



August 25, 2014

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Via electronic mail

Ms. Gail Hansen
US Environmental Protection Agency
Office of Resource Conservation and Recovery
1200 Pennsylvania Ave., NW (5302P)
Washington, DC 20460

Dear Ms. Hansen:

The Coalition for Responsible Waste Incineration (CRWI) appreciates the opportunity to submit comments on the “Waste Analysis at Facilities that Generate, Treat, Store, and Dispose of Hazardous Waste – Draft 2; A Guidance Manual (EPA 530-R-12-001, January 2013). CRWI is a trade association comprised of 26 members.

Thank you for the opportunity to submit comments on draft 2 of this guidance manual. In general, we believe this draft has been significantly improved from the 2013 version. The Agency asked for comments on four areas in Draft 2. Each is addressed below.

If you have questions or need further information, please contact me at mel@crwi.org or 703-431-7343.

Sincerely yours,

Melvin E. Keener, Ph.D.
Executive Director

cc: CRWI members

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Specific issues

In the request for comments, EPA listed four areas where they are specifically soliciting comments. CRWI will address each. In addition, we found one typo that is identified in item 5.

1. Does Part 2 of the guidance clearly distinguish between mandatory versus recommended elements of a WAP?

CRWI believes the Agency did a good job in distinguishing the mandatory and recommended provision in a WAP. We believe that the red highlighting in the text box on page 2-3 makes it easy to distinguish which elements are required and which are recommended. In addition, the text boxes in each section reinforce that point. For example, the text box on page 2-6 not only makes it clear that a WAP does not require a facility description, it also cites the regulations pertaining to this element. We believe this inclusion will make the guidance much better and remove some of the potential confusions found in the earlier drafts. We thank the Agency for making these improvements.

2. Does the guidance describe RCRA sampling frequency and procedures sufficiently (e.g., see Sections 1.2, 2.4 and 2.5)?

While the Agency significantly improved the sample frequency and procedures sections, we believe additional work should be done on these sections.

- a. CRWI remains concerned about several examples included in section 1.2 that suggest extensive sampling is required when the contaminant levels in these materials are known and sampling may be difficult. In general, the waste analysis approach is dictated by the situation. Much of the early EPA guidance from the 1980s was tailored toward addressing Superfund sites where levels and types of contamination are largely unknown. We believe the purpose of this guidance is primarily for the generator who already possesses extensive knowledge about the waste that is subsequently shared with those performing the treatment, storage, and disposal. In short, the generator's knowledge involves few unknowns such that the sampling frequency and procedures can be narrowly focused on confirming/characterizing the chemical and/or physical characteristics necessary for proper and compliant treatment, storage, and disposal.

In Section 1.2 (page 1-15), the Agency continues to use the term “contaminated debris” as an example that may require more frequent testing. In our experience, “contaminated debris” is typically a term reserved for lightly-contaminated, high-volume materials that often widely vary in composition. Examples include used PPE or materials from demolition activities. The logistics of sampling this category is difficult and the results are not very informative. Most facilities

generally try to segregate wastes in such ways to avoid creating mixtures of wastes that are difficult to sample especially when some parts can be highly contaminated and others not. The basis for the frequency of sampling procedures utilized and analyses performed should be tailored accordingly. Debris-like materials that are known to be lightly contaminated, even if variable, do not require frequent sampling. In most cases, the possible contaminants and associated characteristics are known such that sampling and analysis does not yield any significant or useful information with regard to their treatment, storage, and disposal. The disposition of such materials can often be determined based on the bulk nature of the material with consideration as to the contaminants.

Generally, the more the facility knows about a waste, the less it needs to sample. Sampling frequency should be dictated by the amount of variability in the waste stream, the level of contamination, and how close that level of contamination is to a regulatory limit or could impact/dictate the handling method. We believe in most cases generator knowledge about “contaminated debris” and other similar materials is sufficient to their safe handling. This information, properly communicated to those performing the treatment, storage, and disposal is also sufficient. Any additional sampling by those performing treatment, storage, and disposal can be limited to confirmation analyses.

The second example is the statement in the text box on page 1-17 indicating that generic profiles may not be acceptable if the treatment process must meet numerical standards. In many cases, we believe generic profiles are acceptable. The processes generating the wastes are often consistent and well-defined, and correspondingly result in wastes that are equally consistent and well-defined. The sampling frequency and analyses performed in such cases is periodic and routine, aimed solely at confirming the materials are not varying significantly. The facilities that receive wastes under generic profiles can safely and compliantly limit the frequency of sampling and analyses performed to those necessary to ensure the material received is as expected or identified, and is treated, stored, and disposed of compliantly. For such generic profiles, development of acceptable ranges is possible such that testing (fingerprinting) is only necessary to show that the material is within the acceptable range. We suggest that this statement be dropped or modified so that a receiving facility has the option of accepting the waste under a generic profile as long as proper sampling and analysis is performed to ensure the material can be treated, stored, and disposed within the permitted limits.

A third example is the use of ± 2 pH units as a reason for rejecting or re-qualifying in the text box on page 1-17 (second bullet). A waste profile can commonly include much higher ranges of pH than ± 2 . The ± 2 threshold only makes sense if the range crosses a regulatory threshold. In addition, the ± 2 threshold may not make sense if the TSDF is already permitted for a D002

waste. Basically, if the variance does not change the way the waste is managed, the range should not matter.

- b. The WAP guidance states (Section 2.5.1, page 2-28) that there are two major sampling approaches that may be employed to collect representative samples, Authoritative and Random Sampling. RCRA does not require the use of a firm statistical basis to determine if a waste is hazardous or to determine compliance with the LDR requirements. The methods employed are required to be an acceptable method and representative. CRWI recommends adding the following sentences to the second to last paragraph on page 2-27. The revised paragraph would read as follows.

“The RCRA regulations do not require the use of statistical testing to determine the classification of a waste or to determine compliance with LDR. The sampling methods employed are required to be an acceptable method and representative. Based upon the data objectives and other considerations identified in the sampling strategy, two major sampling approaches may be employed to collect representative samples. These approaches are summarized as follows:”

- c. At the bottom of page 2-33, the Agency make a statement that off-site combustion facilities may need to characterize all waste prior to burning. The Agency extensively revised Section 2.9.2 to make it more compatible to the current regulatory regime. While it is desirable to adequately characterize waste being burned, it is not always appropriate. In fact, the Agency added a paragraph (bottom of page 2-64) that discussed when it is not appropriate to sample. Given that the Agency added a discussion on when it is not appropriate to sample waste, we suggest deleting the following sentence.

~~Off-site combustion facilities may need to characterize all wastes prior to burning to verify that permit conditions will be met (i.e., fingerprint analysis may not be acceptable).~~

- d. CRWI appreciates the changes made in the 2013 draft that modifies the frequency of sampling (page 2-34). While RCRA does not require the use of statistical methods, we agree that the number of initial samples should be based on a combination of sound statistics and an understanding of the potential variability of the waste stream. We remain concerned about a couple of additional words and phrases in the recommendations. First, it is appropriate to slowly reduce the frequency over time but the addition of “with each subsequent shipment” is redundant and potentially confusing. Second, we are concerned with the use of the word “thorough.” Permitting authorities often have a different understanding of what “thorough” means. Does “thorough” mean 90% of the time, 99% of the time, 99.99% of the time, or even higher? This type of language

is often interpreted to create an impossible threshold to meet. We suggest removing that word. The revised paragraph would read as follows.

When the regulations do not specifically stipulate sampling frequency, you may want to use a tiered approach to waste re-evaluation. That is, you may consider conducting a thorough initial characterization of each waste and then slowly reduce the frequency of re-evaluation over time ~~with each subsequent shipment~~ as long as the hazardous constituents are safely below the action level (defined in Section 2.3). **For example, if a site generates a new waste stream during its manufacturing operations, the number of manufacturing batches to sample should be determined through a sound statistical basis and with a thorough an understanding of the potential for variability in the waste stream.** This is important, as the waste handler can use the data from this initial shipment as a baseline to evaluate data from the subsequent shipments. There are also a number of ways to use historic waste data to determine re-evaluation frequencies. One possible approach is detailed in Section 2.8. You do not need to use this specific approach but your WAP must state how you will determine re-evaluation frequencies based on waste data.

EPA makes the same statement on page 2-57 in the first part of Section 2.8 on sample frequency. We suggest making the same changes to this paragraph.

- e. In section 2.2.2 (page 2-7), EPA states the WAP may need to identify each process generating wastes and the appropriate EPA waste classification. Many facilities are complex and information should be limited to a general description of the sources of on-site and off-site waste and the waste codes managed. Changing a permit to include such detail would require a major permit modification with no benefit to the environment. We do not believe this level of detail is necessary and suggest dropping the last two bullets in the list as shown below.

- ~~▪ Each process generating these wastes~~
- ~~▪ Appropriate EPA waste classifications (e.g., LDR classification as wastewater or non-wastewater).~~

- f. The “Systematic Planning” information in Section 2.3 (page 2-10) is overly complex for the normal users of the guidance document at facilities. For that reason, we recommend eliminating this section. The references that are provided at the end of the Section on Page 2-15 can be placed in Section 2.5.5 giving additional guidance for preparing Data Quality Objectives. If the Agency deems it is necessary to retain this section, Step 6 should be removed. We make this suggestion because generators may have one-time wastes or infrequently generated wastes (e.g., only every few years), or at the other

extreme, R&D facilities that can produce several hundred unique waste streams each year making statistical evaluations impossible.

- g. The data uncertainty calculations for confidence levels in analytical data are unnecessary (Section 2.7, Page 2-54). EPA proposed a section similar to Section 2.7 in 1994 but that section was not included in the final draft based on comments from stakeholders. At that time, commenters noted that EPA requires that the methods employed for analytical data be acceptable methods and that samples are representative; thus no additional guidance is necessary. We believe that it is still unnecessary to achieve the objective of “representative” and recommend that Section 2.7 be deleted.
 - h. In Section 2.8, the Agency recommends that the sampling frequency can be decreased as the value goes further below the action level (see Table 2-9). CRWI supports that concept. Nowhere in this document does it discuss sampling frequency when above an action level. If the material varies around the action level and the facility is attempting to determine whether to treat to meet LDR requirements, then frequent testing may be appropriate. However, if the facility assumes (based on previous testing or acceptable knowledge) that the material will exceed the action level and treats to meet LDR requirements, there is no need to test until after the treatment (to make sure it meets LDR). This may be an appropriate place to add a text box in this section where it is made clear that if a facility makes the assumption that the waste exceeds the action level and treats, that no testing prior to treatment is necessary.
3. Does the guidance discuss and distinguish between generator and TSDF requirements sufficiently?

For the most part, the Agency has done a good job of distinguishing between generator and TSDF requirements. The one place where we would suggest an additional change is in the first sentence of section 1.1.3 (page 1-12). This sentence implies that a WAP is required of all generators. We suggest the following change to remove that potential confusion

In addition to conducting waste analyses and/or developing/following a WAP, a generator (or owner/operator of a TSDF making an offsite shipment) must provide waste analysis information to the TSDF that subsequently receives the waste, as specified [40 CFR §268.7].

4. Does the guidance describe the relationship between CAA FAP and RCRA WAP requirements accurately (see Sections 2.4.4 and 2.9.2 and Appendix D)?

We believe the Agency did a good job in revising Sections 2.4.4 and 2.9.2 to make it clear that the FAP and WAP have two different functions. These sections also make it clear that individual facilities may choose to merge these two documents,

depending upon their local needs. We also believe the crosswalk of the FAP and WAP regulatory provisions is a useful addition to the guidance document. We appreciate the Agency making these changes.

5. Other issues

On page D-3, in the paragraph entitled Miscellaneous Units, there is a missing comma in the second sentence between “landfill” and “incinerator.” That part of the sentence should read “... landfill, incinerator, ...”