



# Department of Toxic Substances Control

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## MEMORANDUM

TO: Bill Veile, PE #46306  
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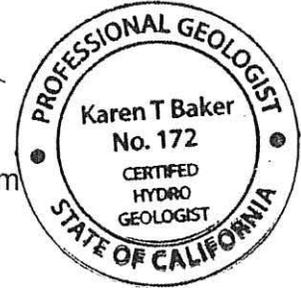
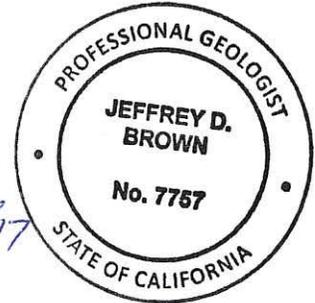
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DATE: January 30, 2017

SUBJECT: EPC Westside Disposal Facility – Article 6 Variance Renewal Request  
Chevron Environmental Management Company  
Formerly Santa Fe Company  
Fellows, Kern County, California  
Project Number: 25035/100223-33/20041027



## DOCUMENTS REVIEWED

1. RCRA Post-Closure Permit Renewal Application, Attachment H, Groundwater Variance Renewal Request, Westside Disposal Facility, prepared by Chevron Environmental Management Company, dated June 15, 2015.

2. Supplementary Hydrogeologic Characterization (SHC) of the Westside Disposal Facility, Santa Fe Energy Resources, Inc. Prepared by Uribe & Associates, dated March 1990.

The Department of Toxic Substances Control (DTSC), Geological Services Unit (GSU) has reviewed the above-referenced documents and prepared the following comments. If you have any questions regarding this memorandum, please contact me at (916) 255-6532 or via email at jeff.brown@dtsc.ca.gov.

## **INTRODUCTION**

GSU was asked to review the above-referenced documents to evaluate the technical merits of Chevron's request to renew a 2006 DTSC-issued variance from groundwater monitoring requirements defined in 40 CFR Part 264, Subpart F (and the State of California regulation, 22 CCR, Division 4.5, Chapter 14, Article 6).

A waiver from 40 CFR Part 264, Subpart F groundwater monitoring requirements was first issued to the EPC Westside Disposal Facility (WDF) by the EPA in April of 1991. Based on this waiver, DTSC issued, in May of 1991, a variance from Article 6 monitoring requirements which was later renewed, effective June of 2006 (Variance No. V1/06-001). The 2006 variance was included as part of DTSC's post-closure permit issued to the WDF in 2006. Chevron is currently requesting a DTSC renewal of this variance as part of the current permit renewal application and is asking the variance be effective for the remainder of the post-closure period.

To augment GSU's review of the technical appropriateness of the variance, GSU also evaluated regulatory compliance of the WDF against the following items:

- Changes to Article 6 regulations, effective May 12, 2011; and
- The applicability of air, soil, and soil-pore gas monitoring requirements and response actions defined in 22 CCR, Division 4.5, Chapter 14, Article 17.

Both regulatory items warrant evaluation because Article 6 has been revised since the 2006 variance renewal and because compliance with Article 17 was not directly addressed in previous applications submitted by the facility owner.

## **COMMENTS**

1. Technical Review. GSU has reviewed the above-referenced documents and concludes the DTSC variance from Article 6 monitoring for the WDF remains technically appropriate.

This conclusion is based on evidence indicating the geologic, hydrogeologic, and hydrologic data collected and presented for the site has not changed since the 1991 publication of the SHC report. GSU concludes the five technical points originally identified in the memorandum prepared by GSU in January of 2006 (conducted to review the merits of the 2006 variance and the SHC Report), as well as the basis of the waiver as listed in Section 6.5 of the 2006 variance,

remain valid technical support for a continuance of the groundwater monitoring variance.

The points raised in the 2006 GSU memorandum and the 2006 variance address the following topics:

- a) A limited potential of leachate generation due to annual evapotranspiration rate of 96 inches per year which significantly exceeds annual rainfall of 6 inches per year;
  - b) A large vadose zone thickness (or distance to groundwater), ranging from 675 to 900 feet below ground surface;
  - c) A thick (50 to 100 foot thick) basal alluvial clay serving as a barrier to potential contaminant migration;
  - d) The discontinuous nature of the uppermost aquifer and variable saturation of this material serving to hydraulically isolate groundwater and limit its migration; and
  - e) The occurrence of crude oil in the uppermost aquifer.
2. Compliance with Article 17. While a variance from Article 6 was granted by DTSC in 2006, the documentation developed by DTSC to release Chevron from subsurface monitoring did not specifically address 1) the need to comply with air, soil, and soil-pore gas monitoring requirements identified in Article 17 (22 CCR §66264.700 et seq) or 2) explain how the facility was in compliance or exempt from Article 17.

To address this, GSU has reviewed the site conditions and general facility operational history to determine if the regulations in Article 17 may be applicable to Chevron or whether Chevron may qualify for an exemption. The results of this review suggest Chevron may qualify under one, or both, of the following exemption pathways provided in Article 17:

- a) The general operation of the unit at the EPC Westside facility is stated to have ceased in November of 1985 and, therefore, may not be subject to monitoring requirements if facility can demonstrate the receipt of waste ceased prior to February 2, 1985 [§66264.700(a)].
- b) The technical evaluation provided in the SHC report and Chevron variance application related documentation, indicate hazardous waste is unlikely to migrate from the unit during its post-closure period. [§66264.700(c)].

However, the facility did not provide support for these exemption pathways to DTSC in a form targeted to address regulations of Article 17. If Chevron seeks relief from Article 17 Chevron should submit an application (or letter) to DTSC requesting such an exemption and include this in a revision to the permit part B application.

This application could include any new information or reference existing technical data currently in the application as necessary to support DTSCs review and decision on the exemption request.

3. Compliance with Article 6, Surface Water and Unsaturated Zone. While a waiver from groundwater monitoring requirements was granted by the EPA, 40 CFR Part 264, Subpart F does not include provisions for surface water or vadose zone (soil-pore liquid) monitoring; therefore, the EPA waiver applies only to groundwater. The subsequent variance issued by DTSC did not specifically address surface water monitoring component of Article 6 [22 CCR §66264.97(c)] or the vadose zone (soil-pore liquid) monitoring component of Article 6 [22 CCR §66264.97(d)].

Sufficient technical support may exist to qualify the site for exclusions from surface water and vadose zone (soil-pore liquid) monitoring requirements pursuant to 22 CCR §66264.97(c)(3) and (d)(7). However, neither the current part B permit application, nor historical documentation developed by DTSC and Chevron adequately describes this justification or provides support for these exclusions.

Chevron should revise the pertinent section of the part B permit application to address this issue. Revisions could include any new information or reference existing technical data currently in the application as necessary to support DTSCs review and decision on the exclusion of these regulations.