



Groundwater Monitoring System Certification

W.A. Parish Electric Generating Station
Thompsons, Texas

August 2018

Prepared For
NRG Texas Power, LLC

A handwritten signature in blue ink, appearing to read "R. Nilsson", written over a horizontal line.

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Senior Project Manager

TRC Environmental Corporation | NRG Texas Power, LLC
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Section 1

Regulatory Requirement

Pursuant to 40 CFR 257.91(a), the W.A. Parish Electric Generating Station installed a single unit groundwater monitoring system around each of the four individual coal combustion residuals (CCR) units at its existing Solid Waste Disposal Area (SWDA, Solid Waste Management Unit (SWMU) 001); and a single unit groundwater monitoring system at its FGD Emergency Pond (E-Pond, SWMU 020) and Air Preheater Pond (SWMU 021) CCR units under 40 CFR 257. Per 40 CFR 257.91(f), the owner or operator must obtain a certification from a qualified professional engineer stating that the groundwater monitoring systems have been designed and constructed to meet the requirements of 40 CFR 257.91.

Section 2

Certification Update

Pursuant to 40 CFR 257.91(f), a qualified professional engineer prepared the initial certification for six single unit groundwater monitoring systems at the W.A. Parish Electric Generating Station on October 17, 2017. The certification encompassed six active CCR units at the W.A. Parish Electric Generating Station: the Solid Waste Disposal Area (SWDA, Solid Waste Management Unit [SWMU] 001), which encompasses four individual CCR units: active portion of Cell 1C, the active portion of Cell 2A (Pug Mill), Cell 2B, and Cell 3. The October 17, 2017 certification also included the FGD Emergency Pond (E-Pond, SWMU 020) and the Air Preheater Pond (SWMU 021). The initial certification was prepared by Environmental Resource Management (ERM) on behalf of NRG Texas Power, LLC and stated that the groundwater monitoring systems had been designed and constructed to meet the requirements of 40 CFR 257.91.

Since preparation of the October 17, 2017 groundwater monitoring system certification, NRG Texas Power, LLC has reviewed its management approach for the four active CCR units at the SWDA at the W.A. Parish Electric Generating Station under 40 CFR 257. Based on its review, NRG Texas Power, LLC determined that the four CCR units at the SWDA should be monitored using a single multiunit groundwater monitoring system under 40 CFR 257.91(d), instead of as four separate CCR units. Based on factors provided in 40 CFR 257.91(d)(1), NRG Texas Power, LLC determined that the SWDA multiunit (SWMU 001) encompasses the active portions of the four individual CCR units using a multiunit groundwater monitoring system instead of four separate groundwater monitoring systems for each separate CCR unit, as was presented in the October 17, 2017 certification. Furthermore, pursuant to 40 CFR 257.91, establishment of a multiunit monitoring system will result in redesignation of the upgradient and downgradient monitoring wells for the SWDA. The revised SWDA multiunit monitoring system, consisting of six upgradient and eight downgradient monitoring wells, meets the design criteria for groundwater monitoring systems under 40 CFR 257.91(c) and provides improved overall representation of groundwater quality for the SWDA CCR unit.

In addition, NRG Texas Power, LLC is modifying the groundwater monitoring network for the Air Preheater Pond (SWMU 021). Based on determination of the direction of groundwater flow, two of the groundwater monitoring wells (MW-39 and MW-40) that had initially been identified as downgradient wells have been redesignated as upgradient monitoring wells. Therefore, the groundwater monitoring network has been revised to designate both MW-39 and MW-40 as upgradient groundwater monitoring wells at the Air Preheater Pond, which will allow for a more representative determination of background groundwater quality.

Therefore, this revised groundwater monitoring system certification updates the original October 17, 2017 groundwater monitoring system certification to reflect implementation of a multiunit groundwater monitoring system at the SWDA under 40 CFR 257.91(d) encompassing Cell 1C, Cell 2A, Cell 2B, and Cell 3 and redesignating MW-39 and MW-40 as being upgradient, background wells at the Air Preheater Pond (SWMU 021).

Section 3 Certification

I, the undersigned Texas Professional Engineer, hereby certify that I am familiar with the technical requirements of 40 CFR 257.91. I also certify that it is my professional opinion that, to the best of my knowledge, information, and belief, that the multiunit groundwater monitoring system at the Solid Waste Disposal Area (SWMU 001) has been designed and constructed in accordance with current good and accepted engineering practice(s) and standard(s) appropriate to the nature of the project and the technical requirements of 40 CFR 257.91.

For the purpose of this document, "certify" and "certification" shall be interpreted and construed to be a "statement of professional opinion". The revised certification is understood and intended to be an expression of my professional opinion as a Texas Licensed Professional Engineer, based upon knowledge, information, and belief. The statement(s) of professional opinion are not and shall not be interpreted or construed to be a guarantee or a warranty of the groundwater monitoring system.

R. Kent Nilsson, P.E.

107021

Printed Name of Professional Engineer

State of Texas License Number



August 13, 2018

Signature of Professional Engineer

Date

