



Central Valley Regional Water Quality Control Board

4 April 2013

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CERTIFIED MAIL
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CALIFORNIA WATER CODE DIRECTIVE PURSUANT TO SECTION 13267. You are legally obligated to respond to this Order. Please read this Order carefully.

Vintage Production California LLC (Vintage) is the owner and operator of an oil production well, designated as the Sill 2H-14 (Well), in Kern County near the City of Shafter. The Well is in the SE $\frac{1}{4}$ of Section 14, T28S, R25E, MDB&M (Site). Section 14 is directly adjacent to the southern boundary of the North Shafter Oil field. The Well was reportedly completed within the production zone as a horizontal well in September/October 2012, and subsequently subjected to stimulation by hydraulic fracturing.

On 8 March 2013 an internet video, time stamped 6 October 2012, at <http://www.youtube.com/watch?v=mx671gbmkY> was reviewed by Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff. The video was subsequently reported by Vintage in a telephone conversation (between Shelton Gray with Central Valley Water Board staff and Jim Robinson with Vintage) to be of the Sill Well, and was reportedly showing wastewater associated with a hydraulic fracturing stimulation of the Well, discharging to what appeared to be an unlined surface impoundment (sump) adjacent to the Well.

By this Order, the Central Valley Water Board is seeking information about Vintage's activities, including those shown in the video, which appear to have impacts or threatened impacts to water quality. The Central Valley Water Board's authority to require technical reports derives from Section 13267 of the California Water Code, which specifies, in part, that:

(a) A regional board, ...in connection with any action relating to any plan or requirement authorized by this division, may investigate the quality of any waters of the state within its region.

(b)(1) In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region...that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written

explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

Kern County Water Agency reports indicate that the depth to the uppermost unconfined groundwater in the Shafter area is approximately 250 feet. Groundwater quality, as measured by total dissolved solids (TDS), is approximately 1,000 milligrams per liter. Groundwater beneath the site has beneficial uses of Municipal and Domestic (MUN), Agricultural (AGR), Industrial Service Supply (IND), and Industrial Process Supply (PRO), as identified in the *Water Quality Control Plan for the Tulare Lake Basin, Second Edition (Revised 2004)*. Groundwater in the area is used for agriculture and as a drinking water source. The discharge of wastewater to an unlined sump could have water quality impacts, or may threaten waters of the State. Technical reports required by this Order are necessary to assure compliance with the California Water Code. Vintage owns and operates facilities that are subject to this Order.

Under the prescribed authority of California Water Code section 13267, the Central Valley Water Board directs you to submit, **by 6 May 2013**, a technical report that describes the hydraulic fracturing stimulation process of the Well, in addition to providing an overview of activities that Vintage has engaged in at the Site and relevant maps indicating where such activities occur. At a minimum, the report needs to address the following items that relate to the Well:

- The date construction and installation of the sump commenced, as well as when materials were first discharged to sump;
- Dimensions of sump, including size and depth;
- Documentation of any material or construction work implemented to reduce fluid migration from the sump;
- Volume and chemical characteristics of all materials discharged to the sump;
- Volume and chemical characteristics of each fresh water source used for the hydraulic fracturing process;
- Volume and trade name of each chemical additive (and MSDS/ACS sheets) used for the hydraulic fracturing process;
- Type and amount of proppant used;
- Duration of sump use and detailed description of sump closure process;
- Description of fracturing flowback fluids or other liquids that were handled at the Site, if not discharged to the sump;
- Description of when materials were removed from the sump and documentation of waste characterization and disposal, including all agency applications, permits, and bills of lading for Banker tanks, for example;
- Map showing the location and purpose of private water supply wells within one mile of the Site.

Vintage also shall provide the following additional information: (1) a map showing the wells Vintage has completed that were subject to hydraulic fracturing within the drainage area of the San Joaquin Valley in the past two years; (2) a map showing the locations where a sump was constructed to contain wastes associated with the drilling, construction, completion, and testing of wells; (3) a map showing the location of all wells proposed to be drilled by Vintage within the drainage area of the San Joaquin Valley, and permitted by the California Division of Oil, Gas, and Geothermal Resources; and (4) a

discussion of how Vintage manages hydraulic fracturing fluids at drilling sites and their ultimate disposal.

In accordance with California Water Code section 13260, for all well drilling sites where Vintage proposes to include excavation of a sump to contain discharges of well stimulation and production wastes (including return of hydraulic fracturing liquids) to land, a Report of Waste Discharge (RWD) shall be submitted with the appropriate filing fee at least 140 days prior to discharge. If Vintage applied for a RWD prior to installing or discharging to the sump, please provide such documentation. The Central Valley Water Board reserves the right to issue a Notice of Violation or pursue enforcement for Vintage's activities after reviewing the documentation provided in response to this Order.

Technical report(s) are to be signed and stamped by a California Professional Engineer (Registered as a Civil Engineer) or a registered California Professional Geologist. Any laboratory analyses are to be performed by an analytical laboratory certified by the State of California for the analyses performed. Submissions pursuant to this Order should include a statement by Vintage, or an authorized representative of Vintage, certifying (under penalty of perjury in conformance with the laws of the State of California) that the information submitted is true, complete, and accurate.

The failure to furnish any of the required reports, or the submittal of substantially incomplete reports or false information, is a misdemeanor, and may result in additional enforcement actions being taken against Vintage, including issuance of an Administrative Civil Liability Complaint pursuant to California Water Code section 13268. Liability may be imposed pursuant to California Water Code section 13268 in an amount not to exceed one thousand dollars (\$1,000) for each day in which the violation occurs.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., within 30 days after the date of this directive, except that if the thirtieth day following the date of this directive falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

By 12 April 2013, please contact this office to arrange for a meeting in order to discuss the contents of this letter and the extent of your ongoing operations.

If you have any questions regarding this matter, please contact Doug Patteson of this office at (559) 445-5577 or at dpatteson@waterboards.ca.gov.

Original signed by:

Pamela C. Creedon
Executive Officer

cc: Julie Macedo, Office of Enforcement, State Water Resources Control Board, Sacramento
Burton Ellison, California Division of Oil, Gas, and Geothermal Resources, Bakersfield
Kern County Environmental Health, Bakersfield