



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

APR 30 2018

OFFICE OF  
SOLID WASTE AND  
EMERGENCY RESPONSE  
NOW THE  
OFFICE OF LAND AND  
EMERGENCY MANAGEMENT

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c/o Edison Electric Institute  
701 Pennsylvania Avenue, N.W.  
Washington, D.C. 20004

Douglas Green  
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Venable LLP  
600 Massachusetts Avenue, N.W.  
Washington, D.C. 20001

Re: Coal Combustion Residuals Rule Groundwater Monitoring Requirements

Dear Ms. Fawal, Mr. Green, and Mr. Roewer:

My office has been asked to respond to the letter from the Utility Solid Waste Activities Group (USWAG), dated November 27, 2017, to the U.S. Environmental Protection Agency (EPA), requesting confirmation with regard to your reading of the timing for two specific requirements in the Coal Combustion Residuals (CCR) Rule's groundwater monitoring provisions: (1) the timing to establish an assessment monitoring program if an owner/operator is unable to successfully make an alternate source demonstration in detection monitoring under 40 C.F.R. § 257.94(e)(2); and (2) the timing for conducting a statistical evaluation on the data collected under the assessment monitoring program. On January 26, 2018, we provided an initial response that addressed the first issue raised in your letter. This letter responds to the remainder of that November 27 letter.

USWAG requested confirmation of its reading of the time frame for completing a statistical evaluation of the groundwater data collected during assessment monitoring in order to determine whether there is an exceedance of the groundwater protection standard. Your letter suggests that January 10, 2019, is the date by which facilities must make their initial determination of whether there has been the detection of a statistically significant increase of an Appendix IV constituent above the relevant groundwater protection standard in the downgradient wells (assuming the facility has elected to take 90 days pursuant to § 257.94(e)(2) to demonstrate that detection of the Appendix III constituent(s) was attributable to sampling error or some other source).

As explained below, EPA calculates January 14, 2019,<sup>1</sup> as the deadline for facilities<sup>2</sup> to make their initial determination of whether there has been the detection of a statistically significant increase of an Appendix IV constituent above the relevant groundwater protection standard in the downgradient wells (assuming the facility has elected to take advantage of the 90 day option in § 257.94(e)(2)).

Section 257.95 generally establishes the schedule and framework for conducting the sampling and analysis required for assessment monitoring, but does not include a specific timeframe for completing the statistical evaluation of these data to determine whether there is an exceedance of the groundwater protection standard. The timeframe for that requirement instead appears in 40 C.F.R. § 257.93(h), which EPA reads to apply to the statistical analyses required under both detection and assessment monitoring. Taken together, these sections establish that the first deadline for completing the statistical evaluation of the assessment monitoring data to determine whether there is an exceedance of the groundwater protection standard is 90 days after completion of the re-sampling and analysis in § 257.95(d)(1).

Section 257.95(b) provides that within 90 days of triggering assessment monitoring (and on an annual basis thereafter) the owner/operator must sample and analyze for all Appendix IV constituents. For any Appendix IV constituents detected in the sampling and analysis required under subsection (b) the owner/operator must: (1) identify (“establish”) the relevant groundwater protection standards specified in § 257.95(h); (2) continue assessment monitoring by resampling for all Appendix III and the relevant (detected) Appendix IV constituents and (3) obtain analytical results of those combined samples within 90 days. 40 C.F.R. § 257.95(d)(1)-(2).

Section 257.93(h) states that an owner or operator “must determine whether there is a statistically significant increase over background values for each constituent required in the particular groundwater monitoring program that applies to the CCR unit, as determined under § 257.94(a) or § 257.95(a).” 40 C.F.R. § 257.93(h). Section (h)(2) in turn specifies that “within 90 days after completing sampling and analysis, the owner or operator must determine whether there has been a statistically significant increase over background for any constituent at each monitoring well.” The determination of whether there has been a statistically significant increase over background is a necessary prerequisite to determining whether there is an exceedance of the groundwater protection standard. A determination that there has been a statistically significant increase over background indicates that there is a release from the unit and requires that the release be evaluated further to determine if it also exceeds the groundwater protection standard. See 40 C.F.R. § 257.95(f).

Thus, 90 days after completing the resampling for the relevant (detected) Appendix IV constituents pursuant to § 257.95(d)(1), an owner or operator must conduct a statistical analysis in accordance with § 257.93(h).<sup>3</sup> For example, assuming that the facility did not take advantage of the 90 day option in § 257.94(e)(2), the first round of Assessment monitoring would have been completed on April 16, 2018. In this case, consistent with § 257.93(h), the facility would need to complete the

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<sup>1</sup> In calculating this date, EPA extended any deadlines that fell on a weekend or Federal holiday to the next business day.

<sup>2</sup> This excludes those inactive surface impoundments whose deadlines were extended by 81 Fed. Reg. 51,803 (Aug. 5, 2016).

<sup>3</sup> Note that conducting the statistical analysis on 2 sets of sampling occurs only on this first round (the “initial...sampling events” referenced in § 257.95(d)(1)) of Assessment monitoring. All other statistical analyses on subsequent rounds of on-going semi-annual or annual sampling under assessment monitoring must be conducted following the single set of samples obtained during that sampling event.

statistical analyses on the two rounds of sampling to determine whether there is a statistically significant increase over the groundwater protection standard no later than October 15, 2018.

EPA's discussion of section 257.93(h)(2) in the final rule preamble supports this reading. As EPA explained, "[s]everal commenters suggested that *once sampling and analysis had been completed*, 90 days would be a reasonable amount of time to complete the statistical analysis to determine whether an exceedance had occurred. No commenter suggested a longer period of time was necessary and that timeframe is consistent with the Agency's experience of the timeframes necessary to complete such analyses. Accordingly, *we have revised the provision to require the determination of a statistically significant increase to be made within 90 days of sampling and analysis.*" 80 Fed. Reg. at 21,404 (emphases added).

If you have any additional questions regarding this letter, please contact me at (703) 308-8895 or at [johnson.barnes@epa.gov](mailto:johnson.barnes@epa.gov).

Sincerely,

A handwritten signature in cursive script that reads "Barnes Johnson". The signature is written in black ink and is positioned above the printed name and title.

Barnes Johnson, Director

Office of Resource Conservation and Recovery