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NOTE: Italicized terms are specifically defined at Tennessee Rule 0400-11-01-.01(2).

**EFFECTIVE DATE:** 12/12/22

**SIGNATURES:** 

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#### A. PURPOSE

This guidance has been prepared by the Tennessee Department of Environment and Conservation (TDEC), Division of Solid Waste Management (DSWM), to identify prohibited or restricted wastes and to assist individuals who seek information about the DSWM's special waste program. This document is not regulation but is instead guidance intended primarily to assist *solid waste* generators in identifying prohibited or restricted wastes and the *special wastes* they generate and the information to be submitted with the Special Waste Application. It also clarifies the potential outcomes from the DSWM's evaluation of such applications.

## B. BACKGROUND

T. C. A. § 68-211-102(b) states in part that "the general assembly declares that it is the policy of this state to ensure that no hazardous waste, as regulated under chapter 212 of this title, is disposed of in a solid waste disposal facility" and calls on the Division of Solid Waste Management (DSWM) to develop inspection programs that include "waste streams, baled waste and special waste generators and transporters to prevent the introduction of hazardous waste into solid waste disposal facilities." Special wastes are broadly defined in Solid Waste Rule 0400-11-01-.01(2) as "solid wastes that are either difficult or dangerous to manage and may include sludges, bulky wastes, pesticide wastes, medical wastes, industrial wastes, hazardous wastes which are not subject to regulations under Rules 0400-12-01-.03 through 0400-12-01-.07, liquid wastes, friable asbestos wastes, and combustion wastes." Except as may be specifically allowed in the facility's permit, the operator of a solid waste processing or disposal facility may not accept any special waste unless and until specifically approved to do so by the DSWM pursuant to the Special Waste Approval Process set forth in Solid Waste Rule 0400-11-01-.01(4). To obtain such approval, the special waste generator is required by Solid Waste Rule 0400-11-01-.01(4)(c)1 to submit a waste-specific Special Waste Application (Form CN-1051) to the DSWM for evaluation. The DSWM may deny such application or issue a conditional approval allowing such waste to be processed or disposed at the identified facility.

It is also important and relevant to note that Hazardous Waste Rule 0400-12-01-.03(1)(b) requires generators of *solid wastes* (which includes *liquid wastes* and compressed gases) to make determinations for each such waste as to whether it is a *hazardous waste* pursuant to Rule 0400-12-01-.02. The DSWM has developed a Hazardous Waste Determination Matrix, found at the following website, to assist generators in making a *hazardous waste* determination: <a href="https://www.tn.gov/environment/program-areas/solid-waste/hazardous-waste-management/hw-determination-matrix.html">https://www.tn.gov/environment/program-areas/solid-waste/hazardous-waste-management/hw-determination-matrix.html</a>

The above-referenced rule requires a waste generator to determine whether his/her waste is excluded from being a *solid waste* or *hazardous waste*, meets a *hazardous waste* listing description, or meets a *hazardous waste* characteristic. In doing so, the generator may use (1) his/her knowledge of the waste, the process(es) that generated it, and the material inputs into the process(es); and/or (2) the results of certain testing prescribed by the regulations. Please refer to Chapter Nine of EPA SW-846 regarding sampling waste found at <a href="https://www.epa.gov/hw-sw846/chapter-nine-sw-846-compendium-sampling-plans">https://www.epa.gov/hw-sw846/chapter-nine-sw-846-compendium-sampling-plans</a> Typically, the generator will utilize a combination of these methods – using his/her knowledge to determine whether an exclusion or *hazardous waste* listing applies to the waste and whether any of the *hazardous waste* characteristics could apply to the waste, and then

testing representative samples of the waste to determine whether the potentially applicable *hazardous waste* characteristics do indeed apply. See also Section J below concerning the special "TCLP Analysis" required to determine if a waste exhibits the Toxicity Characteristic.

When making such determinations, and particularly when collecting representative samples for testing, the generator must consider the variability of the generating process(es) and raw material inputs on the chemical constituency of the waste stream. The generator should also not rely too heavily on Safety Data Sheets and Specification Sheets provided by its raw material suppliers in identifying the *hazardous waste* constituents that might be present in the waste. As described in Section H below, such information may not be sufficiently detailed. The key item to take from this excerpt is that the generator must ensure that his/her determination is correct, as an incorrect hazardous waste determination could result in the generator having to pay substantial penalties for non-compliance as well as the costs for removal of the waste from a solid waste landfill.

The Hazardous Waste Rules further require generators to document their *hazardous waste* determinations and retain such records. While the rule only requires generators to retain such records for wastes that are determined to be *hazardous wastes*, the DSWM strongly encourages waste generators to retain records for each of their waste streams documenting whether the waste is a *hazardous waste* or a non-hazardous *solid waste*. Such records not only clearly demonstrate compliance with Hazardous Waste Rule 0400-12-01-.03(1)(b) but will typically be very useful in preparing a Special Waste Application.

It must be noted that the DSWM's approval of a *special waste* for management at a *solid waste* processing or disposal facility does not mean that the *operator* of such facility must accept the *special waste*. Most *operators* implement their own separate waste evaluation and acceptance programs. The *special waste* generator must therefore contact and obtain separate approval from the *operator* of the *solid waste processing* or *disposal facility* before sending a *special waste* to such facility.

Tennessee's Solid Waste Processing and Disposal regulations (Rule Chapter 0400-11-01) and Hazardous Waste Management regulations (Rule Chapter 0400-12-01), along with the DSWM policies and guidance, can be accessed via the following website: <a href="https://www.tn.gov/environment/program-areas/solid-waste/sw-regulations.html">https://www.tn.gov/environment/program-areas/solid-waste/sw-regulations.html</a>.

## C. WASTE CATEGORIES REQUIRING EVALUATION AS POTENTIAL HAZARDOUS WASTES

T. C. A. § 68-211-102(b) states, "it is the policy of this state to ensure that no *hazardous waste*, as regulated under chapter 212 of this title, is disposed of in a solid waste disposal facility." [Note: Chapter 212 is the statutory authority for Tennessee's Hazardous Waste Rules.] Therefore, and as made clear in the section above, the evaluation of a *special waste* by either the generator or the DSWM should begin by determining whether the *solid waste* at question is a *hazardous waste*. Potentially *hazardous wastes* include, but are not limited to, the following non-domestic (non-household) wastes:

1. Combustion wastes – Bottom ash and residues from the burning of materials other than natural wood wastes (untreated and unpainted) and *landscaping and clearing wastes* (Note: Fly ash captured by air pollution control devices such as baghouses are considered a *sludge* – see item (r) below.)

- 2. Commercial chemical products or manufacturing chemical intermediates and off-specification versions of such products or intermediates (See Section I below.);
- 3. Contaminated environmental media (water, soil, and/or rock) and debris resulting from the cleanup of a spill or release of a petroleum product or hazardous material (Note: Hazardous material would include any other waste identified in this section.)<sup>1</sup>;
- 4. Wastes containing cyanide (e.g. quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process);
- 5. Distillation bottom wastes;
- 6. Pesticide wastes which means waste from the use, or preparation for use, of a substance or mixture of substances intended for destroying, preventing, repelling, or otherwise controlling plant or animal pests. The term pesticide is a generic term which includes herbicides, insecticides, fungicides, rodenticides, miticides, etc. Pesticide wastes include, but are not necessarily limited to, unused pesticide product, leftover mixed material, tanks and equipment rinsate, containers (excluding properly rinsed containers), and other residues of pesticide;
- 7. Pharmaceutical wastes including wastes from veterinary pharmaceutical production;
- 8. Plating bath wastes;
- 9. *Sludge* which means any solid, semi-solid, or *liquid waste* generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility, exclusive of the treated effluent from a wastewater treatment plant; and/or,
- 10. Wastes that contain, as an unreacted constituent, one or more of the organic solvent compounds included in the listed wastes F001 through F005 found in Hazardous Waste Rule 0400-12-01-.02(4)(b)1. These constituents include: acetone, benzene, carbon disulfide, carbon tetrachloride, chlorobenzene, chlorinated fluorocarbons, cresols, cresylic acid, cyclohexanone, ethyl acetate, ethyl benzene, ethyl ether, 2-ethoxyethanol, isobutanol, methanol, methylene chloride, methyl ethyl ketone, methyl isobutyl ketone, n-butyl alcohol, nitrobenzene, 2-nitropropane, orthodichlorobenzene, pyridine, tetrachloroethylene, toluene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethylene, trichlorofluoromethane, 1,1,2-trichloro-1,2,2-trifluoroethane, and xylene. EPA guidance regarding solvents may be found at: Solvents in the Workplace How to Determine if They Are Hazardous Waste (epa.gov)
- 11. Wood preserving wastes;
- 12. Organic chemical production wastes;
- 13. Inorganic chemical production wastes;
- 14. Wastes from the production of explosives;
- 15. Petroleum refinery wastes;
- 16. Spent potliners from primary aluminum reduction;
- 17. Wastes from secondary lead smelters; and
- 18. Wastes from coking.

For the above waste categories, and for many others, the generator is required to determine whether the waste meets the Hazardous Waste Toxicity Characteristic set forth at Hazardous Waste Rule 0400-12-01-.02(3)(e). This will require the generator to have one or more representative samples of the waste submitted to an analytical lab where the sample(s) will first be subjected to the Toxicity Characteristic Leaching Procedure ("TCLP") to produce a simulated leachate (the TCLP extract). This TCLP extract must then be tested by certain specified methods to determine if concentrations of the toxic *hazardous waste* constituents from Table 1 in the rule might reasonably be expected to be in the waste. The measured concentrations must then be compared to the regulatory levels presented in

Table 1 to determine if the waste meets the Toxicity Characteristic and is therefore a *hazardous waste*. See also Section J below.

## D. PROHIBITED OR RESTRICTED SOLID WASTES

In addition to *hazardous wastes*, there are other solid wastes for which management in a *solid waste processing* or *disposal facility* is prohibited or restricted. These include, but are not necessarily limited to:

- 1. Waste materials that contain polychlorinated biphenyls (PCBs)<sup>2</sup> which are subject to regulation under the Toxic Substances Control Act;
- 2. Wastes that contain source, special nuclear, or by-product material as defined by the federal Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.);
- 3. Other radioactive waste materials that require special management under regulations promulgated by the U.S. Department of Energy, the U.S. Nuclear Regulatory Commission, or the Tennessee Division of Radiological Health (DRH).
- 4. Liquid wastes are prohibited from disposal in a solid waste disposal facility except in very limited situations set forth at Solid Waste Rule 0400-11-01-.04(2)(k)2. However, some solid waste processing facilities are authorized to receive and process certain liquid wastes pursuant to permit-by-rule conditions established in Solid Waste Rule 0400-11-01-.02(2) and/or by special waste approvals processed under Solid Waste Rule 0400-11-01-.01(4)(c). Some such facilities process liquid wastes by solidification/stabilization processes to render a physically solid special waste that can be approved via Rule 0400-11-01-.01(4)(c) for disposal in a permitted solid waste disposal facility.
- 5. *Medical wastes*<sup>4</sup> are generally prohibited from management in a *solid waste processing* or *disposal facility*. As specified in Solid Waste Rule 0400-11-01-.04(2)(k)4, however, certain types of *medical wastes* can be disposed in a *solid waste disposal facility* only after treatment to render them non-infectious or, in the case of *sharps*, if they have been securely packaged in a puncture-proof container. Some *solid waste processing facilities* may be authorized to receive and process certain types of *medical wastes* pursuant to permit-by-rule conditions established in Solid Waste Rule 0400-11-01-.02(2) and/or by special waste approvals processed under Solid Waste Rule 0400-11-01-.01(4)(c).
- 6. As specified in Solid Waste Rule 0400-11-01-.04(2)(k)3, whole tires cannot be disposed of in a *disposal facility*.

## E. OTHER SPECIAL WASTE CHARACTERISTICS

In addition to potentially being a hazardous waste or one of the prohibited or restricted solid wastes identified in Section D above, there are other characteristics that can make a solid waste a special waste. There are other characteristics distinctive to certain non-domestic (non-household) waste that can make them potentially difficult or dangerous to manage and therefore are also included in the definition of special wastes in Rule 0400-11-01-.01(2). In this context, "difficult or dangerous to manage" can include wastes which require special restrictions for receipt including special scheduling of shipments, or special handling upon receipt, as well as wastes which could pose more long-term problems relating to landfill stability, gas generation, fugitive gas emissions, and leachate management. All such wastes identified by the DSWM require Special Waste approval before managing at a permitted solid waste processing or disposal facility and thus typically require the

submittal of a Special Waste Application. Below are listed several examples of wastes which are typically considered special wastes because they can be difficult or dangerous to manage, but the DSWM can also identify wastes based on the characteristics of the targeted receiving facility as well as the characteristics of the waste itself:

- 1. Wastes that are dangerous and/or difficult to manage because of potential risks they pose to facility personnel and perhaps others during unloading, processing, or disposal (e.g., friable asbestos wastes<sup>3</sup>, large amounts of fine dust wastes, wastes that react with water to create toxic or asphyxiating gases, wastes that are delivered to the landfill at elevated temperatures, wastes that emit significant volatile organics at ambient conditions, etc.);
- 2. Wastes that are dangerous and/or difficult to manage because of problems during processing or after disposal (e.g., waste which are corrosive or otherwise unusually damaging to landfill equipment or materials, wastes which react with water to create heat and gases such as aluminum dross waste may be affected by moisture in cover material or other media);
- 3. Wastes that are dangerous and/or difficult to manage because the amount or type of waste requires special operational considerations or conditions (e.g., wastes that are delivered to the landfill at harmful temperatures, requires deviation from normal operations, such as bulky waste, or requires specialized equipment that is not listed in the facility's permit);
- 4. Medical wastes<sup>4</sup>;
- 5. Waste containing PCBs<sup>2</sup>;
- 6. Solvent-contaminated wipes, as defined in Hazardous Waste Rule 0400-12-01-.01(2)(a), that are conditionally excluded from being a *hazardous waste* under Hazardous Waste Rule 0400-12-01-.02(1)(d)2(xviii);
- 7. Wastes that require a Toxicity Characteristic Leaching Procedure (TCLP) analysis (see "ELABORATING ON WASTES REQUIRING A TCLP ANALYSIS" below in Section J);
- 8. Wastes subject to regulation by the U.S. Department of Energy, Nuclear Regulatory Commission, and/or the Tennessee Division of Radiological Health (DRH) (including but not necessarily limited to Bulk Survey for Release Wastes and Technologically-Enhanced Naturally Occurring Radioactive Materials)<sup>5</sup> "[In order for a Special Waste Application for these wastes to be considered for approval, it must include a copy of the license (or appropriate portions) as required by DRH and issued by DRH authorizing the dispose of the specific radioactive waste containing radioactive material identified in Special Waste Application in specific proposed disposal facility.];
- 9. Wastes that were *hazardous wastes* and because of treatment are no longer *hazardous wastes*. (Note: Even though a waste may no longer be a *hazardous waste*, the waste must meet the Land Disposal Restriction requirements/standards of Hazardous Waste Rule 0400-12-01-.10 in order to be disposed of in a landfill.); and,
- 10. Wastes the DSWM or the permitted facility determines are otherwise difficult or dangerous to manage. These include but are not limited to wastes that may affect the stability of the landfill (e.g., sludge), may have long term impacts to the facility, or require special handling, initial management, or restrictions (e.g., volume of special waste included in the application is greater than 20 percent of the waste the facility normally manages).

#### F. SPECIAL WASTE EVALUATION OUTCOMES

The following are the three possible outcomes from the review of Special Waste Applications (Note: The fee for the *special waste* application/evaluation is not refundable no matter which determination is made by the DSWM.):

- 1. The DSWM determines, based on the information/data received by the DSWM, that the waste at question is a *special waste* but cannot be managed at the targeted Tennessee solid waste *processing or disposal facility* for one or both of the following reasons: (1) the DSWM has determined that management of the waste at the facility is prohibited or restricted by a law or regulation (e.g., the waste is a *hazardous waste* or listed in Section D above); or (2) the DSWM has determined that the waste is too dangerous or difficult for the targeted facility to safely or effectively manage it (e.g., safely handling the waste would require specialized equipment that the facility cannot provide, or managing the waste is likely to create gas than the facility is not designed to manage). The DSWM will issue a Special Waste Denial Letter in which the reason(s) for the denial will be specifically described along with instructions on how to appeal the denial.
- 2. The DSWM determines, based on the information/data received by the DSWM, that the waste at question is (1) not prohibited from management at the targeted facility by law or regulation (e.g., not a hazardous waste or listed in Section D above); and (2) does not meet any of the Special Waste Characteristics and is not otherwise too difficult or dangerous for the targeted facility to safely and effectively manage. The DSWM will issue a Non-Special Waste Letter stating:
  - a) The Non-Special Waste determination is typically only valid for the permitted Tennessee solid waste *processing or disposal facility* listed in the application. However, for some truly benign waste streams, the DSWM may make the determination applicable to other facilities.
  - b) The Non-Special Waste determination is valid only as long as the characteristics of the waste do not change due to any changes in the process generating the waste or the process inputs, or any other changes in the types or amounts of materials in the waste;
  - c) The generator should maintain a copy of the Special Waste Application and the DSWM Non-Special Waste Determination Letter, along with the records required under Rule 0400-12-01-.03(5)(a)3 for review/copy by the DSWM for at least three years from the date that the waste was last sent to a Tennessee Solid Waste Permitted Facility listed in the application; and
  - d) If the characteristics of the waste change due to any changes in the process generating the waste or process inputs, or any other changes in the types or amounts of materials in the waste, then the generator must submit a new Special Waste Application in accordance with Rule 0400-11-01-.01(4)(c)4(iii) and should immediately stop shipping the waste to a Tennessee permitted facility.

- 3. The DSWM determines, based on the information/data received by the DSWM, that the waste is a *special waste* but its management at the targeted facility is not prohibited by a law or regulation (e.g., the waste is not a *hazardous waste* or listed in Section D above), and that it can be safely and effectively managed at the targeted facility. The DSWM will issue a Special Waste Approval Letter stating:
  - a) The waste must be managed as a *special waste* in accordance with the conditions specified in the letter;
  - b) The generator and the Tennessee Solid Waste Permitted Facility must each maintain a copy of the Special Waste Application and the DSWM Waste Determination Letter along with the records required under Rule 0400-12-01-.03(5)(a)3 for review/copy by the DSWM for at least three years from the date that the waste is approved to be sent to a Tennessee Solid Waste Permitted Facility;
  - c) If the characteristics of the waste change due to any changes in the process generating the waste or process inputs, or any other changes in the types or amounts of materials in the waste, then the generator must submit a new Special Waste Application and should immediately stop shipping the waste to a Tennessee permitted facility;
  - d) If the generator wishes to continue to dispose of or process the *special waste* at the Tennessee Solid Waste Permitted Facility after three years, it must submit a recertification in accordance with Rule 0400-11-01-.01(4)(c)4. Typically, laboratory reports with analytical results are submitted with each new recertification for wastes requiring analyses for *hazardous waste* determinations (e.g., TCLP analysis required wastes, etc.). Alternatively, if the generator is making the *hazardous waste* determination based on the generator's knowledge of the materials and processes utilized rather than on laboratory analyses, a record adequately documenting the basis for the generator's knowledge determination needs to be submitted. If the date of the analyses is greater than one year before the original approval date **OR** the last recertification date, whichever is the most recent, then new analyses need to be submitted in a new laboratory report **OR** a statement adequately justifying why the prior analyses are still representative of the waste needs to be submitted. The DSWM recommends submitting laboratory reports with analytical results that are within 365 days of the date of the recertification to help expedite the review process.

## G. LABORATORY REPORTS

In order to expedite the review process, all Laboratory Reports should include the following standard information:

- 1. Case narrative;
- 2. Sample log, with sample condition and sample preparations;
- 3. Analyses results with appropriate units, qualifiers, reporting limits suitable for numerical standard comparison, and surrogate spike results;
- 4. Quality Control results
  - a) Method blank results;

- b) Laboratory Control sample and Laboratory Control Duplicate results within the acceptable method ranges of accuracy and precision; and
- c) Matrix Spike and Matrix Spike Duplicate results within the acceptable method ranges of accuracy and precision;
- 5. Chain of Custody; and
- 6. Qualifiers and notations defined.

## H. USE OF SAFETY DATA SHEETS AND MANUFACTURER'S SPECIFICATIONS

Safety Data Sheets (SDS - formerly MSDS) and Manufacturer's Specifications can be useful in determining what constituents could be present in a waste, for making some *hazardous waste* F-listed determinations, and for identifying potential hazards. However, it must be realized that generally manufacturers are not required to identify SDS constituents – even ones that can be harmful – that are only present in the material below certain de minimus concentrations. For toxic chemicals identified as carcinogens, the de minimus level is 0.1% (equivalent to 1,000 ppm). For other toxic chemicals, the de minimus level is 1% (equivalent to 10,000 ppm). Special waste generators can thus not fully rely on SDSs to identify all toxic constituents that might be significantly present in a product and thus a waste generated from that product. However, the generator may be able to get further information by contacting the manufacturer or distributor of the product.

# I. ELABORATING ON THE SPECIAL WASTE CATEGORY "COMMERCIAL CHEMICAL PRODUCT OR MANUFACTURING CHEMICAL INTERMEDIATE AND OFF-SPECIFICATION COMMERCIAL CHEMICAL PRODUCT OR MANUFACTURING CHEMICAL INTERMEDIATE"

"Commercial Chemical Product or Manufacturing Chemical Intermediate" refers to a chemical substance which 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 materials, such as manufacturing products or process wastes that contain a chemical substance in which the chemical is not the sole active ingredient. "Off-Specification versions of such products and intermediates refers to batches of such materials which were produced but which do not meet specifications for marketing or use. The DSWM is primarily interested in such chemicals that are identified as hazardous wastes at Hazardous Waste Rule 0400-12-01-.02(4)(d)5 and 6. However, any Commercial Chemical Product or Manufacturing Chemical Intermediate, or off-specification versions thereof, that a generator seeks to send as a waste (other than residual quantities in emptied containers) to a permitted solid waste processing or disposal facility in Tennessee would be considered a special waste.

## J. ELABORATING ON WASTES REQUIRING TCLP ANALYSIS

"Wastes Requiring TCLP Analysis" are defined as solid wastes that must be analyzed to determine if they exhibit the *hazardous waste* Toxicity Characteristics using the Toxicity Characteristic Leaching Procedure (TCLP), Test Method 1311 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," *EPA Publication SW-846*. A solid waste exhibits the characteristic of toxicity and is a *hazardous waste* under Hazardous Waste Rule 0400-12-01-.02(3)(e) if the **TCLP extract** from a representative sample of the waste contains any of the contaminants listed in Table 1 below at the

concentration equal to or greater than the Regulatory Limit (mg/L) in column 3. TCLP analysis is not required if the generator has:

- Adequate knowledge to demonstrate and/or total analysis (EPA Publication SW-846 Test Method 1311) of the solid waste to demonstrate that none of the contaminants is at a total concentration (mg/kg for solid waste that contains no filterable liquids) such that the waste could exhibit the characteristic of toxicity by exceeding the Regulatory Level in the Table 1; or
  - (Note: Because the TCLP method dilutes the sample for solid waste that contains no filterable liquids by 20, if the **total** concentration (mg/kg) of a contaminant from the analysis of a representative sample is less than the value listed in column 4, then the regulatory level in column 3 could not be exceeded for that contaminant.);
- 2. Adequate knowledge with appropriate documentation that the concentration (mg/L) of a contaminant in the **TCLP extract** from analysis of a representative sample could not equal or exceed the Regulatory Level listed in column 3;

(Note: For solid waste that contains less than 0.5 percent filterable solids, the remaining liquid after filtering under the methodology outlined in *EPA Publication SW-846* Test Method 1311 is considered to be the **TCLP extract**.)

If the characteristics of a waste change due to any changes in the process generating the waste and/or any changes in the types or amounts of materials in the waste, both a new *hazardous waste* determination under Rule 0400-12-01-.03(1)(b) and the submittal of a new *Special Waste* Application are required.

## **FOOTNOTES**

- <sup>1</sup> Other DSWM policies or guidance may apply, including DSWM Guidance Number 026 concerning Petroleum Contaminated Soil, DSWM Guidance SWM-HWP-G-001 concerning Hazardous Waste Determinations, and the rules and statutes cited therein.
- Please refer to DSWM Guidance Numbers 025, 111, and 113 concerning PCBs and the rules and statutes cited therein, and EPA's October 24, 2012, memo addressing PCB Bulk Product Waste Reinterpretation.
- <sup>3</sup> Please refer to DSWM Guidance Numbers 043, 087, and 118 concerning Friable Asbestos and the rules and statutes cited therein.
- <sup>4</sup> Please refer to DSWM Guidance Number 016 concerning Medical Waste and the rules and statutes cited therein.
- <sup>5</sup> Please refer to DSWM Policy Number 126 concerning the Memorandum of Agreement between the Division of Radiological Health and DSWM and the rules and statutes cited therein.

(Notes: DSWM Policy Number 013 addresses *special waste* from outside the State of Tennessee. Based on present travel regulations, DSWM staff may travel up to 50 miles from the Tennessee Stateline to inspect *special waste* generation.)

TABLE 1						
1	4	5				
Contaminant	CAS No.	Regulatory Level <sup>B</sup> (mg/L)	20 Times the Regulatory Level for Totals Concentrations (mg/kg) in Solids	Hazardous Waste Code if Applicable		
Arsenic	7440-38-2	5.0	100	D004		
Barium	7440-39-3	100.0	2000	D005		
Benzene	71-43-2	0.5	10	D018		
Cadmium	7440-43-9	1.0	20	D006		
Carbon tetrachloride	56-23-5	0.5	10	D019		
Chlordane	57-74-9	0.03	0.6	D020		
Chlorobenzene	108-90-7	100.0	2000	D021		
Chloroform	67-66-3	6.0	120	D022		
Chromium	7440-47-3	5.0	100	D007		
o-Cresol <sup>c</sup>	95-48-7	200.0	4000	D023		
m-Cresol <sup>c</sup>	108-39-4	200.0	4000	D024		
p-Cresol <sup>c</sup>	106-44-5	200.0	4000	D025		
Cresol <sup>c</sup>		200.0	4000	D026		
2,4-D	94-75-7	10.0	200	D016		
1,4-Dichlorobenzene	106-46-7	7.5	150	D027		
1,2-Dichloroethane	107-06-2	0.5	10	D028		
1,1-Dichloroethylene	75-35-4	0.7	14	D029		
2,4-Dinitrotoluene <sup>D</sup>	121-14-2	0.13	2.6	D030		
Endrin	72-20-8	0.02	0.4	D012		
Heptachlor (and its epoxide)	76-44-8	0.008	0.16	D031		
Hexachlorobenzene D	118-74-1	0.13	2.6	D032		
Hexachlorobutadiene	87-68-3	0.5	10	D033		
Hexachloroethane	67-72-1	3.0	60	D034		
Lead	7439-92-1	5.0	100	D008		
Lindane	58-89-9	0.4	8	D013		
Mercury	7439-97-6	0.2	4	D009		
Methoxychlor	72-43-5	10.0	200	D014		
Methyl ethyl ketone	78-93-3	200.0	4000	D035		
Nitrobenzene	98-95-3	2.0	40	D036		
Pentachlorophenol	87-86-5	100.0	2000	D037		
Pyridine <sup>D</sup>	110-86-1 3	5.0	100	D038		
Selenium	7782-49-2	1.0	20	D010		
Silver	7440-22-4	5.0	100	D011		
Tetrachloroethylene	127-18-4	0.7	14	D039		
Toxaphene	8001-35-2	0.5	10	D015		

TABLE 1						
1	<b>2</b> <sup>A</sup>	3	4	5		
Contaminant	CAS No.	Regulatory Level <sup>B</sup> (mg/L)	20 Times the Regulatory Level for Totals Concentrations (mg/kg) in Solids	Hazardous Waste Code if Applicable		
Trichloroethylene	79-01-6	0.5	10	D040		
2,4,5-Trichlorophenol	95-95-4	400.0	8000	D041		
2,4,6-Trichlorophenol	88-06-2	2.0	40	D042		
2,4,5-TP (Silvex)	93-72-1	1.0	20	D017		
Vinyl chloride	75-01-4	0.2	4	D043		

<sup>&</sup>lt;sup>A</sup> Chemical abstracts service number.

## **REVISION HISTORY TABLE**

Revision Number	Date	Brief Summary of Change
0	05/16/16	Initial
1	12/12/22	Updated to be consistent with BOE Policy and to make the document more user friendly. Items 11 through 18 have been added on page 4 to include K listed hazardous waste. There have been several clarifications made including evaluation outcomes, use of safety data sheets, and TCLP Analyses. Sections D and G have been added to include information on Prohibited or Restricted Wastes and Laboratory Reports, respectively.

<sup>&</sup>lt;sup>B</sup> See Table 1 in Hazardous Waste Rule 0400-12-01-.02(3)(e).

<sup>&</sup>lt;sup>c</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 and 20 times the regulatory level of total cresol is 4000 mg/l.

<sup>&</sup>lt;sup>D</sup> Quantitation limit is greater than the calculated regulatory level. The quantitation limit, therefore, becomes the regulatory level.