Summary of Comments and Responses Concerning the Draft Revised Special Waste Guidance Noticed December 3, 2021, on the web page of the Tennessee Department of Environment and Conservation (TDEC) Bureau of Environment (BOE) Date December 1, 2022

The Division of Solid Waste Management (DSWM) staff appreciate the time individuals committed to review and comment on the Draft Revised Special Waste Guidance.

Please note the following important information:

- 1. The original Special Waste Guidance (SWG) was issued on May 13, 2016, by the DSWM.
- 2. The BOE issued a Policy on Developing Policy and Guidance on August 3, 2017 (revised on November 27, 2017).
- 3. The DSWM decided to revise the initial SWG to provide addition guidance for clarification, make it more user friendly, and be consistent with the BOE Policy on Policies and Guidance.
- 4. DSWM staff briefed the Underground Storage Tanks and Solid Waste Disposal Control Board on the proposed revised SWG at their meeting that was open to the public on December 1, 2021, and stated that the revised SWG would be posted on the BOE web page for a 30-day comment period for all interested persons. The comment period ended January 7, 2022.
- 5. The DSWM modified the purpose of the SWG on page 2 for additional clarity to read as:

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.

The DSWM determined that it is very important to point out that the guidance does identify prohibited or restricted wastes.

6. DSWM is actively upgrading its special waste tracking systems to allow for public access through the dataviewers with DSWM's goal to have this in place before July 2023.

The DSWM received three sets of comments and those have been included in two groups as follows: 1) Comments Specifically Addressing the Draft Updated SWG (on pages 3 and 4); and

2) Comments Beyond the Scope of the Updated SWG (on pages 5 thru 10). Please note that the "Comments Beyond the Scope of the Updated SWG" are presented as the item provided by the commenter(s) and do not summarize the numerous comments under the item. Responses are provided to each item of the "Comments Specifically Addressing the Draft Updated SWG." Since the "Comments Beyond the Scope of the Updated SWG (on pages 5 thru 10)" are not specific to the purpose of the SWG and are very broad, the responses are limited.

Key for comments -

Comment (1) - Represents comments included in a January 5, 2022, email from Dwight Hinch

Comment (2) - Represents comments included in a January 7, 2022, letter via email from Andy Binford

Comment (3) - Represents comments included in a January 7, 2022, letter via email from:

Sarah Houston, Protect Our Aquifer

Justin J. Pearson, Memphis Community Against Pollution

Dan Firth, Tennessee Chapter Sierra Club

Amanda Garcia, Chelsea Bowling and Daniel J. Metzger, Southern Environmental Law Center

Summary of Comments Specifically Addressing the Draft Updated Special Waste Guidance

1. Comment (1) - Page 4 – The term "Pesticide waste" in listed item 6 should be italicized since it is defined at Rule 0400-11-01-.01(2). Also suggest that this entry be revised to read "Pesticide wastes including wastes from the production of pesticides and pesticide contaminated materials from the storage, distribution, and application of pesticides but excluding materials contaminated by pesticides solely as a result of their application in accordance with label instructions." [Note: It seems that the descriptions of some other wastes included in the Part C listings could be similarly revised to clarify their scope.]

DSWM Response: The term "Pesticide waste" was italicized and the entry was revised to reflect the definition in Rule 0400-11-01-.01(2). Since there are numerous documents addressing the applicability of hazardous waste listings, the DSWM determined it was not practical to include or reference all those numerous documents in the guidance.

 Comment (1) - Page 4 – The term "Sludge" in listed item 9 should be italicized since it is defined at Rule 0400-11-01-.01(2). It would seem also appropriate to substitute the language and punctuation "Sludges – defined as" for the language "Sludge, including" at the beginning of the text.

DSWM Response: The term "Sludge" was italicized, and the entry was revised to reflect the definition in Rule 0400-11-01-.01(2).

Comment (1) - Page 5 – In the first paragraph under the heading "E. Other Special Waste Characteristics," the parenthetical Notes included after the 4th sentence should be deleted as no longer relevant in this paragraph because they are addressed under the previous heading "D. Prohibited or Restricted Solid Wastes."

DSWM Response: The DSWM agrees and made the suggested deletion.

4. Comment (1) - Page 6 – Listed items 4 (medical wastes) and 5 (waste containing PCBs) in Section "C. Waste Categories Requiring Evaluation as Potential Hazardous Wastes" should be deleted because they are addressed under the Section "D. Prohibited or Restricted Solid Wastes."

DSWM Response – The DSWM chose not to delete items 4 and 5 as it needs to remain clear that special waste applications must be submitted for these wastes and written DSWM approval is necessary prior to management at a processing or disposal facility permitted under Tennessee's Solid Waste Processing and Disposal regulations (Rule Chapter 0400-11-01).

5. Comment (1) - Page 6 – Listed item 6 should be moved to the more appropriate previous heading "D. Prohibited or Restricted Solid Wastes".

DSWM Response: The DSWM chose not to move solvent-contaminated wipes as it needs remain clear that a special waste application must be submitted for solvent-contaminated wipes as there are numerous conditions on disposal so written DSWM approval is necessary

prior to disposal in a disposal facility permitted under Tennessee's Solid Waste Processing and Disposal regulations (Rule Chapter 0400-11-01).

6. Comment (1) - Page 6 – Listed item 7 should be deleted here because wastes that are of concern because they are potentially hazardous wastes are already addressed under previous heading "C. Waste Categories Requiring Evaluation as Potential Hazardous Wastes".

DSWM Response: The DSWM chose not to make the suggested change as it needs remain clear that special wastes application must be submitted for wastes that require a Toxicity Characteristic Leaching Procedure analysis and written DSWM approval is necessary prior to management in a facility permitted under the Tennessee's Solid Waste Processing and Disposal regulations (Rule Chapter 0400-11-01).

7. Comment (1) - Page 6 – Listed item 8 should be incorporated as an example under listed item 3 instead.

DSWM Response: The DSWM chose not to make the suggested change as it needs to be clear that a special waste application must be submitted for these wastes that can be prohibited or restricted and written DSWM approval is necessary prior to management at a processing or disposal facility permitted under Tennessee's Solid Waste Processing and Disposal regulations (Rule Chapter 0400-11-01).

8. Comment (1) - Page 6 – Listed item 9 should be moved to the more appropriate previous heading "D. Prohibited or Restricted Solid Wastes".

DSWM Response: The DSWM chose not to move item 9 as it needs to be clear that a special waste application must be submitted for these wastes to ensure the applicable Land Disposal Restriction requirements/standards of Hazardous Waste Rule 0400-12-01-.10 are met and written DSWM approval is necessary prior to disposal in a facility permitted under Tennessee's Solid Waste Processing and Disposal regulations (Rule Chapter 0400-11-01).

Comments Beyond the Scope of the Draft Updated Special Waste Guidance

1. Comment (1) – Correcting/Clarifying the Status of hazardous waste from Very Small Quantity Generators ("VSQGs") formerly identified as Conditionally Exempt Small Quantity Generators ("CESQGs") until the Generator Improvement Amendments became effective in June 2021.

DSWM Response: The DSWM's position remains that T.C.A. § 68-211-102(b) prohibits the disposal of hazardous waste, including from very small quantity generators, from being disposed of in a solid waste disposal facility.

2. Comment (1) - Immediate Need for Amendment to Definition of "Special Waste" in Rule 0400-11-01-.01(2).

DSWM Response: This is under consideration and the DSWM staff will discuss with an attorney(s) with TDEC's Office of General Counsel.

3. Comment (2) – Recommendation for a Memorandum of Agreement or Memorandum of Understanding between DSWM and the Division of Radiological Health (DRH) that clearly specifies what radioactive material may be disposed in a solid waste landfill as a special waste would (1) help clarify landfill operators' potential liability and (2) provide additional clarity to TDEC personnel making special waste determinations.

DSWM Response: This is beyond the scope of any guidance, including the SWG, and would be a separate Policy. However, DSWM did add the following to the end of number 8 on page 6 of the SWG: "[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 disposal of the specific radioactive waste containing radioactive material identified in Special Waste Application in specific proposed disposal facility.]" Please note that all applications are reviewed by the DSWM, and DSWM approval is not a given.

4. Comment (2) - Ensure the Division of Water Resources (DWR) can address discharges and releases from solid waste processing facilities and landfills, it would be helpful if the list of Prohibited or Restricted Solid Waste in section D also includes: Any waste containing a radionuclide, hazardous material, pollutant, or constituent that, if discharged or released from the solid waste landfill or processing facility to surface water or groundwater, would be exempt from or otherwise not subject to the federal Clean Water Act and the Tennessee Water Quality Control Act.

DSWM Response: The DWR has the authority to address discharges into surface and ground water and the DSWM staff have and will continue to cooperate/work with the DWR staff. The DSWM did not include the suggested language in the guidance concerning discharges/releases to surface and ground water because those are regulated by DWR. Additionally, the requirement to construct, operate, maintain, and close processing facilities in such a manner to minimize the potential for releases of solid wastes or solid waste constituents to the environment except in a manner authorized by state and local air pollution control, water pollution control, and/or waste management agencies is addressed by Solid Waste Rule 0400-11-01-.02(2)(b)1(i)(I)III [page 26 of the Rules]. For disposal facilities, leachate migration control standards are addressed in Rule 0400-11-.04(4) [pages 77 thru 80]

and the ground water protection/monitoring standards are addressed in Rule 0400-11-.04(7) [pages 82 thru 98].

5. Comment (2) - For special waste disposal or processing within jurisdictions subject to the Jackson Law, any special waste disposal or processing should be consistent with the information and impacts submitted to local government(s) to secure local government(s) approval.

DSWM Response: Rule 0400-11-01-.01(4)(c) specifically addresses the requirements for the special waste approval process. If any condition(s) in a registration for the permit of a disposal facility had any specific limitations or requirements regarding special waste, then those must be complied with.

6. Comment (2) - The special waste application and approval process is not transparent to the public. It would be better if citizens could use the TDEC DSWM dataviewer to access both special waste applications and approvals.

DSWM Response: DSWM is currently updating our internal special waste application tracking database to interact with TDECs external dataviewer. Barring any unexpected technical delays, DSWM intends to have active special waste approvals available on the dataviewer before July 2023.

7. Comment (2) - Even though TDEC rules don't require public notice and comment for special waste approvals, where processing or disposal of the special waste may alter the expected impact of the facility on the public, public health, or the environment and the volume of waste requires changes in final contours, increases in capacity, changes in direction of drainage, or other changes deemed major by the Commissioner, public notice would be part of a major modification of the permit.

DSWM Response: This is beyond the scope of the updated SWG. However, Rule 0400-11-01-.02(6)(b) contains the regulatory requirements for modifications and the DSWM does follow the Rule.

8. Comment (2) - With the lack of transparency in special waste applications and approvals, it is unclear whether the Division of Water Resources (DWR) has the information and data it needs to ensure discharges from solid waste landfills and processing facilities comply with the Tennessee Water Quality Control Act (WQCA) and regulations promulgated pursuant to the WQCA.

DSWM Response: The DSWM staff have and will continue to cooperate/work with the DWR staff regarding discharges from solid waste processing facilities and landfills. Centralized TDEC Oracle databases allow DWR staff the ability to cross reference DSWM permits activity against their own. Specific DWR staff also have access to DSWM current permitting activity trackers upon request including all special waste approvals and destination landfills. Within our standard operating procedures, TDEC DSWM Central Office and Field Office staff routinely collaborate on any potential water impacts with DWR staff.

9. Comment (2) - Special wastes include those wastes that are difficult or dangerous to manage and may cause long-term problems. To help prevent future problems, it is suggested that the special waste approval process also include reevaluating financial assurance to verify funds

will be available to address long-term issues for the volume and characteristics of special wastes subject to said approval.

DSWM Response: The DSWM is aware of these concerns but those are beyond the scope of the SWG. However, the SW Rules requires financial assurance in an amount, based on 3rd party costs, that is adequate to insure proper operation, closure and post-closure care of disposal facilities. In addition, a new regulation, Rule 0400-11-01-.03(2)(c) [Rule page 50] now requires all Class I and Class II facilities must submit a new closure/post-closure care plan every 10 years from the date of the original permit or the date of approval of the most recent permit modification for an expansion. These new closure/post-closure care plan must include Itemized closure/post-closure cost estimates must be adjusted by recalculating the maximum closure/post-closure amounts in current dollars and taking into account any design changes, new monitoring points, and changes in materials in addition to other items under the most recent permit modification.

10. Comment (3) - Most of Tennessee's Class I landfills are authorized places to dispose of wastes deemed too "difficult or dangerous to manage" without specific permission from TDEC.

DSWM Response: Please refer to F.1 on page 7 of the SWG concerning the outcome from the review of Special Waste Applications if the DSWM 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 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, regulation, or policy (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.

The DSWM recognized years ago the difficulties for consistency statewide to identify: 1) Prohibited and restricted wastes: 2) Wastes that required the submittal of special waste application and approval; and 3) Information/data to be provided in a special waste application. Therefore, the DSWM developed the initial SWG (2016) and the revised SWG (2022). The DSWM also conducted internal training for staff on evaluating special waste applications.

The regulations do provide communities an opportunity to provide public input on all new application and major modifications to solid waste disposal facilities.

11. Comment (3) - The Draft Guidance should prioritize and require informed input from communities who are likely to be most affected by special waste decisions.

DSWM Response: The DSWM is aware of these concerns but those are beyond the scope of any guidance document and would require amendments to the Rules. However, the

regulations do provide communities with an opportunity to provide public input on all new and major modifications to permits for disposal facilities.

- **12. Comment (3) -** The Draft Guidance should clarify the relationship between special waste approvals and other TDEC permitting requirements.
 - A. The Draft Guidance should include the standards TDEC will use to evaluate whether the intended disposal facility indicated in a special waste application can safely manage that special waste.

DSWM Response: Standards cannot be established in guidance or policy but must be established through rule making. Rule 0400-11-01-.01(4)(c) does state that the Commissioner shall specify those management conditions which he deems necessary to prevent or minimize potential adverse impacts to public health, and the environment to promote safe and efficient facility operation. Failure to meet the required management conditions is unlawful disposal under the Tennessee Solid Waste Disposal Act. The Rules do not establish specific standards for specific special waste, but the rules do establish specific standards for classification of landfills that are taken in consideration when evaluating special waste. As one example of a specific standard for a Class I disposal facility is the requirement to have a liner and leachate collection.

B. The Draft Guidance should indicate how solid waste disposal facility permit modifications interact with special waste approvals.

DSWM Response: This is beyond the purpose of this updated SWG. DSWM does review all proposed permit modifications to evaluate compliance with all applicable Rules of CHAPTER 0400-11-01 SOLID WASTE PROCESSING AND DISPOSAL and will only grant approval once compliance is determined.

C. Draft Guidance should describe how special waste transportation plans are evaluated and include consideration of public health and environmental impacts.

DSWM Response: The DSWM has no authority to regulate the transportation of material, including waste, to ensure such is conducted in a safe manner prior to delivery to the disposal facility.