chlorobenzene; Dichlorobenzene; 1,2,4- Trichlorobenzene; Tetrachlorobenzene; Pentachlorobenzene; Hexachlorobenzene; Toluene; Naphthalene.		
F026	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans.		

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F027	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.
F028	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.
F032	Benz(a)anthracene, benzo(a)pyrene, dibenz(a,h)-anthracene,indeno(1,2,3-cd)pyrene, pentachlorophenol, arsenic, chromium, tetra-, penta-, hexa-, heptachlorodibenzo-p- dioxins, tetra-, penta-, hexa-, heptachlorodibenzofurans.
F0 <b>34</b>	<pre>Benz(a)anthracene, benzo(k)fluoranthene, benzo(a)pyrene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, naphthalene, arsenic, chromium.</pre>
F035	Arsenic, chromium, lead.
F037	Benzene, benzo(a)pyrene, chrysene, lead, chromium.
F038	Benzene, benzo(a)pyrene chrysene, lead, chromium.
F0 <b>39</b>	All constituents for which treatment standards are specified for multi-source leachate (wastewaters and nonwastewaters) under 40 CFR 268.43(a), Table CCW.
K001	Pentachlorophenol, phenol, 2-chlorophenol, p-chloro-m-cresol, 2,4-dimethylphenyl, 2,4- dinitrophenol, trichlorophenols, tetrachlorophenols, 2,4-dinitrophenol, cresosote, chrysene, naphthalene, fluoranthene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, benz(a)anthracene, dibenz(a)anthracene, acenaphthalene.
K002	Hexavalent chromium, lead
к0 <b>03</b>	Hexavalent chromium, lead.
к0 <b>04</b>	Hexavalent chromium.
K0 <b>05</b>	Hexavalent chromium, lead.
K006	Hexavalent chromium.
K007	Cyanide (complexed), hexavalent chromium.
к0 <b>08</b>	Hexavalent chromium.
к0 <b>09</b>	Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid.
к010	Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid, chloroacetaldehyde.
K011	Acrylonitrile, acetonitrile, hydrocyanic acid.
K0 <b>13</b>	Hydrocyanic acid, acrylonitrile, acetonitrile.
к014	Acetonitrile, acrylamide.
K015	Benzyl chloride, chlorobenzene, toluene, benzotrichloride.
K016	Hexachlorobenzene, hexachlorobutadiene, carbon tetrachloride, hexachloroethane, perchloroethylene.
K017	Epichlorohydrin, chloroethers [bis(chloromethyl) ether and bis (2-chloroethyl) ethers], trichloropropane, dichloropropanols.
K018	1,2-dichloroethane, trichloroethylene, hexachlorobutadiene, hexachlorobenzene.
K019	Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride.
K020	Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride.
K021	Antimony, carbon tetrachloride, chloroform.
K022	Phenol, tars (polycyclic aromatic hydrocarbons)

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к023	Phthalic anhydride, maleic anhydride.
к024	Phthalic anhydride, 1,4-naphthoquinone.
к025	Meta-dinitrobenzene, 2,4-dinitrotoluene.
K026	Paraldehyde, pyridines, 2-picoline.
к027	Toluene diisocyanate, toluene-2, 4-diamine.
к028	1,1,1-trichloroethane, vinyl chloride.
к029	1,2-dichloroethane, 1,1,1-trichloroethane, vinyl chloride, vinylidene chloride, chloroform.
к030	Hexachlorobenzene, hexachlorobutadiene, hexachloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, ethylene dichloride.
к031	Arsenic.
K032	Hexachlorocyclopentadiene.
к033	Hexachlorocyclopentadiene.
к034	Hexachlorocyclopentadiene.
к035	Creosote, chrysene, naphthalene, fluoranthene benzo(b) fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd) pyrene, benzo(a)anthracene, dibenzo(a)anthracene, acenaphthalene.
K0 <b>3</b> 6	Toluene, phosphorodithioic and phosphorothioic acid esters.
к037	Toluene, phosphorodithioic and phosphorothioic acid esters.
K0 <b>38</b>	Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters.
к0 <b>39</b>	Phosphorodithioic and phosphorothioic acid esters.
K040	Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters.
К041	Toxaphene.
K042	Hexachlorobenzene, ortho-dichlorobenzene.
к043	2,4-dichlorophenol, 2,6-dichlorophenol, 2,4,6-trichlorophenol.
К044	N.A.
к045	N.A.
к046	Lead.
к047	N.A.
к048	Hexavalent chromium, lead.
K049	Hexavalent chromium, lead.
к050	Hexavalent chromium.
K051	Hexavalent chromium, lead.
K052	Lead.
K060	Cyanide, napthalene, phenolic compounds, arsenic.
K061	Hexavalent chromium, lead, cadmium.
K062	Hexavalent chromium, lead.
K064	Lead, cadmium.
K065	Do.
к066	Do.
K069	Hexavalent chromium, lead, cadmium.
(071	Mercury

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	K073	Chloroform, carbon tetrachloride, hexacholroethane, trichloroethane, tetrachloroethane, tetrachloroethylene, dichloroethylene, 1,1,2,2-tetrachloroethane.
	K083	Aniline, diphenylamine, nitrobenzene, phenylenediamine.
	K084	Arsenic.
	к085	Benzene, dichlorobenzenes, trichlorobenzenes, tetrachlorobenzenes, pentachlorobenzene, hexachlorobenzene, benzyl chloride.
	K086	Lead, hexavalent chromium.
	K087	Phenol, naphthalene.
	K088	Cyanide (complexes).
	K090	Chromium.
	K091	Do.
Ť	K093	Phthalic anhydride, maleic anhydride.
	K094	Phthalic anhydride.
	K095	1,1,2-trichloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane.
	K096	1,2-dichloroethane, 1,1,1-trichloroethane, 1,1,2-trichloroethane.
	K097	Chiordane, heptachior.
	K098	Toxaphene.
	K099	2,4-dichlorophenol, 2,4,6-trichlorophenol.
	K100	Hexavalent chromium, lead, cadmium.
	K101	Arsenic.
	K102	Arsenic.
	к103	Aniline, nitrobenzene, phenylenediamine.
	к104	Aniline, benzene, diphenylamine, nitrobenzene, phenylenediamine.
	к105	Benzene, monochlorobenzene, dichlorobenzenes, 2,4,6-trichlorophenol.
	к106	Mercury.
	K107	1,1-Dimethylhydrazine (UDMH).
	к108	1,1-Dimethylhydrazine (UDMH).
	к109	1,1-Dimethylhydrazine (UDMH).
	K110	1,1-Dimethylhydrazine (UDMH).
	к111	2,4-Dinitrotoluene.
	к112	2,4-Toluenediamine, o-toluidine, p-toluidine, aniline.
	к113	2,4-Toluenediamine, o-toluidine, p-toluidine, aniline.
	к114	2,4-Toluenediamine, o-toluidine, p-toluidine.
	к115	2,4-Toluenediamine.
	к116	Carbon tetrachloride, tetrachloroethylene, chloroform, phosgene.
	к117	Ethylene dibromide.
	к118	Ethylene dibromide.
	K123	Ethylene thiourea.
	K124	Ethylene thiourea.
	K125	Ethylene thiourea.
	к126	Ethylene thiourea.

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K131	Dimethyl sulfate, methyl bromide.
K132	Methyl bromide.
K136	Ethylene dibromide.
K140	2,4,6-Tribromophenol.
К141	<pre>Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene.</pre>
К142	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene.
K143	Benzene, benz(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene.
К144	<pre>Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene.</pre>
K145	Benzene, benz(a)anthracene, benzo(a)pyrene, dibenz(a,h)anthracene, naphthalene.
K147	<pre>Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene.</pre>
K148	<pre>Benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene.</pre>
K149	Benzotrichloride, benzyl chloride, chloroform, chloromethane, chlorobenzene, 1,4- dichlorobenzene, hexachlorobenzene, pentachlorobenzene, 1,2,4,5-tetrachlorobenzene, toluene.
K150	Carbon tetrachloride, chloroform, chloromethane, 1,4-dichlorobenzene, hexachlorobenzene, pentachlorobenzene, 1,2,4,5-tetrachlorobenzene, 1,1,2,2- tetrachloroethane, tetrachloroethylene, 1,2,4-trichlorobenzene.
K151	Benzene, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene.
К156	Benomyl, carbaryl, carbendazim, carbofuran, carbosulfan, formaldehyde, methylene chloride, triethylamine.
к157	Carbon tetrachloride, formaldehyde, methyl chloride, methylene chloride, pyridine, triethylamine.
к158	Benomyl, carbendazim, carbofuran, carbosulfan, chloroform, methylene chloride.
K159	Benzene, butylate, eptc, molinate, pebulate, vernolate.
K160	Benzene, butylate, eptc, molinate, pebulate, vernolate.
к161	Antimony, arsenic, metam-sodium, ziram.

N.A. -- Waste is hazardous because it fails the test for the characteristic of ignitability, corrosivity, or reactivity.

### Appendix II to Chapter 41 -- Hazardous Constituents

Common name	Chemical abstracts name	Chemical abstracts No.	Hazardous waste No.
A2213	Ethanimidothioic acid, 2- (dimethylamino) -N-hydroxy-2-oxo-, methyl ester	30558-43-1	U394
Acetonitrile	Same	75-05-8	U003
Acet <b>ophenone</b>	Ethanone, 1-phenyl-	98-86-2	U004
2-Acetylaminefluarone	Acetamide, N-9N-fluoren-2-yl-	53-96-3	U005
Acetyl chloride	Same	75-36-5	U006
1-Acetyl-2-thiourea	Acetamide, N-(aminothioxomethyl)-	591-08-2	P002
Acrolein	2-Propenal	107-02-8	P003

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	1	1	ţ
Acrylami <b>de</b>	2-Propenamide	79-06-1	U007
Acrylonitrile	2-Propenenitrile	107-13-1	U009
Aflatoxins	Same	1402-68-2	
Aldicarb	<pre>Propanal, 2-methyl-2-(methylthio)-, 0- [(methylamino)carbonyl]oxime</pre>	116-06-3	P070
Aldicarb sulfone	Propanal, 2-methyl-2- (methylsulfonyl) -, O-[(methylamino) carbonyl] oxime	1646-88-4	P203
Aldrin	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-10- hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5alpha,8alpha, 8abeta)-	309-00-2	P004
Allyl alcohol	2-Propen-1-ol	107-18-6	P005
Allyt chloride	1-Propane, 3-chloro	107-18-6	
Aluminum phosphide	Same	20859-73-8	P006
4-Aminobiphenyl	[1,1'-Biphenyl]-4-amine	92-67-1	
5-(Aminomethyl)-3- isoxazolol	3(2H)-Isoxazolone, 5-(aminomethyl)-	2763-96-4	P007
4-Aminopyridine	4-Pyridinamine	504-24-5	P008
Amitrole	1H-1,2,4-Triazol-3-amine	61-82-5	U011
Ammonium vanadate	Vanadic acid, ammonium salt	7803-55-6	P119
Aniline	Benzenamine	62-53-3	U012
Antimony	Same	7440-36-0	
Antimony compounds, $\infty$ N.O.S. <sup>1</sup>			
Aramite	Sulfurous acid, 2-chloroethyl 2-[4-(1,1- dimethylethyl)phenoxy]-1-methylethyl ester	140-57-8	
Arsenic	Same	7440-38-2	
Arsenic compounds, N.O.S.			F
Arsenic acid	Arsenic acid H <sub>3</sub> AsO4	7778-39-4	P010
Arsenic pentoxide	Arsenic oxide As <sub>2</sub> O <sub>5</sub>	1303-28-2	P011
Arsenic trioxide	Arsenic oxide As <sub>2</sub> O <sub>3</sub>	1327-53-3	P012
Auramine	Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl	492-80-8	U014
Azaserine	L-Serine, diazoacetate (ester)	115-02-6	U015
Barban	Carbamic acid, (3-chlorophenyl) -, 4-chloro-2-butynyl ester	101-27-9	U280
Barium	Same	7440-39-3	
Barium compounds, N.O.S.			
Barium cyanide	Same	542-62-1	P013
Bendiocarb	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate	22781-23-3	U278
Bendiocarb phenol	1,3-Benzodioxol-4-ol, 2,2-dimethyl-,	22961-82-6	U364
Benomyl	<b>Carbamic</b> acid, [1- [(butylamino) carbonyl]- 1H- <b>ben</b> zimidazol-2-yl] -, methyl ester	17804-35-2	U271
Benz[c]acridine	Same	225-51-4	U016
Benz [a] anthracene	Same	56-55-3	U018

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Benzal chloride	Benzene, (dichloromethyl)-	98-87-3	U017
Benzene	Same	71-43-2	U019
Benzenearsonic acid	Arsonic acid, phenyl-	98-05-5	
Benzidine	[1,1'-Biphenyl]-4,4'-diamine	92-87-5	U021
Benzo(b)fluoranthene	Benz[e]acephenanthrylene	205-99-2	
<pre>3enzo[j]fluoranthene</pre>	Same	205-82-3	
Benzo(k)fluoranthene	Same	207-08-9	
Benzo(a]pyrene	Same	50-32-8	U022
p-Benzoquinone	2,5-Cyclohexadiene-1,4-dione	106-51-4	U197
Benzotrichloride	Benzene, (trichloromethyl)-	98-07-7	U023
Senzyl chloride	Benzene, (chloromethyl)-	100-44-7	P028
Beryllium powder	Same	7440-41-7	P015
Beryllium compounds, N.O.S. <sup>1</sup>			
Bis (pentamethylene)-thiuram tetrasulfide.	Piperidine, 1,1'-(tetrathiodicarbonothioyl)-bis-	120-54-7	<b>U40</b> 0
Bromoacetone	2-Propanone, 1-bromo-	598-31-2	P017
Bromoform	Methane, tribromo-	75-25-2	U225
4-Bromophenyl phenyl ether	Benzene, 1-bromo-4-phenoxy-	101-55-3	U030
Brucine	Strychnidin-10-one, 2,3-dimethoxy-	357-57-3	P018
Butyl benzyl phthalate	1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester	85-68-7	
Butylate	Carbamothioic acid, bis (2-methylpropyl)-, S-ethyl ester	2008-41-5	U392
Cacodylic acid	Arsinic acid, dimethyl-	75-60-5	U136
Cadmium	Same	7440-43-9	1
Cadmium compounds, N.O.S. <sup>1</sup>			
Calcium chromate	Chromic acid H <sub>2</sub> CrO4, calcium salt	13765-19-0	U032
Calcium cyanide	Calcium cyanide Ca(CN),	592-01-8	P021
Carbaryl	1-Naphthalenol, methylcarbamate	63-25-2	U279
Carbendazim	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester	10605-21-7	U372
Carbofuran	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate	1563-66-2	P127
Carbofuran phenol	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-	1563-38-8	U <b>3</b> 67
Carbon disulfi <b>de</b>	Same	75-15-0	P022
Carbon oxyfluoride	Carbonic difluoride	353-50-4	U033
Carbon tetrachloride	Methane, tetrachloro-	56-23-5	U211
Carbosulfan	Carbamic acid, [(dibutylamino) thio] methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester	55285-14-8	р189
Chloral	Acetaldehyde, trichloro-	75-87-6	U034
Chlorambucil	Benzenebutanoic acid, 4-[bis(2- chloroethyl)amino]-	305-03-3	U035

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		1	1
Chlordane	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8- octachloro-2,3,3a,4,7,7a-hexahydro-	57-74-9	U036
Chiordane (alpha and gamma isomers)			U036
Chlorinated benzenes, N.O.S.'			
Chlorinated ethane, N.O.S. <sup>1</sup>			
Chlorinated fluorocarbons, N.O.S.			
Chlorinated naphthalene, N.O.S. <sup>1</sup>			
Chlorinated phenol, N.O.S. <sup>1</sup>			
Chlornaphazin	Naphthalenamine, N,N'-bis(2-chloroethyl)-	494-03-1	U026
Chloroacetaldehyde	Acetaldehyde, chloro-	107-20-0	P023
Chloroaikyl ethers, 🐃 N.O.S.'			
p-Chlo <b>roaniline</b>	Benzenamine, 4-chloro-	106-47-8	P024
Chlorobenzene	Benzene, chloro-	108-90-7	U037
Chlorobenzilate	Benzeneacetic acid, 4-chloro-alpha-(4- chlorophenyl)-alpha-hydroxy-, ethyl ester	510-15-6	U0 <b>38</b>
p-Chloro-m-cresol	Phenol, 4-chioro-3-methyl-	59-50-7	U039
2-Chlor <b>oet</b> hyl vinyl ether	Ethene, (2-chloroethoxy)-	110-75-8	U042
Chloroform	Methane, trichloro-	67-66-3	U044
Chloromethyl methyl ether	Methane, chloromethoxy-	107-30-2	U046
beta-Chloronaphthalene	Naphthalene, 2-chloro-	91-58-7	U047
o-Chlorophenol	Phenol, 2-chloro-	95-57-8	U048
1-(o-Chlorophenyl)thiourea	Thiourea, (2-chlorophenyl)-	5344-82-1	P026
Chloroprene	1,3-Butadiene, 2-chloro-	126-99-8	
3-Chloropropionitrile	Propanenitrile, 3-chloro-	542-76-7	P027
Chromiums	Same	7440-47-3	
Chromium compounds, N.O.S.'			
Chrysene	Same	2 <b>18-</b> 01-9	U050
Citrus red No. 2	2-Naphthalenol, 1-[(2,5-dimethoxyphenyl)azo]-	6358-53-8	1
Coal tar creosote	Same	8007-45-2	
Copper cyanide	Copper cyanide CuCN	544-92-3	P029
Copper dimethyldithiocarbamate	Copper, bis(dimethylcarbamodithioato-S,S')-,	137-29-1	U393
Creosote	Same		U051
Cresol (Cresylic acid)	Phenol, methyl-	1319-77-3	U052
Crotonaldehyde	2-Butenal	4170-30-3	U053
m-Cumenyl methylcarbamate	Phenol, 3-(methylethyl)-, methyl carbamate	64-00-6	P202

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	yanides (soluble salts nd complexes) N.O.S.'			P030
C	yanogen	Ethanedinitrile	460-19-5	P031
C)	yanogen bromide	Cyanogen bromide (CN)Br	506-68-3	U246
C)	yanogen chloride	Cyanogen chloride (CN)Cl	506-77-4	P033
C	ycasin	beta-D-Glucopyranoside, (methyl-ONN- azoxy)metnyl	14901-08-7	
C۱	ycloate	Carbamothioic acid, cyclohexylethyl-, S-ethyl ester	1134-23-2	U386
	-Cyclohexyl-4,6- initrophenol	Phenol, 2-cyclohexyl-4,6-dinitro-	131-89-5	P034
C)	yclophospnamide	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2- chloroethyl)tetrahydro-, 2-oxide	50-18-0	U058
2,	,4-D	Acetic acid, (2,4-dichlorophenoxy)-	94-75-7	U240
2,	,4-D, saits, esters	· · ·		U240
Da	aunomycin	5,12-Naphthacenedione, 8-acetyl-10-[(3-amino- 2,3,6-trideoxy-alpha-L-lyxo-hexopyranosyl)oxy]- 7,8,9,10-tetrahydro-6,8,11-trihydroxy-1- methoxy-, (8S-cis)-	20830-81-3	U059
Da	azomet	2H-1,3,5-thiadiazine-2-thione, tetrahydro-3,5-dimethyl	533-74-4	U366
DD	00	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4- chloro-	72-54-8	U060
DD	θE	Benzene, 1,1'-(dichloroethenylidene)bis[4- chloro-	72-55-9	
DD	т	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4- chloro-	50-29-3	U061
Di	allate	Carbamothioic acid, bis(1-methylethyl)-, S- (2,3-dichloro-2-propenyl) ester	2303-16-4	U062
Ði	benz(a,h)acridine	Same	226-36-8	
Dii	benz(a,j]acridine	Same	224-42-0	
Di	benz[a,h]anthracene	Same	53-70-3	U063
7H	-Dibenzo(c,g]carbazole	Same	194-59-2	
Dil	benzo(a,e)pyrene	Naphtho(1,2,3,4-def]chrysene	192-65-4	
Dı	benzo[a,h]pyrene	Dibenzo[b,def]chrysene	189-64-0	
Dil	benzo(a,i)pyrene	Benzo(rst)pentaphene	189-55-9	U064
	2-Dibromo-3- loropropane	Propane, 1,2-dibromo-3-chloro-	96-12-8	U0 <b>66</b>
Dit	butyl phthalate	1,2-Benzenedicarboxylic acid, cibutyl ester	84-74-2	U069
o-0	Dichlorobenzene	Benzene, 1,2-dichloro-	<b>95</b> -50-1	U070
_ m-C	Dichlorobenzene	Benzene, 1,3-dichloro-	541-73-1	U071
p-0	Dichlorobenzene	Benzene, 1,4-dichloro-	106-46-7	U072
Dic	chlorobenzene, N.O.S.	Benzene, dichloro-	25321-22-6	
3,3	3'-Dichlorobenzidine	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-	91-94-1	U073
1,4	-Dichloro-2-butene	2-Butene, 1,4-dichloro-	<b>764-</b> 41-0	U074
Dic	hlorodifluoromethane	Methane, dichlorodifluoro-	75-71-8	U075

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	1	1	I
Dichloroethylene, N.O.S.	Dichloroethylene	25323-30-2	
1,1-Dichloroethylene	Ethene, 1,1-dichloro-	75-35-4	U078
1,2-Dichloroethylene	Ethene, 1,2-dichlrol-, (E)-	156-60-5	U079
Dichloroethyl ether	Ethane, 1,1'oxybis[2-chloro-	111-44-4	U025
Dichloroisopropyl ether	Propane, 2,2'-oxybis{2-chloro-	108-60-1	U027
Dichloromethoxy ethane	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-	111-91-1	U024
Dichloromethyl ether	Methane, oxybis{chloro-	542-88-1	P016
2,4-Dichlorophenol	Phenol, 2,4-dichloro-	120-83-2	U081
2,6-Dichlorophenol	Phenol, 2,6-dichioro-	87-65-0	U082
Dichlorophenylarsine	Arsonous dichloride, phenyl-	696-28-6	P036
Dichloropropane, N.O.S.	Propane, dichloro-	26638-19-7	
Dichloropropanol, N.O.S.	Propanol, dichloro-	26545-73-3	
Dichloropropene, N.O.S. <sup>1</sup>	1-Propene, dichloro-	26952-23-8	
1,3-Dichloropropene	1-Propene, 1,3-dichloro-	542-75-6	U084
Dieldrin	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)-	60-57-1	P037
1,2:3,4-Diepoxybutane	2,2'-Bioxirane	1464-53-5	U085
Diethylarsine	Arsine, diethyl-	692-42-2	P038
Diethylene glycol, dicarbamate	Ethanol, 2,2′-oxybis-, dicarbamate	5952-26-1	U <b>3</b> 95
1,4-Diethyleneoxide	1,4-Dioxane	123-91-1	U108
Diethylhexyl phthalate	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	117-81-7	U028
N,N'-Diethylhydrazine	Hydrazine, 1,2-diethyl-	1615-80-1	U086
0,0-Diethyl S-methyl dithiophosphate	Phosphorodithioic acid, 0,0-diethyl S-methyl ester	3288-58-2	U087
Diethyl-p-nitrophenyl phosphate	Phosphoric acid, diethyl 4-nitrophenyl ester	.311-45-5	P041
Diethyl phthaiate	1,2-Benzenedicarboxylic acid, diethyl ester	84-66-2	U088
0,0-Diethyl O-pyrazinyl phosphoro- thioate	Phosphorothioic acid, 0,0-diethyl <mark>O-pyraziny</mark> l ester	297-97-2	P040
Diethylstilbesterol	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-	56-53-1	U089
Dihydrosafrole	1,3-Benzodioxole, 5-propyl-	94-58-6	U090
Diisopropylfluorophosphate (DFP)	Phosphorofluoridic acid, bis(1-methylethyl) ester	55-91-4	P043
Dimethoate	Phosphorodithioic acid, 0,0-dimethyl S-[2- (methylamino)-2-oxoethyl] ester	60-51-5	P044
3,3'-Dimethoxybenzidine	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-	119-90-4	U091
p-Dimethylaminoazobenzene	Benzenamine, N,N-dimethyl-4-(phenylazo)-	60-11-7	U093
7,12- Dimethylbenz[a]anthracene	Benz[a]anthracene, 7,12-dimethyi-	57-97-6	U094
3,3'-Dimethylbenzidine	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-	119-93-7	U095

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Dimethylcarbamoyl chloride	Carbamic chloride, dimethyl-	79-44-7	U097
1,1-Dimethylhydrazine	Hydrazine, 1,1-dimethyl-	57-14-7	U098
1,2-Dimethylhydrazine	Hydrazine, 1,2-dimethyl-	540-73-8	U099
alpha, s.pha-		122-09-8	P046
Dimetrvlphenethylamine	Benzeneethanamine, alpha,alpha-dimethyl-	122-09-0	P040
2,4-Direthylphenol	Phenol, 2,4-dimethyl-	105-67-9	U101
Dimetry: phthalate	1,2-Benzenedicarboxylic acid, dimethyl ester	131-11-3	U102
Dimethvi sulfate	Sulfuric acid, dimethyl ester	77-78-1	U103
Dimetian	Carbamic acid, dimethyl-, 1- [(dimethylamino) carbonyl]-5-methyl-1H-pyrazol-3-yl ester	644-64-4	P191
Dinitripenzene, N.O.S. <sup>1</sup>	Benzene, dinitro-	25154-54-5	
4,6-Dinitro-o-cresol	Phenol, 2-methyl-4,6-dinitro-	534-52-1	P047
4,6-Dinitro-o-cresol salts			P047
2,4-Dinitrophenol	Phenol, 2,4-dinitro-	51-28-5	P048
2,4-Dinitrotoluene	Benzene, 1-methyl-2,4-dinitro-	121-14-2	U105
2,6-Dinitrotoluene	Benzene, 2-methyl-1,3-dinitro-	606-20-2	U106
Dinoseo	Phenol, 2-(1-methylpropyl)-4,6-dinitro-	88-85-7	P020
Di-n-octyl phthalate	1,2-Benzenedicarboxylic acid, dioctyl ester	117-84-0	U017
Diphenviamine	Benzenamine, N-phenyl-	122-39-4	
1,2-Diphenylhydrazine	Hydrazine, 1,2-diphenyl-	122-66-7	U109
Di-n-propylnitrosamine	1-Propanamine, N-nitroso-N-propyl-	621-64-7	U111
Disulfiram	Thioperoxydicarbonic diamide, tetraethyl	97-77-8	U403
Disulfaton	Phosphorodithioic acid, 0,0-diethyl S-[2- (ethylthio)ethyl] ester	298-04-4	P039
Dithicciuret	Thioimidodicarbonic diamide [(H2N)C(S)]2NH	541-53-7	P04 <b>9</b>
Endosu, fan	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a- hexahydro-, 3-oxide	115-29-7	P050
Endothail	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid	145-73-3	P088
Endrin	2,7:3,6-Dimethanonaphth [2,3-b] oxirene, ° 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a- octahydro-,(1aalpha,2beta,2abeta,3alpha,6alpha, 6abeta,7beta,7aalpha)-	72-20-8	P051
Endrin metabolites			P051
Epichteronydnin	Oxirane, (chloromethyl)-	106-89-8	U041
Epineonrine	1,2-Benzenediol, 4-[1-hydroxy-2- (methylamino)ethyl]-, (R)-	51-43-4	P042
EPTC	Carbamothioic acid, dipropyl-, S-ethyl ester	759-94-4	U390
Ethyl carbamate (urethane)	Carbamic acid, ethyl ester	51-79-6	U238
Ethyl cyanide	Propanenitrile	107-12-0	P101
Ethylenebisdithiocarbamic acid	Carbamodithioic acid, 1,2-ethanediylbis-	111-54-6	U114
Ethylenepisdithiocarbamic acid, salts and esters			U114

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Ethylene dibromide	Ethane, 1,2-dibromo-	106-93-4	U067
Ethylene dichloride	Ethane, 1,2-dichloro-	107-06-2	U077
Ethylene glycol monoethyl ether	Ethanol, 2-ethoxy-	110-80-5	U <b>3</b> 59
Ethyleneimine	Aziridine	151-56-4	P054
Ethylene oxide	Oxirane	75-21-8	U115
Ethylenethiourea	2-Imidazolidinethione	96-45-7	U116
Ethylidene dichloride	Ethane, 1,1-dichloro-	75-34-3	U076
Ethyl methacrylate	2-Propenoic acid, 2-methyl-, ethyl ester	97-63-2	U118
Ethyl methanesulfonate	Methanesulfonic acid, ethyl ester	62-50-0	U119
Ethyl Ziram	Zinc, bis(diethylcarbamodithioato-S,S')-	14324-55-1	U407
Famphur	Phosphorothioic acid, 0-[4- [(dimethylamino)sulfonyl]phenyl] 0,0-dimethyl ester	52-85-7	P097
Ferbam	Iron, tris(dimethylcarbamodithioat-S,S')-,	14484-64-1	U396
Fluoranthene	Same	206-44-0	U120
Fluorine	Same	7782-41-4	P056
Fluoroacetamide	Acetamide, 2-fluoro-	640-19-7	P057
Fluoroacetic acid, sodium salt	Acetic acid, fluoro-, sodium salt	62-74-8	P058
Formaldehyde	Same	50-00-0	U122
Formetanate hydrochloride	Methanimidamide, N,N-dimethyl-N'-[3-[[(methylamino) carbonyl]oxy]phenyl]-, monohydrochloride	23422-53-9	P198
Formic acid	Same	64-18-6	U123
Formparanate	Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-[[(methylamino) carbonyl]oxy]phenyl]	17702-57-7	P197
Glycidylaldehyde	Oxiranecarboxyaldehyde	765-34-4	U126
Halomethanes, N.O.S.'			
Heptachlor	4,7-Methano-1H-indene, 1,4,5,6,7,8,8- heptachloro-3a,4,7,7a-tetrahydro-	76-44-8	P059
Heptachlor epoxide	2,5-Methano-2H-indeno[1,2-b]oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexa- hydro-, (1aalpha,1bbeta,2alpha,5alpha, 5abeta,6beta,6aalpha)-	1024-57-3	
Heptachlor epoxide (alpha, beta, and gamma isomers)			
Heptachlorodibenzofurans.			1
Heptachlorodibenzo-p- dioxins			
Hexachlorobenzene	Benzene, hexachloro-	118-74-1	U127
Hexachlorobutadiene	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	87-68-3	U128
Hexachlorocyclopentadiene	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	77-47-4	U130
Hexachlorodibenzo-p- dioxins			

Hexachlorodibenzofurans

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Hexachloroethane	Ethane, hexachloro-	67-72-1	U131
Hexachlorophene	Phenol, 2,2'-methylenebis[3,4,6-trichloro-	70-30-4	U132
Hexachloropropene	1-Propene, 1,1,2,3,3,3-hexachloro-	1888-71-7	U243
Hexaethyl tetraphosphate	Tetraphosphoric acid, hexaethyl ester	757-58-4	P062
Hydrazine	Same	302-01-2	U133
Hydrogen cyanide	Hydrocyanic acid	74-90-8	P063
Hydrogen fluoride	Hydrofluoric acid	7664-39-3	U134
Hydrogen sulfide	Hydrogen sulfide H <sub>z</sub> S	7783-06-4	U135
Indeno[1,2,3-cd]pyrene	Same	193-39-5	U137
3-Iodo-2-propynyl n-butylcarbamate	Carbamic acid, butyl-, 3-iodo-2-propynyl ester	55406-53-6	U375
Isobutyl alcohol	1-Propanol, 2-methyl-	78-83-1	U140
Isodrin	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10- hexachloro-1,4,4a,5,8,8a-hexahydro- ,(1alpha,4alpha,4abeta,5beta,8beta,-8abeta) -	465-73-6	P060
Isolan	Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester	119-38-0	P192
Isosafrole	1,3-Benzodioxole, 5-(1-propenyl)-	120-58-1	U141
Kepone	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-	143-50-0	U142
Lasiocarpine	2-Butenoic acid, 2-methyl-,7-[[2,3-dihydroxy-2- (1-methoxyethyl)-3-methyl-1 - oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H- pyrrolizin-1-yl ester, [1S- [1alpha(Z),7(2S*,3R*),7aalpha]]-	303-34-1	U143
Lead	Same	7439-92-1	
Lead compounds, N.O.S.			
Lead acetate	Acetic acid, lead(2+) salt	301-04-2	U144
Lead phosphate	Phosphoric acid, lead(2+) salt (2:3)	7446-27-7	U145
Lead subacetate	Lead, bis(acetato-0)tetrahydroxytri-	1335-32-6	U146
Lindane	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)-	58-89-9	U129
Maleic anhydride	2,5-Furandione	108-31-6	U147
Maleic hydrazide	3,6-Pyridazinedione, 1,2-dihydro-	123-33-1	U148
Malononitrile	Propanedinitrile	109-77-3	U149
Manganese dimethyldithiocarbamate	Manganese, bis(dimethylcarbamodithioato-S,S')-,	15339-36-3	P196
Melphalan	L-Phenylalanine, 4-[bis(2-chloroethyl)aminol]-	148-82-3	U150
Mercury	Same	7439-97-6	U151
Mercury compounds, N.O.S. <sup>1</sup>			
Mercury fulminate	Fulminic acid, mercury(2+) salt	628-86-4	P065
Metam Sodium	Carbamodithioic acid, methyl-, monosodium salt	137-42-8	U384
Methacrylonitrile	2-Propenenitrile, 2-methyl-	126-98-7	U152
Methapyrilene	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl- N'-(2-thienylmethyl)-	91-80-5	U155

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Methiocarb	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate	2032-65-7	P199
Methomyl	Ethanimidothioic acid, N- [[(methylamino)carbonyl]oxy]-, methyl ester	16752-77-5	P066
Methoxychlor	<pre>Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4- methoxy-</pre>	72-43-5	U247
Methyl bromide	Methane, bromo-	74-83-9	U029
Methyl chloride	Methane, chloro-	74-87-3	U045
Methyl chlorocarbonate	Carbonochloridic acid, methyl ester	79-22-1	U156
Methyl chloroform	Ethane, 1,1,1-trichloro-	71-55-6	U226
3-Methylcholanthrene	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	56-49-5	U157
4,4'-Methylenebis (2- chloroaniline)	Benzenamine, 4,4'-methylenebis[2-chloro-	101-14-4	U158
Methylene bromide	Methane, dibromo-	74-95-3	U068
Methylene chloride ,	Methane, dichloro-	75-09-2	U080
Methyl ethyl ketone (MEK)	2-Butanone	78-93-3	U159
Methyl ethyl ketone peroxide	2-Butanone, peroxide	1338-23-4	U160
Methyl hydrazine	Hydrazine, methyl-	60-34-4	P068
Methyl iodide	Methane, iodo-	74-88-4	U138
Methyl isocyanate	Methane, isocyanato-	624-83-9	P064
2-Methyllactonitrile	Propanenitrile, 2-hydroxy-2-methyl-	75-86-5	P069
Methyl methacrylate	2-Propenoic acid, 2-methyl-, methyl ester	80-62-6	U162
Methyl methanesulfonate	Methanesulfonic acid, methyl ester	66-27-3	
Methyl parathion	Phosphorothioic acid, 0,0-dimethyl 0-(4- nitrophenyl) ester	298-00-0	P071
Methylthiouracil	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2- thioxo-	56-04-2	U164
Metolcarb	Carbamic acid, methyl-, 3-methylphenyl ester	1129-41-5	P190
Mexacarbate	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester)	315-18-4	P128
Mitomycin C	Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7- dione, 6-amino-8-[[(aminocarbonyl)oxy]methyl]- 1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5- methyl-, [1aS-(1aalpha,8beta,8aalpha,8balpha)]	50-07-7	U010
MNNG	Guanidine, N-methyl-N'-nitro-N-nitroso-	70-25-7	U163
Molinate	1H-Azepine-1-carbothioic acid, hexahydro-, S-ethyl ester	2212-67-1	U365
Mustard gas	Ethane, 1,1'-thiobis(2-chloro-	505-60-2	
Naphthalene	Same	91-20-3	U165
1,4-Naphthoquinone	1,4-Naph thal enedione	130-15-4	U166
alpha-Naphthylamine	1-Naphthalenamine	134-32-7	U167
beta-Naphthylamine	2-Naphthalenamine	91-59-8	U168
alpha-Naphthylthiourea	Thiourea, 1-naphthalenyl-	86-88-4	P072
Nickel	Same	7440-02-0	
Nickel compounds, N.O.S. <sup>1</sup>	-		ł

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Nickel carbonyl	Nickel carbonyl Ni(CO), (T-4)-	13463-39-3	P073
Nickel cyanide	Nickel cyanide Ni(CN) <sub>2</sub>	557-19-7	P074
Nicotine	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-	54-11-5	P0 <b>75</b>
Nicotine salts			P075
Nîtric oxide	Nitrogen oxide NO	10102-43-9	P076
p-Nitroaniline	Benzenamine, 4-nitro-	100-01-6	P077
Nitrobenzene	Benzene, nitro-	98-95-3	U169
Nitrogen dioxide	Nitrogen oxide NO <sub>2</sub>	10102-44-0	P078
Nitrogen mustard	Ethanamine, 2-chloro-N-(2-chloroethyl)-N- methyl-	51-75-2	
Nitrogen mustard, hydro- chloride sait			
Nitrogen mustard N-oxide	Ethanamine, 2-chloro-N-(2-chloroethyl)-N- methyl-, N-oxide	126-85-2	
Nitrogen mustard, N-oxide, hydrochloride salt			
Nitroglycerin	1,2,3-Propanetriol, trinitrate	55-63-0	P081
p-Nîtro <b>pheno</b> l	Phenol, 4-nitro-	100-02-7	U170
2-Nitropropane	Propane, 2-nitro-	79-46-9	U171
Nitrosamines, N.O.S. <sup>1</sup>		35576-91-1D	]
N-Nitrosodi-n-butylamine	1-Butanamine, N-butyl-N-nitroso-	924-16-3	U172
N-Nitrosodiethanolamine	Ethanol, 2,2'-(nitrosoimino)bis-	1116-54-7	U173
N-Nitrosodiethylamine	Ethanamine, N-ethyl-N-nitroso-	55-18-5	U174
N-Nitrosodimethylamine	Methanamine, N-methyl-N-nitroso-	62-75-9	P082
N-Nitroso-N-ethylurea	Urea, N-ethyl-N-nitroso-	759-73-9	U176
N-Nitrosomethylethylamine	Ethanamine, N-methyl-N-nitroso-	10595-95-6	
N-Nitroso-N-methylurea	Urea, N-methyl-N-nitroso-	684-93-5	U177
N-Nitroso-N-methylurethane	Carbamic acid, methylnitroso-, ethyl ester	615-53-2	U178
N-Nitrosomethylvinylamine	Vinylamine, N-methyl-N-nitroso-	4549-40-0	<sup>7</sup> P084
N-Nitrosomorpholine	Morpholine, 4-nitroso-	59-89-2	
N-Nitrosonornicotine	Pyridine, 3-(1-nitroso-2-pyrrolidinyl)-, (S)-	16543-55-8	1
N-Nitrosopiperidine	Piperidine, 1-nitroso-	100-75-4	U179
N-Nitrosopyrrolidine	Pyrrolidine, 1-nitroso-	930-55-2	U180
N-Nitrososarcosine	Glycine, N-methyl-N-nitroso-	13256-22-9	
5-Nitro-o-toluidine	Benzenamine, 2-methyl-5-nitro-	99-55-8	U181
Octamethylpyrophos- phoramide	Diphosphoramide, octamethyl-	152-16-9	P085
Osmíum tetroxide	Osmium oxide OsO,, (T-4)-	20816-12-0	P087
Oxamyl	Ethanimidothioc acid, 2-(dimethylamino)-N-[[(methylamino)carbonyl]oxy ]-2-oxo-, methyl ester	23135-22-0	P194
Paraldehyde	1,3,5-Trioxane, 2,4,6-trimethyl-	123-63-7	U182
Parathion	Phosphorothioic acid, 0,0-diethyl 0-(4-	56-38-2	P089
	nitrophenyi) ester	50 50 L	1 1007

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Pebulate		1114-71-2	U391
Pentachlorobenzene	Carbamothioic acid, butylethyl-, S-propyl ester	608-93-5	U183
· · · · · · · · · · · · · · · · · · ·	Benzene, pentachloro-	000-93-3	0105
Pentachlorodibenzo-p- dioxins			-
Pentachlor <b>odibenzofurans</b>			
Pentachloroethane	Ethane, pentachloro-	76-01-7	U184
Pentachloronitrobenzene (PCNB)	Benzene, pentachloronitro-	82-68-8	U185
Pentachlorophenol	Phenol, pentachloro-	87-86-5	See F027
Phenacetin	Acetamide, N-(4-ethoxyphenyl)-	62-44-2	U187
Phenol	Same	108-95-2	U188
Phenylenediamine	Benzenediamine	25265-76-3	
Phenylmercury acetate	Mercury, (acetato-0)phenyl-	62-38-4	P0 <b>92</b>
Phenylthiourea	Thiourea, phenyl-	103-85-5	P093
Phosgene	Carbonic dichloride	75-44-5	P0 <b>95</b>
Phosphine	Same	7803-51-2	P096
Phorate	Phosphorodithioic acid, 0,0-diethyl S- [(ethylthio)methyl] ester	<b>29</b> 8-02-2	P094
Phthalic acid esters, N.O.S.'			
Phthalic anhydride	1,3-Isobenzofurandione	85-44-9	U190
Physostigmine	Pyrrolo[2,3-b]indol-5-01, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-	57-47-6	P204
Physostigmine salicylate	Benzoic acid, 2-hydroxy-, compd. with (3aS-cis) -1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrol o [2,3-b]indol-5-yl methylcarbamate ester (1:1).	57-64-7	P188
2-Picoline	Pyridine, 2-methyl-	109-06-8	U191
Polychlorinated biphenyls, N.O.S.			
Potassium cyanide	Potassium cyanide K(CN)	151-50-8	P098
Potassium dimethyldithiocarbamate	Carbamodithioc acid, dimethyl, potassium salt	128-03-0	U <b>3</b> 83
Potassium hyroxymethyl-n-methyl-dith iocarbamate.	Carbamodithioc acid, (hydroxymethyl)methyl-, monopotassium salt	51026-28-9	U378
Potassium n-methyldithiocarbamate	Carbamodithioc acid, methyl-monopotassium salt	137-41-7	U377
Potašsium pentachlorophenate	Pentachlorophenol, potassium salt	7778736	None
Potassium silver cyanide	Argentate(1-), bis(cyano-C)-, potassium	506-61-6	P0 <b>99</b>
Promecarb	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate	2631-37-0	P201
Pronamide	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2- propynyl)-	23950-58-5	U192
1,3-Propane sultone	1,2-Oxathiolane, 2,2-dioxide	1120-71-4	U193 ·
n-Propylamine	1-Propanamine	107-10-8	U194

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Propargy: alcohol	2-Propyn-1-ol	107-19-7	P102
Propham	Carbamic acid, phenyl-, 1-methylethyl ester	122-42-9	U373
Propoxur	Phenol, 2-(1-methylethoxy)-, methylcarbamate	114-26-1	U411
Propylene dichloride	Propane, 1,2-dichloro-	78-87-5	U083
1,2-Propytenimine	Aziridine, 2-methyl-	75-55-8	P067
Propylthiouracil	4(1H)-Pyrimidinone, 2,3-dihydro-6-propyl-2- thioxo-	51-52-5	
Prosulfocard	Carpamothioic acid, dipropyl-, S-(phenylmethyl) ester	52888-80-9	U387
Pyridine	Same	110-86-1	U196
Reserpine	Yohimban-16-carboxylic acid, 11,17-dimethoxy- 18-[(3,4,5-trimethoxybenzoyl)oxy]-smethyl ester, (3beta,16beta,17alpha,18beta,20alpha)-	50-55-5	U200
Resorcinol	1,3-Benzenediol	108-46-3	U201
Saccharin	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide	81-07-2	U202
Saccharin salts			U202
Safrole	1,3-Benzodioxole, 5-(2-propenyl)-	94-59-7	U203
Selenium	Same	7782-49-2	
Selenium compounds, N.O.S. <sup>1</sup>			
Selenium dioxide	Selenious acid	7783-00-8	U204
Selenium sutfide	Selenium sulfide SeS2	7488-56-4	U205
Selenium, tetrakis (dimethyı-dithiocarbamate.	Carbamodithioic acid, dimethyl-, tetraanhydrosulfide with orthothioselenious acid.	144-34-3	U376
Selenourea	Same	630-10-4	P103
Silver	Same	7440-22-4	
Silver compounds, N.O.S.			
Silver cvanide	Silver cyanide Ag(CN)	506-64-9	P104
Silvex (2,+,5-TP)	Propanoic acid, 2-(2,4,5-trichlerophenoxy)-	93-72-1	See F027
Sodium cvanide	Sodium cyanide Na(CN)	143-33-9	P106
Sodium dibutylaithiocarbamate	Carbamodithioic acid, dibutyl, sodium salt	136-30-1	U379
Sodium diethylaitriocarbamate	Carbamodithioic acid, diethyl-, sodium salt	148-18-5	U381
Sodium dimethylaithiocarbamate	Carbamodithioic acid, dimethyl-, sodium salt	128-04-1	U <b>38</b> 2
Sodium pentachlorophenate	Pentachlorophenol, sodium salt	131522	None
Streptozatocin	D-Glucose, 2-deoxy-2- [[(methylnitrosoamino)carbonyl]amino]-	18883-66-4	U206
Strychnine	Strychnidin-10-one	57-24-9	P108
Strychnine salts			P108
Sulfallate	C <b>arbamod</b> ithioic acid, diethyl-, <b>2</b> -chloro-2-propenyl ester	95-06-7	U277
TCDD	Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro-	1746-01-6	1

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Tetrabutylthiuram disulfide	Thioperoxydicarbonic diamide, tetrabutyl	1634-02-2	U402
Tetrabutylthiuram monosulfide	Bis (dimethylthiocarbamoyl) sulfide	97-74-5	U401
1,2,4,5-Tetrachlorobenzene	Benzene, 1,2,4,5-tetrachloro-	95-94-3	U207
Tetrachlorodibenzo-p- dioxins			
Tetrachlorodibenzofurans			
Tetrachioroethane, N.O.S.	Ethane, tetrachloro-, N.O.S.	25322-20-7	
1,1,1,2-Tetrachloroethane	Ethane, 1,1,1,2-tetrachloro-	630-20-6	U208
1,1,2,2-Tetrachloroethane	Ethane, 1,1,2,2-tetrachloro-	79-34-5	U209
Tetrachloroethylene	Ethene, tetrachloro-	127-18-4	U210
2,3,4,6-Tetrachlorophenol	Phenol, 2,3,4,6-tetrachloro-	58-90-2	See F027
2,3,4,6-tetrachlorophenol, potassium salt	same	53535276	None
2,3,4,6-tetrachlorophenol, sodium salt	same	25567559	None
Tetraethyldithiopyrophos- phate	Thiodiphosphoric acid, tetraethyl ester	3689-24-5	P109
Tetraethyl lead	Plumbane, tetraethyl-	78-00-2	P110
Tetraethyl pyrophosphate	Diphosphoric acid, tetraethyl ester	107-49-3	P111
Tetranitromethane	Methane, tetranitro-	509-14-8	P112
Thallium	Same	7440-28-0	
Thallium compounds, N.O.S. <sup>1</sup>			
Thallic oxide	Thallium oxide Tl <sub>2</sub> O <sub>2</sub>	1314-32-5	P113
Thallium(I) acetate	Acetic acid, thallium(1+) salt	563-68-8	U214
Thallium(I) carbonate	Carbonic acid, dithallium(1+) salt	6533-73-9	U215
Thallium(I) chloride	Thallium chloride TLCL	7791-12-0	U216
Thallium(I) nitrate	Nitric acid, thallium(1+) salt	10102-45-1	U217
Thallium selenite	Selenious acid, dithallium(1+) salt	12039-52-0	P114
Thallium(1) sulfate	Sulfuric acid, dithallium(1+) salt	7446-18-6	P115
Thioacetamide	Ethanethioamide	62-55-5	U218
Thiodicarb	Ethanimidothioic acid, N,N'-[thiobis [(methylimino) carbonyloxy]] bis-, dimethyl ester.	59669-26-0	U410
Thiofanox	2-Butanone, 3,3-dimethyl-1-(methylthio)-, 0- [(methylamino)carbonyl] oxime	39196-18-4	P045
Thiomethanol	Methanethiol	74-93-1	U153
Thiophanate-methyl	Carbamic acid, [1,2-phyenylenebis (iminocarbonothioyl)] bis-, dimethyl ester	23564-05-8	U409
Thiophenol	Benzenethiol	108-98-5	P014
Thiosemicarbazide	Hydrazinecarbothioamide	79-19-6	P116
Thiourea	Same	62-56-6	U219



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Thiram	Thioperoxydicarbonic diamide [(H,N)C(S)] <sub>2</sub> S <sub>2</sub> , tetramethyl-	137-26-8	U244
Tirpate	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[(methylamino) carbonyl] oxime.	26419-73-8	P185
Toluene	Benzene, methyl-	108-88-3	U220
Toluenediamine	Benzenediamine, ar-methyl-	25376-45-8	U221
Toluene-2,4-diamine	1,3-Benzenediamine, 4-methyl-	95-80-7	
Toluene-2,6-diamine	1,3-Benzenediamine, 2-methyl-	823-40-5	
Toluene-3,4-diamine	1,2-Benzenediamine, 4-methyl-	496-72-0	
Toluene diisocyanate	Benzene, 1,3-diisocyanatomethyl-	26471-62-5	U22 <b>3</b>
o-Toluidine	Benzenamine, 2-methyl-	95-53-4	U328
o-Toluidine hydrochloride	Benzenamine, 2-methyl-, hydrochloride	636-21-5	U222
p-Toluidi <b>ne</b>	Benzenamine, 4-methyl-	106-49-0	U353
Toxaphene	Same	8001-35-2	P123
Triallate	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester	2303-17-5	U389
2,4,6-Tribromophenol	Tribromophenol, 2,4,6-	118-79-6	U408
1,2,4-Trichlorobenzene	Benzene, 1,2,4-trichloro-	120-82-1	
1,1,2-Trichloroethane	Ethane, 1,1,2-trichloro-	79-00-5	U227
Trichloroethylene	Ethene, trichloro-	79-01-6	U228
Trichloromethanethiol	Methanethiol, trichloro-	75-70-7	P118
Trichloromonofluoromethane	Methane, trichlorofluoro-	75-69-4	U121
2,4,5-Trichlorophenol	Phenol, 2,4,5-trichloro-	95-95-4	See F027
2,4,6-Trichlorophenol	Phenol, 2,4,6-trichloro-	88-06-2	See F027
2,4,5-T	Acetic acid, (2,4,5-trichlorophenoxy)-	93-76-5	See F027
Trichloropropane, N.O.S.		25735-29-9	
1,2,3-Trichloropropane	Propane, 1,2,3-trichloro-	96-18-4	
Triethylamine	Ethanamine, N,N-diethyl-	121-44-8	U404
0,0,0-Triethyl phosphorothioate	Phosphorothioic acid, 0,0,0-triethyl ester	126-68-1	
1,3,5-Trinitrobenzene	Benzene, 1,3,5-trinitro-	99-35-4	U234
Tris(1- aziridinyl)phosphine sulfide	Aziridine, 1,1′,1″-phosphinothioylidynetris-	52-24-4	
Tris(2,3-dibromopropyl) phosphate	1-Propanol, 2,3-dibromo-, phosphate (3:1)	126-72-7	U2 <b>3</b> 5
Trypan blue	2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'- dimethyl[1,1'-biphenyl]-4,4'diyl)bis(azo)]- bis[5-amino-4-hydroxy-, tetrasodium salt	72-57-1	U2 <b>3</b> 6
Uracil mustard	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2- chloroethyl)amino]-	66-75-1	U237
Vanadium pentoxide	Vanadium oxide V <sub>2</sub> O <sub>5</sub>	1314-62-1	P120
Vernolate	Carbamothioc acid, dipropyl-, S-propyl ester	1929-77-7	U385
Vinyl chloride	Ethene, chloro-	75-01-4	U043

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Warfarin .	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1- phenylbutyl)-, when present at concentrations less than 0.3%	81-81-2	U248
Warfarin	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1- phenylbutyl)-, when present at concentrations greater than 0.3%	81-81-2	P001
Warfarin salts, when present at concentrations less than 0.3%			U248
Warfarin salts, when present at concentrations greater than 0.3%			P001
Zinc cyanide	Zinc cyanide Zn(CN),	557-21-1	P121
Zinc phosphide	Zinc phosphide $Zn_3P_2$ , when present at concentrations greater than 10%	1314-84-7	P122
Zinc phosphide	Zinc phosphide $Zn_3P_2$ , when present at concentrations of 10% or less	1314-84-7	U249
Zirama	ZInc, bis(dimethylcarbamodithioato-S,S')-, (T-4)-	137-30-4	P205

<sup>1</sup>The abbreviation N.O.S. (not otherwise specified) signifies those members of the general class not specifically listed by name in Appendix II.

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### CHAPTER 42 STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE

#### 4200 GENERAL

- 4200.1 These regulations establish standards for generators of hazardous waste.
- 4200.2 Generators who qualify for the reduced requirements of §4102 are subject to the Chapter 42 requirements. Sections 4102.3 and 4102.4 shall be used to determine the quantity of hazardous waste generated per month.
- 4200.3 A generator who treats, stores, or disposes of hazardous waste on-site shall only comply with the following sections of this chapter with respect to that waste: §4200.10 for determining whether he or she has a hazardous waste, §§4200.11 through 4200.13 for obtaining an EPA identification number, §§4202.6 through 4202.8 for accumulation of hazardous waste, §§4203.3 and 4203.4 for recordkeeping, §4203.10 for additional reporting, and, if applicable, §4206.1 for farmers.
- 4200.4 Any person who exports or imports hazardous waste, except "District-only" waste, subject to the manifesting requirements of Chapter 42, or subject to the universal waste management standards of Chapter 48, or subject to State requirements analogous to Chapter 48, to or from the countries listed in §4204.11(b) for recovery, shall comply with §4207.
- 4200.5 Any person who imports hazardous waste into the United States shall comply with the standards applicable to generators established in this chapter.
- 4200.6 A farmer who generates waste pesticides that are hazardous waste and who complies with all of the requirements of §4206.1 is not required to comply with other standards in this chapter or Chapters 44, 46, or 50 with respect to the pesticides.
- 4200.7 A person who generates a hazardous waste as defined by Chapter 41 is subject to the compliance requirements and penalties prescribed in RCRA §3008 or §12 of the Hazardous Waste Management Act (D.C. Code §6-711) if he or she does not comply with the requirements of this chapter.
- 4200.8 An owner or operator who initiates a shipment of hazardous waste from a treatment, storage, or disposal facility shall comply with the generator standards established in this chapter.
- 4200.9 Persons responding to an explosives or munitions emergency in accordance with §§4400.7(h)(1) or 4400.10, and §§4600.8(i)(4) or 4600.10 are not required to comply with the standards of this chapter.
- 4200.10 A person who generates a solid waste, as defined in §§4100:4 through 4100.11, shall determine if that waste is a hazardous waste using the following method:
  - (a) The generator shall first determine if the waste is excluded from regulation under §§4101.1 through 4101.9;

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- (b) The generator shall then determine if the waste is listed as a hazardous waste in §§4109 through 4111;
- (c) For purposes of compliance with Chapter 50, or if the waste is not listed in §§4109 through 4111, the generator shall then determine whether the waste is identified in §4108 by either:
  - (1) Testing the waste according to the methods set forth in §4108, or according to an equivalent method approved by the Director under §§4001.6 through 4001.9; or
  - (2) Applying knowledge of the hazard characteristic of the waste in light of the materials or the processes used; and
- (d) If the waste is determined to be hazardous, the generator shall refer to Chapters 41, 44, 45, 48, and 50 for possible exclusions or restrictions pertaining to management of the specific waste.
- 4200.11 A generator shall not treat, store. dispose of, transport, or offer for transportation, hazardous waste without having received an EPA identification number from the Director.
- 4200.12 A generator who has not received an EPA identification number may obtain one by applying to the Director using EPA form 8700-12. Upon receiving the request the Director shall assign an EPA identification number to the generator.
- 4200.13 A generator shall not offer his or her hazardous waste to transporters or to treatment, storage, or disposal facilities that have not received an EPA identification number.
- 4200.14 The Director may, at his or her discretion, grant a provisional identification number to any generator who treats, stores, disposes of, transports or offers for transportation, hazardous waste no more than one (1) time in a calendar year.
- 4200.15 Generators who hold a provisional identification number shall be subject to the following requirements:
  - (a) Section 4201 pertaining to manifests:
  - (b) Section 4202 Pre-Transport Requirements;
  - (c) Recordkeeping and Reporting Requirements of §§4203(except §4203.5);
  - (d) Requirements for storage, treatment and disposal of hazardous waste; and
  - (e) Requirements for the import and export of hazardous waste at §§4204, 4205, and 4207.
- 4200.16 Generators of hazardous waste shall obtain a permit under the requirements of §4208.

#### 4201 THE MANIFEST

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- 4201.1 A generator who transports, or offers for transportation, hazardous wuste for offsite treatment, storage, or disposal shall prepare a Manifest (OMB control number 2050-0039 on EPA form 8700-22, and, if necessary, EPA form 8700-22A) according to the instructions included in the appendix to 40 CFR Part 262, as incorporated by reference in §4209.1.
- 4201.2 A generator shall designate on the manifest one (1) facility that is permitted to handle the waste described on the manifest.
- 4201.3 A generator may also designate on the manifest one (1) alternate facility that is permitted to handle his or her waste in the event an emergency prevents delivery of the waste to the primary designated facility.
- 4201.4 If the transporter is unable to deliver the hazardous waste to the designated facility or the alternate facility, the generator shall either designate another facility or instruct the transporter to return the waste.
- 4201.5 The requirements of §§4201 and 4202.4 do not apply to the transport of hazardous wastes on a public or private right-of-way within or along the border of contiguous property under the control of the same person, even if such contiguous property is divided by a public or private right-of-way. Notwithstanding §4300.1, the generator or transporter shall comply with the requirements for transporters set forth in §§4302.1 through 4302.5 in the event of a discharge of hazardous waste on a public or private right-of-way.
- 4201.6 If the State to which the shipment is manifested (consignment State) supplies the manifest and requires its use, then the generator shall use that manifest.
- 4201.7 If the consignment State does not supply the manifest, but the State in which the generator is located (generator State) supplies the manifest and requires its use, then the generator shall use that State's manifest.
- 4201.8 If neither the generator State nor the consignment State supplies the manifest, then the generator may obtain the manifest from any source.
- 4201.9 The manifest consists of at least the number of copies that will provide the generator, each transporter, and the owner or operator of the designated facility with one (1) copy each for their records and another copy to be returned to the generator.
- 4201.10 The generator shall:

**US EPA ARCHIVE DOCUMENT** 

- (a) Sign the manifest certification by hand;
- (b) Obtain the handwritten signature of the initial transporter and date of acceptance on the manifest:
- (c) Retain one (1) copy, in accordance with §4203.1; and
- (d) Send one (1) copy to the Department within seven (7) days after the shipment is accepted by the initial transporter.
- 4201.11 The generator shall give the transporter the remaining copies of the manifest.

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- 4201.12 The generator shall send one (1) copy of the manifest that has been signed by the designated facility to the Department within seven (7) days of receipt of the copies.
- 4201.13 For shipments of hazardous waste within the United States solely by water (bulk shipments only), the generator shall send three (3) copies of the manifest dated and signed in accordance with §§4201.10 through 4201.15 to the owner or operator of the designated fucility or the last water (bulk shipment) transporter to handle the waste in the United States if exported by water. Copies of the manifest are not required for each transporter.
- 4201.14 For rail shipments of hazardous waste within the United States which originate at the site of generation, the generator shall send at least three (3) copies of the manifest dated and signed in accordance with §§4201.10 through 4201.15 to:
  - (a) The next non-rail transporter, if any;
  - (b) The designated facility if transported solely by rail; or
  - (c) The last rail transporter to handle the waste in the United States if exported by rail.
- 4201.15 For shipments of hazardous waste to a designated facility in an authorized State that has not yet obtained authorization to regulate that particular waste as hazardous, the generator shall assure that the designated facility agrees to sign and return the manifest to the generator, and that any out-of-state transporter signs and forwards the manifest to the designated facility.

#### 4202 PRE-TRANSPORT REQUIREMENTS

- 4202.1 Before transporting hazardous waste or offering hazardous waste for transportation off-site. a generator shall package the waste in accordance with the applicable Department of Transportation regulations on packaging under 49 CFR parts 173, 178, and 179.
- 4202.2 Before transporting or offering hazardous waste for transportation off-site, a generator shall label each package in accordance with the applicable Department of Transportation regulations on hazardous materials under 49 CFR part 172.
- 4202.3 Before transporting or offering hazardous waste for transportation off-site, a generator shall mark each package of hazardous waste in accordance with the applicable Department of Transportation regulations on hazardous materials under 49 CFR part 172.
- 4202.4 Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator shall mark each container of 110 gallons or less used in such transportation with the following words and information displayed in accordance with the requirements of 49 CFR 172.304:

HAZARDOUS WASTE -- Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.

Generator's Name and Address

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Manifest Document Number

- 4202.5 Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator shall placard or offer the initial transporter the appropriate placards according to Department of Transportation regulations for hazardous materials under 49 CFR part 172, subpart F.
- 4202.6 A generator who accumulates waste on-site shall be an operator of a storage facility and shall be subject to the requirements of Chapter 44 unless:
  - (a) The hazardous waste is accumulated for ninety (90) days or less from the date accumulation began;
  - (b) The generator is a small quantity generator, and the accumulated quantity of hazardous waste is less than six hundred kilograms (600 kgs.) and contains less than the quantity limitations of §4102.5(a) & (b) and it is accumulated for one hundred eighty (180) days or less from the date accumulation began; or
  - (c) The generator has received an extension under §4202.8.
- 4202.7 A generator may accumulate hazardous waste on-site for ninety (90) days or less without a permit or without having interim status, provided that:
  - (a) He or she complies with §4202.6;
  - (b) The waste is placed as provided in §4202.7(b)(1) through (b)(4). In addition, such a generator is exempt from all the requirements in §§4413 and 4414, except for §§4413.2 and 4413.14. The waste shall be placed:
    - (1) In containers and the generator complies with §4415;
    - (2) In tanks and the generator complies with §4416 except relative to §4416.18(a), the owner or operator must also consider the stress of installation and relative to §4416.28, the frequency of inspection cannot be less than once a day;
    - (3) On drip pads and the generator complies with §4424 and maintains the following records at the facility:
      - (A) A description of procedures that shall be followed to ensure that all wastes are removed from the drip pad and associated collection system at least once every ninety (90) days; and
      - (B) Documentation of each waste removal, including the quantity of waste removed from the drip pad and the sump or collection system and the date and time of removal; or
    - (4) In containment buildings and the generator complies with §§4484 through 4486, has placed its professional engineer certification that the building complies with the design standards specified in §4401 in the facility's operating record. The

certification shall be required prior to operation of the unit. The owner or operator shall maintain the following records at the facility:

- (A) A written description of procedures to ensure that each waste volume remains in the unit for no more than ninety (90) days, a written description of the waste generation and management practices for the facility showing that they are consistent with respecting the ninety (90) day limit, and documentation that the procedures are complied with; or
- (B) Documentation that the unit is emptied at least once every ninety (90) days.
- (c) The date upon which each period of accumulation begins is clearly marked and visible for inspection on each container;
- (d) While being accumulated on-site, each container and tank is labeled or marked clearly with the words, "Hazardous Waste"; and
- (e) The generator complies with the requirements for owners or operators in §§4405, 4409, 4410, and 5000.14(d).
- 4202.8 A generator who accumulates hazardous waste for more than ninety (90) days is an operator of a storage facility and is subject to the requirements of Chapter 44 and the permit requirements of Chapter 46 unless he or she has been granted an extension to the 90-day period. Such extension may be granted by the Director if hazardous wastes shall remain onsite for longer than ninety (90) days due to unforeseen, temporary, and uncontrollable circumstances. An extension of up to thirty (30) days may be granted at the discretion of the Director on a case-by-case basis.

#### 4203 RECORDKEEPING AND REPORTING

- 4203.1 A generator shall keep a copy of each manifest signed in accordance with §4201.10 for three (3) years or until he or she receives a signed copy from the designated facility that received the waste. This signed copy shall be retained as a record for at least three (3) years from the date the initial transporter accepted the waste.
- 4203.2 A generator shall keep a copy of each Biennial Report and Exception Report for a period of at least three (3) years from the due date of the report.
- 4203.3 A generator shall keep records of any test results, waste analyses, or other determinations made in accordance with §4200.10 for at least three (3) years from the date that the waste was last sent to on-site or off-site treatment, storage, or disposal.
- 4203.4 The periods of retention referred to in §§4203.1 through 4203.4 are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Director.
- 4203.5 A generator who ships any hazardous waste off-site to a treatment, storage or disposal facility within the United States shall prepare and submit a single copy of a Biennial Report to the Director by March 1 of each even numbered year. The Biennial Report shall be submitted on

EPA Form 8700-13A, shall cover generator activities during the previous year, and shall include the following information:

- (a) The EPA identification number, name, and address of the generator;
- (b) The calendar year covered by the report:
- (c) The EPA identification number, name, and address for each off-site treatment, storage, or disposal facility in the United States to which waste was shipped during the year. For exported shipments, the report should give the name and address of the foreign facility;
- (d) The name and EPA identification number of each transporter used during the reporting year for shipments to a treatment, storage or disposal facility within the United States;
- (e) A description. EPA hazardous waste number (from §§4108 or §§4109 through 4110), DOT hazard class, and quantity of each hazardous waste shipped off-site for shipments. This information shall be listed by EPA identification number of each such off-site facility to which waste was shipped;
- (f) A description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated;
- (g) A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent the information is available for years before 1984; and
- (h) The certification signed by the generator or authorized representative.
- 4203.6 Any generator who treats, stores, or disposes of hazardous waste on-site shall submit a biennial report covering those wastes in accordance with the provisions of Chapters 44, 45, and 46. Reporting for exports of hazardous waste is not required on the Biennial Report form. A separate annual report requirement is set forth at §4204.9.
- 4203.7 A generator who does not receive a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within thirty-five (35) days of the date the waste was accepted by the initial transporter shall contact the transporter and/or the owner or operator of the designated facility to determine the status of the hazardous waste.
- 4203.8 A generator shall submit an Exception Report to the Director if he or she has not received a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within forty-five (45) days of the date the waste was accepted by the initial transporter. The Exception Report shall include:
  - (a) A legible copy of the manifest for which the generator does not have confirmation of delivery; and
  - (b) A cover letter signed by the generator or his or her authorized representative explaining the efforts taken to locate the hazardous waste and the results of those efforts.

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- 4203.9 A generator shall submit written notification to the Director within fourteen (14) days of any of the following events:
  - (a) Any changes to the Notification of Regulated Waste Activity (EPA form 8700-12); or
  - (b) Closing the generating facility or ceasing generation and proof of compliance with §§4413.2 and 4413.14.
- 4203.10 The Director, as he or she deems necessary under §6 of the Act (D.C. Code §6-705) and this subtitle, may require generators to furnish additional reports concerning the quantities and disposition of wastes identified or listed in Chapter 41.

#### 4204 EXPORTS OF HAZARDOUS WASTE

- 4204.1 Section 4204 establishes requirements applicable to exports of hazardous waste. Except to the extent §4204.11 provides otherwise, a primary exporter of hazardous waste shall comply with the special requirements of §4204 and a transporter transporting hazardous waste for export shall comply with applicable requirements of Chapter 43. Section 4204.11 sets forth the requirements of international agreements between the United States and receiving countries that establish different notice, export, and enforcement procedures for the transportation, treatment, storage and disposal of hazardous waste for shipments between the United States and those countries.
- 4204.2 Exports of hazardous waste are prohibited except in compliance with the applicable requirements of §4204 and Chapter 43. Exports of hazardous waste are prohibited unless:
  - (a) Notification in accordance with §§4204.3 through 4204.6 has been provided;
  - (b) The receiving country has consented to accept the hazardous waste;
  - (c) A copy of the EPA Acknowledgment of Consent to the shipment accompanies the hazardous waste shipment and, unless exported by rail, is attached to the manifest (or shipping paper for exports by water (bulk shipment)); and
  - (d) The hazardous waste shipment conforms to the terms of the receiving country's written consent as reflected in the EPA Acknowledgment of Consent.
- 4204.3 A primary exporter of hazardous waste shall notify EPA of an intended export before the waste is scheduled to leave the United States. A complete notification shall be submitted sixty (60) days before the initial shipment is intended to be shipped off site. This notification may cover export activities extending over a twelve (12) month or lesser period. The notification shall be in writing, signed by the primary exporter, and include the following information:
  - (a) Name, mailing address, telephone number and EPA identification number of the primary exporter;
  - (b) By consignee, for each hazardous waste type:

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- A description of the hazardous waste and the EPA hazardous waste number (from §4108 and §§4109 through 4110), U.S. DOT proper shipping name. hazard class and ID number (UN/NA) for each hazardous waste as identified in 49 CFR parts 171 through 177;
- (2) The estimated frequency or rate at which the waste is to be exported and the period of time over which the waste is to be exported;
- (3) The estimated total quantity of the hazardous waste in units as specified in the instructions to the Uniform Hazardous Waste Manifest Form (8700-22);
- (4) All points of entry to and departure from each foreign country through which the hazardous waste will pass;
- (5) A description of the means by which each shipment of the hazardous waste will be transported (for example, mode of transportation vehicle (air, highway, rail, water, etc.), type(s) of container (drums, boxes, tanks, etc.));
- (6) A description of the manner in which the hazardous waste will be treated, stored or disposed of in the receiving country (for example, land or ocean incineration, other land disposal, ocean dumping, recycling);
- (7) The name and site address of the consignee and any alternate consignee; and
- (8) The name of any transit countries through which the hazardous waste will be sent and a description of the approximate length of time the hazardous waste will remain in the country and the nature of its handling while there;
- (c) Notifications submitted by mail should be sent to the following mailing address: Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting, and Data Division (2222A), Environmental Protection Agency. 401 M St. SW., Washington, DC 20460. Hand-delivered notifications should be sent to: Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting, and Data Division (2222A), Environmental Protection Agency, Ariel Rios Bldg., 12th St. and Pennsylvania Ave. N.W., Washington, DC. In both cases, the following shall be prominently displayed on the front of the envelope: "Attention: Notification of Intent to Export." A copy of this notification shall also be sent to the District of Columbia Department of Health, Environmental Health Administration, Hazardous Waste Management Division, 51 N Street. N.E., 3rd Floor, Washington, DC 20002.
- 4204.4 Except for changes to the telephone number in §4204.3(a), changes to §4204.3(b)(5) and decreases in the quantity indicated pursuant to §4204.3(b)(3) when the conditions specified on the original notification change (including any exceedance of the estimate of the quantity of hazardous waste specified in the original notification), the primary exporter shall provide EPA with a written renotification of the change. The shipment shall not take place until consent of the receiving country to the changes (except for changes to §4204.3(b)(8) and in the ports of entry to and departure from transit countries pursuant to §4203.4(b)(4)) has been obtained and the primary exporter receives an EPA Acknowledgment of Consent reflecting the receiving country's consent to the changes.

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**US EPA ARCHIVE DOCUMENT** 

- 4204.5 Upon request by EPA, a primary exporter shall furnish to EPA any additional information that a receiving country requests in order to respond to a notification.
- 4204.6 In conjunction with the Department of State. EPA will provide a complete notification to the receiving country and any transit countries. A notification is complete when EPA receives a notification that EPA determines satisfies the requirements of §4204.3. Where a claim of confidentiality is asserted with respect to any notification information required by §4204.3, EPA may find the notification not complete until the claim is resolved in accordance with §4000.3. Where the receiving country consents to the receipt of the hazardous waste, EPA will forward an EPA Acknowledgment of Consent to the primary exporter for purposes of §4204.7(h). Where the receiving country objects to receipt of the hazardous waste or withdraws a prior consent, EPA will notify the primary exporter in writing. EPA will also notify the primary exporter of any responses from transit countries.
- 4204.7 A primary exporter shall comply with the manifest requirements of §§4201.1 through 4201.15 except that:
  - (a) Instead of the name, site address and EPA identification number of the designated permitted facility, the primary exporter shall enter the name and site address of the consignee;
  - (b) Instead of the name, site address and EPA identification number of a permitted alternate facility, the primary exporter may enter the name and site address of any alternate consignee; or
  - (c) In Special Handling Instructions and Additional Information, the primary exporter shall identify the point of departure from the United States;
  - (d) The following statement shall be added to the end of the first sentence of the certification set forth in Item 16 of the Uniform Hazardous Waste Manifest Form: "and conforms to the terms of the attached EPA Acknowledgment of Consent";
  - (e) Instead of the requirements of §§4201.6 through 4201.8, the primary exporter shall obtain the manifest form from the primary exporter's State if that State supplies the manifest form and requires its use. If the primary exporter's State does not supply the manifest form, the primary exporter may obtain a manifest form from any source;
  - (f) The primary exporter shall require the consignee to confirm in writing the delivery of the hazardous waste to that facility and to describe any significant discrepancies (as defined in §4411.8) between the manifest and the shipment. A copy of the manifest signed by the facility may be used to confirm delivery of the hazardous waste;
  - (g) Instead of the requirements of §4201.4, where a shipment cannot be delivered for any reason to the designated or alternate consignee, the primary exporter shall:
    - (1) Renotify EPA of a change in the conditions of the original notification to allow shipment to a new consignee in accordance with §4204.4 and obtain an EPA Acknowledgment of Consent before delivery; or

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- (2) Instruct the transporter to return the waste to the primary exporter in the United States or designate another facility within the United States; and
- (3) Instruct the transporter to revise the manifest in accordance with the primary exporter's instructions;
- (h) The primary exporter shall attach a copy of the EPA Acknowledgment of Consent to the shipment to the manifest, which shall accompany the hazardous waste shipment. For exports by rail or water (bulk shipment), the primary exporter shall provide the transporter with an EPA Acknowledgment of Consent, which shall accompany the hazardous waste but need not be attached to the manifest, except that for exports by water (bulk shipment) the primary exporter shall attach the copy of the EPA Acknowledgment of Consent to the shipping paper;
- (i) The primary exporter shall provide the transporter with an additional copy of the manifest for delivery to the U.S. Customs official at the point the hazardous waste leaves the United States in accordance with §4301.8(d).
- 4204.8 Instead of the requirements of §§4203.7 through 4203.8, a primary exporter shall file an exception report with the Administrator if:
  - (a) He or she has not received a copy of the manifest signed by the transporter stating the date and place of departure from the United States within forty-five (45) days from the date it was accepted by the initial transporter;
  - (b) Within ninety (90) days from the date the waste was accepted by the initial transporter, the primary exporter has not received written confirmation from the consignee that the hazardous waste was received; or
  - (c) The waste is returned to the United States.
- 4204.9

EPA ARCHIVE DOCUMENT

Primary exporters of hazardous waste shall file with the Administrator no later than March l of each year, a report summarizing the types. quantities, frequency, and ultimate destination of all hazardous waste exported during the previous calendar year. Annual reports submitted by mail should be sent to the following mailing address: Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting, and Data Division (2222A), Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. Hand-delivered reports should be sent to: Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting, and Data Division (2222A), Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. Hand-delivered reports should be sent to: Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting, and Data Division (2222A), Environmental Protection Agency, Ariel Rios Bldg., 12th St. and Pennsylvania Ave., NW., Washington, DC. A copy of this notification shall also be sent to the District of Columbia Department of Health, Environmental Health Administration, Hazardous Waste Management Division, 51 N Street, N.E., 3rd Floor, Washington, DC 20002. The reports shall include the following:

- (a) The EPA identification number, name, and mailing and site address of the exporter;
- (b) The calendar year covered by the report;
- (c) The name and site address of each consignee;

- (d) By consignee, for each hazardous waste exported, a description of the hazardous waste, the EPA hazardous waste number (from §4108 or §§4109 through 4110), DOT hazard class, the name and US EPA identification number (where applicable) for each transporter used, the total amount of waste shipped and number of shipments pursuant to each notification;
- (e) Except for hazardous waste produced by exporters of greater than one hundred kilograms (100 kg) but less than one thousand kilograms (1000 kg) in a calendar month, unless provided pursuant to §§4203.5 through 4203.6, in even numbered years:
  - (1) A description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated; and
  - (2) A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for years prior to 1984;
- (f) A certification signed by the primary exporter that states:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

- 4204.10 For all exports a primary exporter shall:
  - (a) Keep a copy of each notification of intent to export for a period of at least three (3) years from the date the hazardous waste was accepted by the initial transporter;
  - (b) Keep a copy of each EPA Acknowledgment of Consent for a period of at least three (3) years from the date the hazardous waste was accepted by the initial transporter;
  - (c) Keep a copy of each confirmation of delivery of the hazardous waste from the consignee for at least three (3) years from the date the hazardous waste was accepted by the initial transporter;
  - (d) Keep a copy of each annual report for a period of at least three (3) years from the due date of the report; and
  - (e) The periods of retention referred to in §4204.10 are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Administrator.

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4204.11 The following requirements apply to international agreements:

- (a) Any person, who exports or imports hazardous waste, except "District-only" wastes, subject to manifest requirements of Chapter 42, or subject to the universal waste management standards of Chapter 48, or subject to State requirements analogous to Chapter 48, to or from designated member countries of the Organization for Economic Cooperation and Development (OECD) as defined in §4204.11(b) for purposes of recovery, is subject to §4207. The requirements of §§4204 and 4205 do not apply;
- (b) For the purposes of §4204, the designated OECD countries consist of Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States;
- (c) For the purposes of §4204, Canada and Mexico are considered ()ECD member countries only for the purpose of transit; and
- (d) Any person who exports hazardous waste to or imports hazardous waste from: a designated OECD member country for purposes other than recovery (for example, incineration, disposal), Mexico (for any purpose), or Canada (for any purpose) remains subject to the requirements of §§4204 and 4205.

#### 4205 IMPORTS OF HAZARDOUS WASTES

- 4205.1 Any person who imports hazardous waste from a foreign country into the United States shall comply with the requirements of this chapter and the special requirements of §4205.
- 4205.2 When importing hazardous waste, a person shall meet all the requirements of §4201.1 for the manifest except that:
  - (a) In place of the generator's name, address and EPA identification number, the name and address of the foreign generator and the importer's name, address and EPA identification number shall be used.
  - (b) In place of the generator's signature on the certification statement, the U.S. importer or his or her agent shall sign and date the certification and obtain the signature of the initial transporter.
- 4205.3 A person who imports hazardous waste shall obtain the manifest form from the consignment State if the State supplies the manifest and requires its use. If the consignment State does not supply the manifest form, then the manifest form may be obtained from any source.

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#### 4206 FARMERS

4206.1 A farmer disposing of waste pesticides from his or her own use that are hazardous wastes is not required to comply with the standards in this chapter or other standards in Chapters 44, 46, or 50 for those wastes provided he or she triple rinses each emptied pesticide container in accordance with §4104.5 and disposes of the pesticide residues on his or her own farm in a manner consistent with the disposal instructions on the pesticide label.

#### 4207 TRANSFRONTIER SHIPMENTS OF HAZARDOUS WASTE FOR RECOVERY WITHIN THE OECD

- . 4207.1 The requirements of §4207 apply to imports and exports of wastes that are considered hazardous under U.S. national procedures (that is, do not include "District-only" wastes) and are destined for recovery operations in the countries listed in §4204.11(b). A waste is considered hazardous under U.S. national procedures if it meets the definition of hazardous waste in §§4100.12 through 4100.17 and it is subject to either the manifesting requirements at §4201, to the universal waste management standards of Chapter 48, or to other States' requirements analogous to 40 CFR Part 273, and is not a "District-only" waste.
- 4207.2 Any person (notifier, consignee, or recovery facility operator) who mixes two or more wastes (including hazardous and non-hazardous wastes) or otherwise subjects two or more wastes (including hazardous and non-hazardous wastes) to physical or chemical transformation operations, and thereby creates a new hazardous waste, becomes a generator and assumes all subsequent generator duties under the Act and any notifier duties, if applicable, under §4207.
- 4207.3 The level of control for exports and imports of waste is indicated by assignment of the waste to a green, amber, or red list and by U.S. national procedures as defined in §4207.1. The green, amber, and red lists are incorporated by reference in §4207.33.
- 4207.4 Wastes on the green list are subject to existing controls normally applied to commercial transactions, except as provided below:
  - (a) Green-list wastes that are considered hazardous under U.S. national procedures are subject to amber-list controls;
  - (b) Green-list waste that are sufficiently contaminated or mixed with amber-list wastes, such that the waste or waste mixture is considered hazardous under U.S. national procedures, are subject to amber-list controls; and
  - (c) Green-list wastes that are sufficiently contaminated or mixed with other wastes subject to red-list controls such that the waste or waste mixture is considered hazardous under U.S. national procedures shall be handled in accordance with the red-list controls.

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- 4207.5 Wastes on the amber list that are considered hazardous under U.S. national procedures as defined in §4207.1 are subject to the amber-list controls of §4207.
  - (a) If amber-list wastes are sufficiently contaminated or mixed with other wastes subject to red-list controls such that the waste or waste mixture is considered hazardous under U.S. national procedures, the wastes shall be handled in accordance with the red-list controls; and
  - (b) [Reserved]
- 4207.6 Wastes on the red list that are considered hazardous under U.S. national procedures as defined in §4207.1 are subject to the red-list controls of §4207.
- 4207.7 Some wastes on the amber or red lists are not listed or otherwise identified as hazardous under RCRA (for example, polychlorinated biphenyls) and therefor are not subject to the amber- or red-list controls of §4207. Regardless of the status of the waste under RCRA, however, other Federal environmental statutes (for example, the Toxic Substances Control Act) may restrict certain waste imports or exports. These restrictions continue to apply without regard to §4207.
- 4207.8 Wastes not yet assigned to a list are eligible for transfrontier movements, as follows:
  - (a) If the wastes are considered hazardous under U.S. national procedures as defined in \$4207.1, these wastes are subject to the red-list controls; or
  - (b) If the wastes are not considered hazardous under U.S. national procedures as defined in §4207.1, these wastes may move as though they appeared on the green list.
- 4207.9 General conditions applicable to transfrontier movements of hazardous waste are as follows:
  - (a) The waste shall be destined for recovery operations at a facility that, under applicable domestic law, is operating or is authorized to operate in the importing country;
  - (b) The transfrontier movement shall be in compliance with applicable international transport agreements. These international agreements include, but are not limited to, the Chicago Convention (1944), ADR (1957), ADNR (1970), MARPOL Convention (1973/1978), SOLAS Convention (1974), IMDG Code (1985), COTIF (1985), and RID (1985);
  - (c) Any transit of waste through a non-OECD member country shall be conducted in compliance with all applicable international and national laws and regulations.
- 4207.10 Provisions relating to re-export for recovery to a third country are as follows:
  - (a) Re-export of wastes subject to the amber-list control system from the U.S., as the importing country, to a third country listed in §4204.11(b) may occur only after a notifier in the U.S. provides notification to and obtains consent of the competent authorities in the third country, the original exporting country, and new transit countries. The notification shall comply with the notice and consent procedures in §\$4207.11 through 4207.16 for all concerned countries and the original exporting

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country. The competent authorities of the original exporting country as well as the competent authorities of all other concerned countries have thirty (30) days to object to the proposed movement, as follows:

- (1) The 30-day period begins once the competent authorities of both the initial exporting country and new importing country issue Acknowledgements of Receipt of the notification; and
- (2) The transfrontier movement may commence if no objection has been lodged after the 30-day period has passed or immediately after written consent is received from all relevant OECD importing and transit countries; and
- (b) Re-export of waste subject to the red-list control system from the original importing country to a third country listed in §4204.11(b) may occur only following notification of the competent authorities of the third country, the original exporting country, and new transit countries by a notifier in the original importing country in accordance with §§4207.11 through 4207.16. The transfrontier movement may not proceed until the original importing country receives written consent from the competent authorities of the third country, and new transit country, the original exporting country accordance with \$\$
- (c) In the case of re-export of amber or red-list wastes to a country other than those in §4204.11(b), notification to and consent of the competent authorities of the original OECD member country of export and any OECD member countries of transit is required as specified in §§4207.10(a) and 4207.10(b) in addition to compliance with all international agreements and arrangements to which the first importing OECD member country is a party and all applicable regulatory requirements for exports from the first importing country.
- 4207.11 Consent shall be obtained from the competent authorities of the relevant OECD importing and transit countries before exporting hazardous waste destined for recovery operations subject to §4207. Hazardous wastes subject to amber-list controls are subject to the requirements of §4207.12; hazardous wastes subject to red-list controls are subject to the requirements of §4207.13; and wastes not identified on any list are subject to the requirements of §4207.14.
- 4207.12 The following are specific notification and consent requirements for amber-list waste:
  - (a) The export from the U.S. of hazardous wastes as described in §4207.1 that appear on the amber list is prohibited unless the notification and consent requirements of §4207.12(a) or §4207.12(b) are met. Transactions requiring specific consent are as follows:
    - (1) At least forty-five (45) days before commencement of the transfrontier movement, the notifier shall provide written notification in English of the proposed transfrontier movement to the Director and to the Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting and Data Division (2222A), Environmental Protection Agency, 401 M St., SW., Washington, DC 20460, with the words "Attention: OECD Export Notification" prominently displayed on the envelope. This notification shall include all of the information identified in §4207.15. In cases where wastes having similar physical and chemical characteristics, the same United Nations classification, and the same

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EPA hazardous waste numbers are to be sent periodically to the same recovery facility by the same notifier, the notifier may submit one (1) notification of intent to export these wastes in multiple shipments during a period of up to one (1) year. A copy of this notification shall also be sent to the District of Columbia Department of Health, Environmental Health Administration, Ilazardous Waste Management Division, 51 N Street, N.E., 3rd Floor, Washington, DC 20002;

- (2) If no objection has been lodged by any concerned country (that is, exporting, importing, or transit countries) to a notification provided pursuant to §4207.12(a)(1) within thirty (30) days after the date of issuance of the Acknowledgment of Receipt of notification by the competent authority of the importing country, the transfrontier movement may commence. Tacit consent expires one (1) calendar year after the close of the 30-day period; renotification and renewal of all consents is required for exports after that date; and
- (3) If the competent authorities of all the relevant OECD importing and transit countries provide written consent in a period less than thirty (30) days, the transfrontier movement may commence immediately after all necessary consents are received. Written consent expires for each relevant OECD importing and transit country one (1) calendar year after the date of that country's consent unless otherwise specified; and renotification and renewal of each expired consent is required for exports after that date; and
- (b) Shipments to facilities pre-approved by the competent authorities of the importing countries to accept specific wastes for recovery are subject to the following requirements:
  - (1) The notifier shall provide EPA the information identified in §4207.15 in English, at least ten (10) days in advance of commencing shipment to a pre-approved facility. The notification should indicate that the recovery facility is pre-approved, and may apply to a single specific shipment or to multiple shipments as described in §4207.12(a)(1). This information shall be sent to the Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting and Data Division (2222A), Environmental Protection Agency. 401 M St., SW., Washington, DC 20460, with the words "OECD Export Notification -- Pre-approved Facility" prominently displayed on the envelope; and
  - (2) Shipments may commence after the competent authorities of all concerned countries receive the notification required in §4207.12(a)(1), unless the notifier has received information indicating that the competent authorities of one (1) or more concerned countries objects to the shipment.
- 4207.13 The export from the U.S. of hazardous wastes as described in §4207.1 that appear on the red list is prohibited unless notice is given pursuant to §4207.12(a)(1) and the notifier receives written consent from the importing country and any transit countries before commencing the transfrontier movement.
- 4207.14 Wastes not assigned to the green, amber, or red list that are considered hazardous under U.S. national procedures as defined in §4207.1 are subject to the notification and consent requirements established for red-list wastes in accordance with §4207.13. Unlisted wastes that

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are not considered hazardous under U.S. national procedures as defined in §4207.1 are not subject to amber or red controls when exported or imported.

- 4207.15 Notifications submitted under §§4207.11 through 4207.15 shall include:
  - (a) Serial number or other accepted identifier of the notification form;
  - (b) Notifier name and EPA identification number (if applicable), address, and telephone and telefax numbers:
  - (c) Importing recovery facility name, address, telephone and telefax numbers, and technologies employed;
  - (d) Consignee name (if not the owner or operator of the recovery facility) address, and telephone and telefax numbers; whether the consignee shall engage in waste exchange or storage prior to delivering the waste to the final recovery facility and identification of recovery operations to be employed at the final recovery facility;
  - (e) Intended transporters and/or their agents;
  - (f) Country of export and relevant competent authority, and point of departure:
  - (g) Countries of transit and relevant competent authorities and points of entry and departure;
  - (h) Country of import and relevant competent authority, and point of entry;
  - (i) Statement of whether the notification is a single notification or a general notification. If general, include period of validity requested;
  - (j) Date foreseen for commencement of transfrontier movement:
  - (k) Designation of waste type(s) from the appropriate list (amber or red and waste list code), descriptions of each waste type, estimated total quantity of each, RCRA waste code, and United Nations number for each waste type; and
  - (l) Certification/Declaration signed by the notifier that states:

I certify that the above information is complete and certect to the best of my knowledge. I also certify that legally-enforceable written contractual obligations have been entered into, and that any applicable insurance or other financial guarantees are or shall be in force covering the transfrontier movement.

Name:	
Signature:	 
Date:	

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<sup>4207.16</sup> The U.S. does not currently require financial assurance; however, U.S. exporters may be asked by other governments to provide and certify to the assurance as a condition of obtaining consent to a proposed movement.

- 4207.17 All U.S. parties subject to the contract provisions of §4207.22 shall ensure that a tracking document meeting the conditions of §4207.18 accompanies each transfrontier shipment of wastes subject to amber-list or red-list controls from the initiation of the shipment until it reaches the final recovery facility, including cases in which the waste is stored and/or exchanged by the consignee before shipment to the final recovery facility, except as provided in §§4207.17(a) and 4207.17(b). Other requirements include:
  - (a) For shipments of hazardous waste within the U.S. solely by water (bulk shipments only) the generator shall forward the tracking document with the manifest to the last water (bulk shipment) transporter to handle the waste in the U.S. if exported by water, (in accordance with the manifest routing procedures at §4201.13); and
  - (b) For rail shipments of hazardous waste within the U.S. that originate at the site of generation, the generator shall forward the tracking document with the manifest (in accordance with the routing procedures for the manifest in §4201.14) to the next non-rail transporter, if any, or the last rail transporter to handle the waste in the U.S. if exported by rail.
- 4207.18 The tracking document shall include all information required under \$\$4207.11 through 4207.16 (for notification), and each of the following:
  - (a) Date shipment commenced;
  - (b) Name (if not notifier), address, and telephone and telefax numbers of primary exporter;
  - (c) Company name and EPA identification number of all transporters;
  - (d) Identification (license, registered name or registration number) of means of transport, including types of packaging;
  - (e) Any special precautions to be taken by transporters;
  - (f) Certification/declaration signed by notifier that no objection to the shipment has been lodged as follows:

I certify that the above information is complete and correct to the best of my knowledge. I also certify that legally-enforceable written contractual obligations have been entered into, that any applicable insurance or other financial guarantees are or shall be in force covering the transfrontier movement, and that:

- (1) All necessary consents have been received; or
- (2) The shipment is directed at a recovery facility within the OECD area and no objection has been received from any of the concerned countries within the thirty (30) day tacit consent period; or
- (3) The shipment is directed at a recovery facility pre-authorized for that type of waste within the OECD area; authorization has not been revoked, and no objection has been received from any of the concerned countries.

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(delete sentences that are not applicable)

Name:	
Signature:	
Date:	

- (g) Appropriate signatures for each custody transfer (for example, transporter, consignee. and owner or operator of the recovery facility).
- 4207.19 Notifiers also shall comply with the special manifest requirements of §§42()4.7(a), (b), (c), (e), and (i) and consignees shall comply with the import requirements of §4205.
- 4207.20 Each U.S. person who has physical custody of the waste from the time the movement commences until it arrives at the recovery facility shall sign the tracking document (for example, transporter, consignee, and owner or operator of the recovery facility).
- 4207.21 Within three (3) working days of the receipt of imports subject to §4207, the owner or operator of the U.S. recovery facility shall send signed copies of the tracking document to the notifier, to the Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting and Data Division (2222A), Environmental Protection Agency, 401 M St., SW., Washington, DC 20460, and to the competent authorities of the exporting and transit countries. A copy of this notification shall also be sent to the District of Columbia Department of Health, Environmental Health Administration, Hazardous Waste Management Division, 51 N Street, N.E., 3rd Floor, Washington, DC 20002.
- 4207.22 Transfrontier movements of hazardous waste shall comply with the following requirements regarding contracts:
  - (a) Transfrontier movements of hazardous wastes subject to amber or red control procedures are prohibited unless they occur under the terms of a valid written contract, chain of contracts, or equivalent arrangements (when the movement occurs between parties controlled by the same corporate or legal entity). These contracts or equivalent arrangements shall be executed by the notifier and the owner or operator of the recovery facility, and shall specify responsibilities for each. Contracts or equivalent arrangements are valid for the purposes of §4207.22 only if persons assuming obligations under the contracts or equivalent arrangements have appropriate legal status to conduct the operations specified in the contract or equivalent arrangement;
  - (b) Contracts or equivalent arrangements shall specify the name and EPA identification number, where available, of:
    - (1) The generator of each type of waste;
    - (2) Each person who will have physical custody of the wastes;
    - (3) Each person who will have legal control of the wastes; and
    - (4) The recovery facility;

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- (c) Contracts or equivalent arrangements shall specify which party to the contract will assume responsibility for alternate management of the wastes if its disposition cannot be carried out as described in the notification of intent to export. In these cases, contracts shall specify that:
  - (1) The person having actual possession or physical control over the wastes will immediately inform the notifier and the competent authorities of the exporting and importing countries and, if the wastes are located in a country of transit, the competent authorities of that country; and
  - (2) The person specified in the contract will assume responsibility for the adequate management of the wastes in compliance with applicable laws and regulations including, if necessary, arranging their return to the original country of export;
- (d) Contracts shall specify that the consignee will provide the notification required in \$4207.10 before re-export of controlled wastes to a third country;
- (e) Contracts or equivalent arrangements shall include provisions for financial guarantees, if required by the competent authorities of any concerned country, in accordance with applicable national or international law requirements;
- (f) Financial guarantees so required are intended to provide for alternate recycling, disposal or other means of sound management of the wastes in cases where arrangements for the shipment and the recovery operations cannot be carried out as foreseen. The U.S. does not require these financial guarantees at this time; however, some OECD countries do. It is the responsibility of the notifier to ascertain and comply with these requirements; in some cases, transporters or consignees may refuse to enter into the necessary contracts absent specific references or certifications to financial guarantees;
- (g) Contracts or equivalent arrangements shall contain provisions requiring each contracting party to comply with all applicable requirements of §4207;
- (h) Upon request by EPA, U.S. notifiers, consignees, or recovery facilities shall submit to EPA copies of contracts, chain of contracts, or equivalent arrangements (when the movement occurs between parties controlled by the same corporate or legal entity). Information contained in the contracts or equivalent arrangements for which a claim of confidentiality is asserted in accordance with D.C. Code §1524(a)(1) shall be treated as confidential and shall be disclosed by EPA only as provided in §4000.3; and
- (i) Although the U.S. does not require routine submission of contracts at this time, OECD Council Decision C(92)39/FINAL allows members to impose this requirement. When other OECD countries require submission of partial or complete copies of the contract as a condition to granting consent to proposed movements, EPA will request the required information; absent submission of this information, some OECD countries may deny consent for the proposed movement.
- 4207.23 Recognized traders shall comply with the following requirements:
  - (a) A recognized trader who takes physical custody of a waste and conducts recovery operations (including storage prior to recovery) is acting as the owner or operator of a

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recovery facility and shall be so authorized in accordance with all applicable Federal laws; and

- (b) A recognized trader acting as a notifier or consignee for transfrontier shipments of waste shall comply with all the requirements of §4207 associated with being a notifier or consignee.
- 4207.24

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- For all waste movements subject to §4207, persons (for example, notifiers, recognized traders) who meet the definition of primary exporter in §5400.1 shall file an annual report with the Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting and Data Division (2222A), Environmental Protection Agency, 401 M St., SW., Washington, DC 20460, no later than March 1 of each year summarizing the types, quantities, frequency, and ultimate destination of all the hazardous waste exported during the previous calendar year. (If the primary exporter is required to file an annual report for waste exports that are not covered under §4207, he or she may include all export information in one (1) report provided the information on exports of waste destined for recovery within the designated OECD member countries is contained in a separate section). A copy of the report should also be filed with the District of Columbia Department of Health, Environmental Health Administration, Hazardous Waste Management Division, 51 N Street, N.E., 3rd Floor, Washington, DC 20002. The reports shall include the following:
  - (a) The EPA identification number, name, and mailing and site address of the notifier filing the report;
  - (b) The calendar year covered by the report;
  - (c) The name and site address of each final recovery facility;
  - (d) By final recovery facility, for each hazardous waste exported, a description of the hazardous waste, the EPA hazardous waste number (from §4108 or §§4109 through 4110), designation of waste type(s) from OECD waste list and applicable waste code from the OECD lists. DOT hazard class, the name and U.S. EPA identification number (where applicable) for each transporter used, the total amount of hazardous waste shipped pursuant to §4207, and number of shipments pursuant to each notification;
  - (e) In even numbered years, for each hazardous waste exported, except for hazardous waste produced by exporters of greater than one hundred kilograms (100 kg) but less than one thousand kilograms (1000 kg) in a calendar month, and except for hazardous waste for which information was already provided pursuant to §§4203.5 through 4203.6:
    - (1) A description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated; and
    - (2) A description of the changes in volume and toxicity of the waste actually achieved during the year in comparison to previous years to the extent such information is available for years prior to 1984; and

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(f) A certification signed by the person acting as primary exporter that states:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information. I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

- 4207.25 Any person who meets the definition of primary exporter in §5400.1 shall file with the Administrator an exception report instead of the requirements of §§4203.7 through 4203.8 if any of the following occurs:
  - (a) He or she has not received a copy of the tracking documentation signed by the transporter stating point of departure of the waste from the United States, within forty-five (45) days from the date the initial transporter accepted it;
  - (b) Within ninety (90) days from the date the initial transporter accepted the waste, the notifier has not received written confirmation from the recovery facility that the hazardous waste was received; or
  - (c) The waste is returned to the United States.
- 4207.26 Persons who meet the definition of primary exporter in §5400.1 shall keep the following records:
  - (a) A copy of each notification of intent to export and all written consents obtained from the competent authorities of concerned countries for a period of at least three (3) years from the date the initial transporter accepted the hazardous waste;
  - (b) A copy of each annual report for a period of at least three (3) years from the due date of the report; and
  - (c) A copy of any exception reports and a copy of each confirmation of delivery (that is, tracking documentation) the recovery facility sent to the notifier for at least three (3) years from the date the initial transporter accepted the hazardous waste or the recovery facility received the hazardous waste, whichever is applicable.
- 4207.27 The periods of retention referred to in §4207 are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Administrator.

4207.28 [RESERVED]

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- 4207.29 For the purposes of §4207, a waste is considered hazardous under U.S. national procedures, and hence subject to §4207, if the waste:
  - (a) Meets the definition of hazardous waste in §§4100.12 through 4100.17 and is not a "District-only" waste; and
  - (b) Is subject to either the manifesting requirements at §§4201.1 through 4201.15 or to the universal waste management standards of Chapter 48, and is not a "District-only" waste.
- 4207.30 If a waste is hazardous under \$4207.29 and it appears on the amber or red list, it is subject to amber- or red-list requirements respectively.
- \*4207.31 If a waste is hazardous under \$4207.29 and it does not appear on either amber or red lists, it is subject to red-list requirements.
- 4207.32 The appropriate control procedures for hazardous wastes and hazardous waste mixtures are addressed in §§4207.3 through 4207.10.
- 4207.33 The OECD Green List of Wastes (revised May 1994), Amber List of Wastes and Red List of Wastes (both revised May 1993) as set forth in Appendix 3, Appendix 4 and Appendix 5, respectively, to the OECD Council Decision C(92)39/FINAL (Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations) are incorporated by reference. These incorporations by reference were approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51 on July 11, 1996. These materials are incorporated as they exist on the date of the approval and a notice of any change in these materials shall be published in the Federal Register. The materials are available for inspection at: the Office of the Federal Register, 800 North Capitol Street, NW., Suite 700, Washington, DC; the U.S. Environmental Protection Agency, RCRA Information Center (RIC), 1235 Jefferson-Davis Highway, first floor, Arlington, VA 22203 (Docket # F-94-IEHF-FFFFF) and may be obtained from the Organisation for Economic Co-operation and Development, Environment Directorate, 2 rue Andre Pascal, 75775 Paris Cedex 16, France.

### 4208 ISSUANCE RENEWAL AND TERMS OF HAZARDOUS WASTE GENERATOR PERMITS

- 4208.1 No person shall generate hazardous waste in the District of Columbia, or continue to hold or accumulate hazardous waste on site after October 1, 2000, without a Hazardous Waste Generator Permit.
- 4208.2 A generator of hazardous waste in the District of Columbia who has submitted a Notification of Regulated Waste Activity (EPA form #8700-12) and who has been issued a permanent EPA identification number shall be deemed to hold an interim generator permit; provided, however, all permits provided for in this subsection shall expire on April 1, 2000.
- 4208.3 The Director shall mail a permit application/invoice to all persons who hold a permanent EPA identification number for the generation of hazardous waste on or before January 31 of each even-numbered year.

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- 4208.4 A generator of hazardous waste in the District of Columbia who holds a permanent EPA identification number shall submit a completed permit application on the prescribed form and pay the required permit fee on or before March 1, 2000, and on or before March 1 of each even-numbered year thereafter.
- 4208.5 The Director shall issue a Hazardous Waste Generator Permit on or before April 1 of each even-numbered year to each generator who holds a permanent EPA identification number, who has submitted a properly completed permit application form by March 1 and who has paid the appropriate permit fee; provided, however, that a permit may be withheld as set forth in §4208.12, if there are outstanding violations of the HWMA or the Hazardous Waste Regulations. The permit shall bear the same number as the EPA identification number.
- 4208.6 The term of a generator permit shall be for two years, commencing April 1 of each evennumbered year and terminating on the last day of March of the second following year.
- 4208.7 The fee for issuance of a biennial Hazardous Waste Generator Permit shall be \$200 for generators of 500 kilograms or less of hazardous waste per calendar month and \$500 for generators of over 500 kilograms of hazardous waste per calendar month. A person who begins to generate hazardous waste after the commencement of the biennial cycle and who applies for a permit, shall pay the full \$200 fee if application is made at any time during the first year and shall pay \$100 if application is made at any time during the second year.
- 4208.8 A person who applies for a provisional EPA identification number pursuant to \$4200.14 for the one-time generation of hazardous waste shall pay a fee of \$50.
- 4208.9 A person who requests a permanent EPA identification number to begin generating hazardous waste after December 31, 1999 may be required to submit an application for a Hazardous Waste Generator Permit and pay the required fee for the permit cycle commencing April 1, 2000.
- 4208.10 It shall be a term of every Hazardous Waste Generator Permit issued in the District that the permit holder agrees to comply with all requirements of the HWMA and the Hazardous Waste Regulations.
- 4208.11 The Director, in his or her discretion, may incorporate more specific terms into the Hazardous Waste Generator Permit to achieve the purposes of the HWMA or the Hazardous Waste Regulations.
- 4208.12 The Director may refuse to issue a Hazardous Waste Generator Permit if the generator has pending outstanding violations of the HWMA or these regulations. Before acting on an application for a Hazardous Waste Generator Permit, the Director may enter and inspect the premises where hazardous waste is being generated (pursuant to §§4002 or 4003), and, if violations of the Act or the regulations are observed, may withhold issuance of the permit until the violations are corrected.
- 4208.13 Action to suspend or revoke a Hazardous Waste Permit may be commenced pursuant to \$4008 and pursued in accordance with the applicable provisions of Chapter 40 of these regulations and \$10 of the HWMA.

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## 4209 INCORPORATED BY REFERENCE

4209.1 When used in Chapters 40 through 54, the following Appendix from Title 40 of the Code of Federal Regulations is incorporated by reference: Appendix of 40 CFR Part 262 - "Uniform Hazardous Waste Manifest and Instructions (EPA Forms 8700-22 and 8700-22A and Their Instructions".

# CHAPTER 43 STANDARDS APPLICABLE TO TRANSPORTERS OF HAZARDOUS WASTE

### 4300 GENERAL

- 4300.1 These regulations establish standards that apply to persons transporting hazardous waste within or through the District if the transportation requires a manifest under Chapter 42.
- 4300.2 These regulations do not apply to on-site transportation of hazardous waste by generators or by owners or operators of permitted hazardous waste management facilities.
- 4300.3 A transporter of hazardous waste shall also comply with Chapter 42, Standards Applicable to Generators of Hazardous Waste, if he or she:
  - (a) Transports hazardous waste into the United States from abroad; or
  - (b) Mixes hazardous wastes of different DOT shipping descriptions by placing them into a single container.
- 4300.4 A transporter of hazardous waste, except "District- only" wastes, subject to the manifesting requirements of Chapter 42, or subject to the waste management standards of Chapter 48, or other States' requirements analogous to 40 CFR Part 273, that is being imported from or exported to any of the countries listed in §4204.11(b) for purposes of recovery is subject to §4300 and to all other relevant requirements of §4207, including, but not limited to, §§4207.17 through 4207.21 for tracking documents.
- 4300.5 The regulations in this chapter do not apply to transportation during an explosives or munitions emergency response. conducted in accordance with §§4400.7(h)(4) or 4400.10 or as part of interim status under 4401, and §§4600.8(i)(4) or 4600.10.
- 4300.6 Section 4512.7 of this title identifies how the requirements of this chapter apply to military munitions classified as solid waste under §§4512.3 through 4512.6.
- 4300.7 A transporter shall not transport hazardous wastes without having received an EPA identification number from the Director or from an authorized State. The EPA identification number issued to a transporter of hazardous waste shall be deemed a permit, as required by §4 of HWMA, to transport hazardous waste in or through the District of Columbia.
- 4300.8 A transporter who has not received an EPA identification number may obtain one by applying to the Director using EPA Form 8700-12. Upon receiving the request, the Director shall assign an EPA identification number to the transporter.
- 4300.9 A transporter who stores manifested shipments of hazardous waste in containers meeting the requirements of §4202.1 at a transfer facility for a period of ten (10) days or less shall also comply with the General Facility Standards for owners and operators in §§4403.7 through 4407.3 and in §§4409, 4410, 4412, 4415 and 4416 with respect to the storage of those wastes.

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- 4300.10 Transporters who hold EPA identification numbers shall comply with the requirements of this subtitle and the U.S. Department of Transportation requirements under Title 49 CFR Parts 171 through 179 (pursuant to the federal Hazardous Materials Transportation Act regulations) and the requirements of the District of Columbia Hazardous Materials Transportation and Motor Carrier Safety Act of 1988, effective March 16, 1989; D. C. Law 7-190; D. C. Code §§6-3301 et seq.
- 4300.11 A transporter holding hazardous waste at a transfer facility in the District shall obtain a Hazardous Waste Transfer Facility Permit pursuant to the requirements of \$4303.
- 4300.12 No transporter shall park a vacuum truck, pump truck or tanker containing hazardous waste at a hazardous waste transfer facility, or at any other location in the District of Columbia, for more that 24 hours. If a vacuum truck, pump truck or tanker is to remain in the District for more that 24 hours, the contents shall be transferred into containers meeting the requirements of §4415.

### 4301 COMPLIANCE WITH THE MANIFEST SYSTEM AND RECORDKEEPING

- 4301.1 A transporter shall not accept hazardous waste from a generator unless it is accompanied by a manifest signed in accordance with the provisions of §§4201.1 through 4201.5. In the case of exports other than those subject to §4207, a transporter shall not accept the waste from a primary exporter or other person if he or she knows the shipment does not conform to the EPA Acknowledgement of Consent; and unless, in addition to a manifest signed in accordance with the provisions of §§4201.1 through 4201.5, the waste is also accompanied by an EPA Acknowledgement of Consent which, except for shipment by rail, is attached to the manifest (or shipping paper for exports by water (bulk shipment)). For exports of hazardous waste subject to the requirements of §4207, a transporter shall not accept hazardous waste without a tracking document that includes all information required by §§4207.17 through 4207.21.
- 4301.2 Before transporting the hazardous waste, the transporter shall sign and date the manifest acknowledging acceptance of the hazardous waste from the generator. The transporter shall return a signed copy to the generator before leaving the generator's property.
- 4301.3 The transporter shall ensure that the manifest accompanies the hazardous waste. In the case of exports, the transporter shall ensure that a copy of the EPA Acknowledgment of Consent also accompanies the hazardous waste.
- 4301.4 A transporter who delivers a hazardous waste to another transporter or to the designated facility shall:
  - (a) Obtain the date of delivery and the handwritten signature of that transporter or of the owner or operator of the designated facility on the manifest;
  - (b) Retain one (1) copy of the manifest in accordance with §§4301.11 through 4301.16; and
  - (c) Give the remaining copies of the manifest to the accepting transporter or designated facility.

- 4301.5 The requirements of §§4301.3, 4301.4 and 4301.6 do not apply to water (bulk shipment) transporters if:
  - (a) The hazardous waste is delivered by water (bulk shipment) to the designated facility;
  - (b) A shipping paper containing all the information required on the manifest (excluding the EPA identification numbers, generator certification, and signatures) and, for exports, an EPA Acknowledgment of Consent accompanies the hazardous waste;
  - (c) The delivering transporter obtains the date of delivery and handwritten signature of the owner or operator of the designated facility on either the manifest or the shipping paper;
  - (d) The person delivering the hazardous waste to the initial water (bulk shipment) transporter obtains the date of delivery and signature of the water (bulk shipment) transporter on the manifest and forwards it to the designated facility; and
  - (e) A copy of the shipping paper or manifest is retained by each water (bulk shipment) transporter in accordance with §§4301.11 through 4301.16.
- 4301.6 For shipments involving rail transportation, the requirements of §§4301.3, 4301.4, and 4301.5 do not apply and the following requirements do apply:
  - (a) When accepting hazardous waste from a non-rail transporter, the initial rail transporter shall:
    - (1) Sign and date the manifest acknowledging acceptance of the hazardous waste;
    - (2) Return a signed copy of the manifest to the non-rail transporter;
    - (3) Forward at least three (3) copies of the manifest to:
      - (A) The next non-rail transporter, if any;
      - (B) The designated facility, if the shipment is delivered to that facility by rail; or
      - (C) The last raii transporter designated to handle the waste in the United States: and
    - (4) Retain one (1) copy of the manifest and rail shipping paper in accordance with §§4301.11 through 4301.16; and
  - (b) Rail transporters shall ensure that a shipping paper containing all the information required on the manifest (excluding the EPA identification numbers, generator certification, and signatures) and, for exports an EPA Acknowledgment of Consent accompanies the hazardous waste at all times;
  - (c) When delivering hazardous waste to the designated facility, a rail transporter shall:

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- (1) Obtain the date of delivery and handwritten signature of the owner or operator of the designated facility on the manifest or the shipping paper (if the manifest has not been received by the facility); and
- (2) Retain a copy of the manifest or signed shipping paper in accordance with §§4301.11 through 4301.16; and
- (d) When delivering hazardous waste to a non-rail transporter a rail transporter shall:
  - (1) Obtain the date of delivery and the handwritten signature of the next non-rail transporter on the manifest; and
  - (2) Retain a copy of the manifest in accordance with §§4301.11 through 4301.16; and
- (e) Before accepting hazardous waste from a rail transporter, a non-rail transporter shall sign and date the manifest and provide a copy to the rail transporter.
- 4301.7 Intermediate rail transporters are not required to sign either the manifest or shipping paper.
- 4301.8 Transporters who transport hazardous waste out of the United States shall:
  - (a) Indicate on the manifest the date the hazardous waste left the United States;
  - (b) Sign the manifest and retain one (1) copy in accordance with §§4301.13 through 4301.14;
  - (c) Return a signed copy of the manifest to the generator; and
  - (d) Give a copy of the manifest to a U.S. Customs official at the point of departure from the United States.
- 4301.9 The transporter shall deliver the entire quantity of hazardous waste that he or she has accepted from a generator or a transporter to:
  - (a) The designated facility listed on the manifest;
  - (b) The alternate designated facility, if the hazardous waste cannot be delivered to the designated facility because an emergency prevents delivery;
  - (c) The next designated transporter; or
  - (d) The place outside the United States designated by the generator.
- 4301.10 If the hazardous waste cannot be delivered in accordance with §4301.9, the transporter shall contact the generator for further directions and shall revise the manifest according to the generator's instructions.
- 4301.11 A transporter of hazardous waste shall keep a copy of the manifest signed by the generator, himself or herself, and the next designated transporter or the owner or operator of the

designated facility for a period of three (3) years from the date the initial transporter accepted the hazardous waste.

- 4301.12 For shipments delivered to the designated facility by water (bulk shipment), each water (bulk shipment) transporter shall retain a copy of the shipping paper containing all the information required in §4301.5(b) for a period of three (3) years from the date the initial transporter accepted the hazardous waste.
- 4301.13 For shipments of hazardous waste by rail within the United States:
  - (a) The initial rail transporter shall keep a copy of the manifest and shipping paper with all the information required in §4301.6(b) for a period of three (3) years from the date the initial transporter accepted the hazardous waste; and
  - (b) The final rail transporter shall keep a copy of the signed manifest (or the shipping paper if signed by the designated facility instead of the manifest) for a period of three (3) years from the date the initial transporter accepter the hazardous waste.
- 4301.14 Intermediate rail transporters are not required to keep records pursuant to these regulations.
- 4301.15 A transporter who transports hazardous waste out of the United States shall keep a copy of the manifest, which indicates that the hazardous waste left the United States for a period of three (3) years from the date the initial transporter accepted the hazardous waste.
- 4301.16 The periods of retention referred to in §4301 are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Director.

### 4302 HAZARDOUS WASTE DISCHARGES

- 4302.1 In the event of a discharge of hazardous waste during transportation, the transporter shall take appropriate immediate action to protect human health and the environment (for example, notify local authorities, dike the discharge area).
- 4302.2 If a discharge of hazardous waste occurs during transportation and an official (District or a Federal Agency) acting within the scope of his or her official responsibilities determines that immediate removal of the waste is necessary to protect human health or the environment, that official may authorize the removal of the waste by transporters who do not have EPA identification numbers and without the preparation of a manifest.
- 4302.3 An air, rail, highway, or water transporter who has discharged hazardous waste shall:
  - (a) Give notice, if required by 49 CFR 171.15, to the National Response Center (800-424-8802 or 202-426-2675);
  - (b) Report in writing as required by 49 CFR 171.16 to the Director, Office of Hazardous Materials Regulations, Materials Transportation Bureau, Department of Transportation, Washington, DC 20590; and

- (c) Send a copy of the report required by §4302.3(b) to the Department of Health, Environmental Health Administration, Hazardous Waste Management Division, 51 N Street, N.E., 3rd Floor, Washington DC 20002.
- 4302.4 A water (bulk shipment) transporter who has discharged hazardous waste shall give the same notice as required by 33 CFR 153.203 for oil and hazardous substances.
- 4302.5 A transporter shall clean up any hazardous waste discharge that occurs during transportation or take any action as may be required or approved by Federal or District officials so that the hazardous waste discharge no longer presents a hazard to human health or the environment.

#### 4303 HAZARDOUS WASTE TRANSFER FACILITY PERMIT

- 4303.1 A transporter, or an owner or operator of a hazardous waste transfer facility shall not hold, maintain or store hazardous waste at a transfer facility in the District without first obtaining a Hazardous Waste Transfer Facility Permit.
- 4303.2 Any person required to obtain a Hazardous Waste Transfer Facility Permit pursuant to \$4300.11 shall submit a completed application on the form prescribed by the Department, with requested attachments, which shall contain, at a minimum, the following information:
  - (a) The name, address and phone number of the owner of the hazardous waste transfer facility, including any registered agent. if a corporation:
  - (b) The name, address and phone number of the operator(s) of the hazardous waste transfer facility, if different from the owner;
  - (c) The name under which the facility will operate;
  - (d) The location of the facility;
  - (e) A listing of the types of waste to be held at the transfer facility;
  - (f) An estimate of the quantity of waste to be handled at the facility on a daily and annual basis;
  - (g) A description of the methods that will be used to measure and record the quantity and number of drums of hazardous waste coming into and leaving the facility each day including copies of forms that will be maintained by the facility to track how long any container of waste has remained at the facility;
  - (h) A description of hazardous waste management practices to be used at the facility, including any sorting, separating, transferring of drums, mixing, loading, unloading or other operations to be conducted at the facility;
  - (i) A copy of engineering plans and specifications for the proposed or existing hazardous waste transfer facility prepared and signed by a professional engineer anthorized to do business in the District, including:

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- (1) A site plan designating the property boundaries and showing all existing and proposed structures, roads and parking areas;
- (2) Drawings of buildings and other structures located on the site upon which the hazardous waste transfer facility is situated, showing the type of construction, and the layout and dimensions for unloading, loading, and storage and any other operations conducted at the facility;
- (3) Drawings/map showing the location and dimension of major equipment, facilities and containers where hazardous waste will be held within each structure; and
- (4) A map of the facility showing the location and dimensions of all fences, all entrances and exits, all surveillance devices, all guard stations, and all telephones and other communications devices demonstrating compliance with the requirements of §§4403.7 through 4403.9;
- (j) A copy of the inspection schedule and procedures for the facility required pursuant to \$4404;
- (k) A description of training program for facility personnel and training records pursuant to §4405;
- (1) A list of all current employees and managers, their positions and duties;
- (m) Documentation of precautions taken to prevent ignition or reaction of ignitable or reactive waste in compliance with §4406;
- A description of preparedness and prevention equipment and plans compliance with §4409;
- (0) A copy of the contingency plan and emergency preparedness procedures for the facility as required by §4410:
- (p) Demonstration of compliance with or ability to comply with §§4412, 4415 and 4416;
- (q) A list of all vehicles used for transportation of the listed wastes;
- (r) Demonstration of compliance with federal insurance requirements located at 49 CFR Part 387;
- (s) A list of authorized TSD facilities that have agreed to accept wastes held at the facility;
- (t) A copy of any EIS screening form the applicant may be required to prepare;
- (u) An approved application for an Environmental Mitigation Closure Performance Bond to be issued to the facility and running to the District of Columbia in the sum of one million dollars (\$1,000,000) per occurrence;
- (v) A copy of an insurance policy or policies issued to the facility providing coverage for injuries to persons or property arising from any act, omission or default of the owner

or operator of the facility or their agents or employees, in the operation of the hazardous waste transfer facility in the sum of at least one million dollars (\$1,000,000) per occurrence;

- (w) The DUNS numbers for the owner and operator of the hazardous waste transfer facility;
- (x) A Certificate of Good Standing from the Corporations Division of the Department of Consumer and Regulatory Affairs, Business Regulation Administration, if the owner or operator is a corporation;
- (y) The owner's and operator's Federal tax identification numbers;
- (z) A certification from the Office of Tax and Revenue establishing that the owner or operator is registered as a business in the District;
- (aa) Copies of all certificates of occupancy issued for the facility;
- (bb) Copies of all other current environmental permits or endorsements the applicant holds;
- (cc) Payment of the required initial processing fee as set forth in §4303.20; and
- (dd) Any other information the Director requires.
- 4303.3 Upon receipt of an application for a Hazardous Waste Transfer Facility Permit, the Director shall review the application for completeness.
- 4303.4 If the application is not complete, the Director shall return the application within 30 days and inform the applicant in writing of the specific portions of the application that are incomplete or deficient and of any documents that are missing, and shall give the applicant a date certain (not less than 10 days later) by which the application with all required documentation shall be completed. If the application is not completed within the time provided, the application shall be deemed withdrawn by the applicant.
- 4303.5 Once the application is deemed complete by the Director, the applicant shall be informed in writing that the full application fee as described in §4303.20 shall be paid before the Department can further process the application.
- 4303.6 If an application for a new Hazardous Waste Facility Permit meets the requirements for completeness, the Director shall publish a notice in the <u>DC Register</u>, which either contains a detailed summary of the information provided in the application or a statement of where the application can be reviewed.
- 4303.7 Public comments concerning an application shall be submitted in writing to the Director within thirty (30) days following publication of the notice provided for in §4.303.6.
- 4303.8 A copy of the <u>DC Register</u> notice shall be mailed to the Advisory Neighborhood Commission whose area would be affected by the approval or denial of the application.
- 4303.9 To be considered, the comments of the affected Advisory Neighborhood Commission shall be received by the Director within thirty (30) days from the date the notice was sent.

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- 4303.10 A copy of the DC Register notice shall also be mailed to the DC Fire Department, the Department of Public Works, the Zoning Commission, the Office of Tax and Revenue and the Department of Consumer Regulatory Affairs together with a request that the recipients inform the Director within thirty (30) days whether the proposed facility is in compliance with applicable health, safety, zoning and licensing regulations or whether there is reason to deny approval of the application.
- 4303.11 The Director may hold a public meeting to receive comments from the local community concerning the application, and any terms or conditions under which the facility should operate if the application is granted. The Director may require the applicant to attend the meeting to respond to questions.
- 4303.12 After receiving comments from the public, the Advisory Neighborhood commission and other District agencies, the Director may require the applicant to submit additional information necessary for the Director to determine if the application should be granted.
- 4303.13 The applicant shall be provided at least ten (10) days to respond to a request for more information. If the applicant fails to respond, the Director shall make a decision on the application based on the existing application and written comments on the application.
- 4303.14 For a Hazardous Waste Transfer Facility Permit to be granted, the Director shall consider whether the facility will meet the following requirements:
  - (a) The General Facility Standards for owners and operators in §§4403.7 (hrough 4407.3, 4409, 4410, 4412, 4415 and 4416 with respect to the storage of those wastes;
  - (b) Construction and operation of the facility will be in compliance with all applicable District environmental, health, safety, zoning and licensing laws and regulations;
  - (c) There is a valid Certificate of Occupancy for the premises that describes the use of the facility as a hazardous waste transfer facility;
  - (d) The facility has met applicable federal insurance requirements located at 49 CFR Part 387;
  - (e) Any required EIS has been satisfactorily performed and commented on in compliance with the Environmental Policy Act Regulations;
  - (f) The facility has the required Environmental Mitigation Closure Performance Bond and insurance policy as required by §§4303.2(u) and (v); and
  - (g) The required application fee has been paid.
- 4303.15 If the Director determines that the applicant has met all the requirements set forth in §4303.14, the Director shall issue a Hazardous Waste Transfer Facility Permit to the applicant.
- 4303.16 If the Director determines that the application does not satisfy the requirements of §4303.14, the Director shall provide the applicant with a written decision denying the application that

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states the grounds for the denial, including a description of the condition, deficiency or violation of law that formed the basis for the denial.

- 4303.17 The applicant may provide the Director with written proof that the condition, deficiency or violation of law that was the basis for the denial has been cured and request reconsideration of the denial in writing by prepaid mail, return receipt requested, within ninety (90) days of the date the Director issued the decision. Requests for reconsideration pursuant to this subsection do not constitute a waiver of any appeal rights.
- 4303.18 The Director shall grant or deny a request for reconsideration within twenty (20) days of receipt of the request.
- 4303.19 A Hazardous Waste Transfer Facility Permit shall be valid for three years, provided, however, that the owner of the facility submits yearly a Hazardous Waste Transfer Facility Information Update (by the anniversary of the date the permit was issued) in which he or she amends any information that has changed since the previous year or certifies that all information in the original application remains true and correct.
- 4303.20 The initial processing fee for a Hazardous Waste Transfer Facility permit, which shall accompany the initial application, shall be \$500. The full application fee, to be submitted once a completed application has been filed and reviewed, but prior to publication in the <u>DC</u> <u>Register</u> pursuant to \$4303.6, shall be an additional \$2500.
- 4303.21 Upon expiration of a three year transfer facility permit, the owner shall be required to file a new application with new attachments.
- 4303.22 A renewal application should be filed not less than 120 days before expiration of the existing permit, if the applicant wishes to continue in operation without interruption.
- 4303.23 It shall be a term of every Hazardous Waste Transfer Facility Permit issued in the District that the permit holder agrees to comply with all requirements of the HWMA and the Hazardous Waste Regulations.
- 4303.24 The Director, in his or her discretion, may incorporate more specific terms and conditions into the Hazardous Waste Transfer Facility Permit to achieve the purposes of the HWMA or the Hazardous Waste Regulations.
- 4303.25 Before acting on an application for a Hazardous Waste Transfer Facility Permit, the Director may enter and inspect the premises where hazardous waste is to be held, maintained or stored (pursuant to §§4002 or 4003) to ensure compliance with the Act and these regulations.
- 4303.26 The Director may commence action to suspend or revoke a Hazardous Waste Transfer Facility Permit pursuant to §4008, the applicable provisions of Chapter 40, and §10 of HWMA.

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