



Central Valley Regional Water Quality Control Board

17 May 2018

Mr. Timothy Walston Vice President, Operations CalMat Co. dba Vulcan Materials Company 500 N Brand Boulevard, Suite 500 Glendale, CA 91203 CERTIFIED MAIL 7017 3040 0000 4342 3932

NOTICE OF APPLICABILITY (NOA); GENERAL WASTE DISCHARGE REQUIREMENTS ORDER R5-2016-0076-01 (NPDES NO. CAG995002) FOR LIMITED THREAT DISCHARGES TO SURFACE WATER; CALMAT COMPANY DBA VULCAN MATERIALS COMPANY; SANGER SAND AND GRAVEL PLANT, FRESNO COUNTY

Our office received a Notice of Intent (NOI) application on 2 January 2018 from the CalMat Company dba Vulcan Materials Company (hereinafter Discharger) for discharge of treated aggregate wash water, stormwater, and groundwater to the Kings River at its Sanger Sand and Gravel Plant (Facility). The application was deemed complete on 31 January 2018. Based on the application packet submitted by the Discharger, the Facility meets the required conditions for approval under the Order R5-2016-0076-01 (NPDES No. CAG995002) for Limited Threat Discharges to Surface Water (Limited Threat General Order), as a Tier 1B discharge. This Facility is hereby assigned Limited Threat General Order R5-2016-0076-043 and National Pollutant Discharge Elimination System (NPDES) Permit No. CAG995002. Please reference your Limited Threat General Order number, R5-2016-0076-043, in your correspondence and submitted documents.

Discharges to surface water from the Facility are regulated by an individual NPDES permit, Order R5-2013-0105 (NPDES No. CA0078174) adopted by the Central Valley Water Board on 26 July 2013 and scheduled for rescission at the Board's 31 May/1 June meeting. This NOA providing coverage under the Limited Threat General Order shall become effective on 1 June 2018.

The enclosed Limited Threat General Order may also be viewed at the following web address: http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf. You are urged to familiarize yourself with the contents of the entire document. The Limited Threat General Order prescribes mandatory discharge monitoring and reporting requirements. The project activities shall be operated in accordance with the requirements contained in this NOA and the Limited Threat General Order.

PROJECT DESCRIPTION

The Discharger is the owner and operator of the Facility, a sand and gravel mining operation which produces and sells aggregate construction materials along with the ancillary activities such as crushing, screening, washing, and asphalt and concrete recycling. The mining is

KARL E. LONGLEY ScD, P.E., CHAIR | PAMELA C. CREEDON P.E., BCEE, EXECUTIVE OFFICER

conducted in open pits that extend below the groundwater table utilizing a dragline from the upper edge of the excavation. Mined material is then screened, crushed to the appropriate sizes, and washed to remove fine-grained material.

Groundwater from the on-site basins is used as a source of aggregate wash water, and no additives (e.g., salts, detergents, or chemicals of any kind) are added during the washing process. The source of the wash water is from the "Supply Pond" (Attachment A – Project Maps). The used wash water is piped to the "Silt Pond" where the fine-grained material settles out prior to re-use or potential discharge. Some water from the "Silt Pond" is pumped to the "Supply Pond." The "Supply Pond" is currently only providing water for the aggregate washing plant, and is not directly discharging to the Kings River. Water is discharged to the Kings River only out of the "Former Excavation Area." A pump draws from the sixty to eighty foot deep intake in the pond-filled "Former Excavation Area" and discharges to a diffuser on the bank of the Kings River. The pump intake was moved to this location in May 2015 as a corrective measure to avoid algae near the surface of the pond influencing the discharge pH. There is a well physically located between the pond-filled "Former Excavation Area" and the "Supply Pond." The well adds water to the system by pumping water to the "Supply Pond." The only treatment in this system is to allow the fine particles to settle out in the ponds.

Until February 2014, effluent from the system flowed through a cobble levee from the "Supply Pond" to the Kings River. In February 2014, CalMat/Vulcan notified the Central Valley Water Board that the "Supply Pond" side of the cobble levee/weir had been sealed, preventing further discharges from the "Supply Pond" to the Kings River. At that time a pump and meter was established (pumping from the "Former Excavation Area" to the riverbank discharge diffuser pipe) so the discharge flow could be measured and recorded. Since that time the discharge to the Kings River has been via a diffuser pipe on the Kings River side of the cobble levee.

CALIFORNIA TOXICS RULE / STATE IMPLEMENTATION POLICY MONITORING

The Limited Threat General Order incorporates the requirements of the California Toxics Rule (CTR) and the State Water Resources Control Board's (State Water Board), Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, 2005, also known as the State Implementation Policy (SIP). Screening levels for CTR constituents and other constituents of concern are found in Attachment I of the Limited Threat General Order. The Facility discharge is well established with years of effluent and receiving water data. Review of the water quality data shows that the background concentration of two pollutants (copper and lead) exceeded the most stringent water quality objective for the Kings River and the pollutants were detected in the effluent. Accordingly, an effluent limitation is required (1.3 Step 6 of the SIP). Water Quality-Based Effluent Limitations have been established for copper and lead based on the reasonable potential to exceed water quality standards. To set the effluent limitations for copper and lead, a measured hardness value in the Kings River of 37 mg/L as CaCO₃ (26 October 2009) was utilized. The effluent limitations were established using Tables 6C and Table 6D (Order R5-2016-0076, NPDES No. CAG995002) for copper and lead, respectively. The effluent limits for copper and lead are included in Table 1 (below).

EFFLUENT LIMITATIONS

Effluent limitations are specified in Section V, Effluent Limitations and Discharge Specifications of the Limited Threat General Order. Only the following effluent limitations are applicable to this discharge and are contained in Section V.A and V.B of the Limited Threat General Order:

Table 1. Effluent Limitations

Parameter	Units	Effluent Limitations		Section
		Average Monthly	Maximum Daily	Reference
Copper	µg/L	2.8	5.6	V.A.1.g
Lead	μg/L	0.75	1.5	V.A.1.g
Total Suspended Solids	mg/L	10	20	V.B.1

- 1. Flow (Section V.A.1.a). The average monthly discharge flow rate shall not exceed 2.9 million gallons per day.
- 2. pH (Section V.A.1.b.iii). The pH of all discharges within the Tulare Lake Basin shall at all times be within the range of 6.5 to 8.3.

RECEIVING WATER LIMITATIONS

The Limited Threat General Order includes receiving surface water limitations in Section VIII.A. Receiving Water Limitations are based on water quality objectives contained in the Basin Plan for the Tulare Lake Basin and are a required part of the Limited Threat General Order. Based on the information provided in the NOI, only the following receiving surface water limitations are applicable to this discharge:

- Un-ionized Ammonia (VIII.A.1)
- Bacteria (VIII.A.2):
- Biostimulatory substances (VIII.A.3);
- Chemical constituents (VIII.A.4);
- Color (VIII.A.5);
- Dissolved oxygen (VIII.A.6.a.i,ii,and iii);
- Floating material (VIII.A.7);
- Oil and grease (VIII.A.8);
- pH (VIII.A.9.c);
- Pesticides (VIII.A.10.a.,b., and f.);
- Radioactivity (VIII.A.11);
- Suspended sediments (VIII.A.12);
- Settleable substances (VIII.A.13);
- Suspended material (VIII.A.14);
- Taste and odors (VIII.A.15);
- Temperature (VIII.A.16.a.);
- Toxicity (VIII.A.17); and
- Turbidity (VIII.A.18.b.).

The pertinent sections are restated below in italics.

VIII. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

Receiving water limitations are based on water quality objectives contained in the Basin Plans for the Sacramento and San Joaquin River Basin and the Tulare Lake Basin and are a required part of this General Order. Compliance with any amendment or revision to the water quality objectives contained in the Basin Plans adopted by the Central Valley Water Board subsequent to adoption of this General Order is also required. Any discharge authorized for coverage under this General Order shall not cause the following in the receiving water:

- 1. Un-ionized Ammonia. Un-ionized ammonia to be present in amounts that adversely affect beneficial uses for all waterbodies, nor to be present in excess of 0.025 mg/L (as N) in waterbodies in the Tulare Lake Basin.
- 2. Bacteria. The fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, to exceed a geometric mean of 200 MPN/100 mL, nor more than 10 percent of the total number of fecal coliform samples taken during any 30-day period to exceed 400 MPN/100 mL in waterbodies with the beneficial use of water contact recreation.
- 3. Biostimulatory Substances. Water to contain biostimulatory substances which promote aquatic growths in concentrations that cause nuisance or adversely affect beneficial uses.
- 4. Chemical Constituents. Chemical constituents to be present in concentrations that adversely affect beneficial uses.
- 5. Color. Discoloration that causes nuisance or adversely affects beneficial uses.
- 6. Dissolved Oxygen:
 - For waterbodies outside the Sacramento-San Joaquin Delta and for waterbodies in the Tulare Lake Basin:
 - The monthly median of the mean daily dissolved oxygen concentration to fall below 85 percent of saturation in the main water mass;
 - ii. The 95 percentile dissolved oxygen concentration to fall below 75 percent of saturation; and
 - iii. The dissolved oxygen concentration to be reduced below 5.0 mg/L at any time for waterbodies designated as warm freshwater habitat (WARM).
- 7. Floating Material. Floating material to be present in amounts that cause nuisance or adversely affect beneficial uses.

Notice of Applicability - Limited Threat General Order

- 8. Oil and Grease. Oils, greases, waxes, or other materials to be present in concentrations that cause nuisance, result in a visible film or coating on the surface of the water or on objects in the water, or otherwise adversely affect beneficial uses.
- 9. pH: ...
 - c. The pH to be depressed below 6.5, raised above 8.3, nor changed by more than 0.3 units for waterbodies in the Tulare Lake Basin.

10. Pesticides:

- a. Pesticides to be present, individually or in combination, in concentrations that adversely affect beneficial uses;
- b. Pesticides to be present in bottom sediments or aquatic life in concentrations that adversely affect beneficial uses; and
- f. Pesticides to be present in concentration in excess of the maximum contaminant levels (MCL's) set forth in CCR, Title 22, division 4, chapter 15 for waterbodies in the Sacramento and San Joaquin River Basins or specified in Table 64444-A (Organic Chemicals) of section 64444 of Title 22 of the CCR for waterbodies in the Tulare Lake Basin designated as municipal and domestic supply (MUN).

11. Radioactivity:

- a. Radionuclides to be present in concentrations that are harmful or deleterious to human, plant, animal, or aquatic life nor that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.
- b. Radionuclides to be present in excess of the MCL's specified in Table 64442 of section 64442 and Table 64443 of section 64443 of Title 22 of the California Code of Regulations.
- 12. Suspended Sediments. The suspended sediment load and suspended sediment discharge rate of surface waters to be altered in such a manner as to cause nuisance or adversely affect beneficial uses.
- 13. Settleable Substances. Substances to be present in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses.
- 14. Suspended Material. Suspended material to be present in concentrations that cause nuisance or adversely affect beneficial uses.

- 15. Taste and Odors. Taste- or odor-producing substances to be present in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, or that cause nuisance, or otherwise adversely affect beneficial uses or domestic or municipal water supplies.
- 16. Temperature. Where receiving water temperature limitations apply, as specified in the Notice of Applicability:
 - a. For water bodies outside the legal boundaries of the Sacramento-San Joaquin Delta, the natural temperature to be increased by more than 5°F.
- 17. Toxicity. Toxic substances to be present, individually or in combination, in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life.
- 18. Turbidity. Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses...
 - b. For waterbodies in the Tulare Lake Basin, turbidity shall not increase:
 - i. More than 1 NTU where natural turbidity is between 0 and 5 NTUs.
 - ii. More than 20 percent where natural turbidity is between 5 and 50 NTUs.
 - iii. More than 10 NTU where natural turbidity is between 50 and 100 NTUs.
 - iv. More than 10 percent where natural turbidity is greater than 100 NTUs.

MONITORING AND REPORTING

Monitoring and reporting requirements are contained in Attachment C of the Limited Threat General Order. The Discharger is required to comply with the following specific monitoring and reporting requirements in accordance with Attachment C of the Limited Threat General Order.

Monitoring Locations – The Discharger shall monitor the effluent and the receiving water at the specified locations as follows:

Table 2. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	EFF-001	A location where a representative sample of the effluent can be collected prior to discharging to the King's River.
	RSW-001U	In the Kings River, approximately 200 feet upstream of Discharge Point EFF-001.
	RSW-001D	In the Kings River, approximately 800 feet downstream of Discharge Point EFF-001.

Effluent Monitoring – When discharging to Kings River, the Discharger shall monitor the effluent at EFF-001 as follows:

Table 3. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Discharge Flow Rate, Total	MGD	Meter	Continuous	1
Total Suspended Solids	mg/L	Grab .	1/Month	. 2
рН	standard units	Grab	1/Month	1.2
Temperature	°F	Grab	1/Month	1,2
Electrical Conductivity @25 °C	µmhos/cm	Grab	1/Quarter	1,2
Copper, Total Recoverable	μg/L	Grab	1/Quarter	2,3
Lead, Total Recoverable	μg/L	Grab	1/Quarter	2,3
Hardness, Total (as CaCO ₃)	mg/L	Grab	1/Quarter4	2
Standard Minerals ⁵	mg/L	Grab	1/Year	2
Chronic Toxicity	TUc	Grab	1/Year	2,6
Chlorpyrifos	μg/L	Grab	1/Permit Term	. 2
Aluminum, Total Recoverable or Acid Soluble	µg/L	Grab	1/Permit Term	2,7

A hand-held field meter may be used, provided the meter utilizes a USEPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.

Pollutants shall be analyzed using the analytical methods described in 40 CFR part 136 or by methods approved by the Central Valley Water Board or the State Water Board.

For priority pollutant constituents the reporting level shall be consistent with Sections 2.4.2 and 2.4.3 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California.

Monitoring for hardness shall be performed concurrently with effluent sampling for copper and lead.

Standard Minerals shall include the following: boron, calcium, iron, magnesium, potassium, sodium, chloride, manganese, phosphorus, total alkalinity (including alkalinity series), and hardness, and include verification that the analysis is complete (i.e., cation/anion balance).

⁶ See the Limited Threat General Order MRP (Attachment C, section V) for toxicity monitoring requirements.

Compliance with the final effluent limitations for aluminum can be demonstrated using either total or acid-soluble (inductively coupled plasma/atomic emission spectrometry or inductively coupled plasma/mass spectrometry) analysis methods, as supported by USEPA's Ambient Water Quality Criteria for Aluminum document (EPA 440/5-86-008), or other standard methods that exclude aluminum silicate particles as approved by the Executive Officer.

Effluent Characterization Monitoring - The Limited Threat General Order requires effluent characterization monitoring every 5 years. Effluent samples shall be collected at monitoring location EFF-001 and analyzed for the constituents specified in Table I-1 of Attachment I of the Limited Threat General Order, with results submitted to the Central Valley Water Board by 1 July 2021. In accordance with Table I-1, the Discharger shall monitor for constituents for Tier 1, Discharge Volume ≥ 0.25 MGD (Million Gallons Per Day).

Receiving Water Monitoring – When discharging to the Kings River, the Discharger shall monitor the receiving water at RSW-001U and RSW-001D as follows:

 Table 4.
 Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
pН	standard units	Grab	1/Month	1,2
Temperature	°F	Grab	1/Month	1,2
Turbidity	NTU	Grab	1/Month	1,2
Dissolved oxygen	mg/L	Grab	1/Quarter	1,2
Electrical Conductivity @ 25°C	µmhos/cm	Grab	1/Quarter	1,2
Hardness, Total (as CaCO₃)	mg/L	Grab	1/Quarter	1,2

A hand-held field meter may be used, provided the meter utilizes a USEPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program shall be maintained at the Facility.

In conducting receiving water sampling, a log shall be kept of the receiving water conditions throughout the reach bounded by RSW-001U and RSW-001D. Attention shall be given to the presence or absence of:

- a. Floating or suspended matter;
- b. Discoloration;
- c. Bottom deposits;
- d. Aquatic life;
- e. Visible films, sheens, or coatings;
- f. Fungi, slimes, or objectionable growths; and
- g. Potential nuisance conditions.

Notes on receiving water conditions shall be summarized in the monitoring reports.

Monitoring Report Submittals - Monitoring in accordance with the Limited Threat General Order shall begin on 1 June 2018. Self-Monitoring Reports (SMRs) shall be submitted to the Central Valley Water Board on a quarterly basis, beginning with the Second Quarter 2018. This report shall be submitted on 1 August 2018. If no discharge occurs during the quarter, the monitoring report must be submitted stating that there has been no discharge. Table 5, below, summarizes the monitoring report due dates required under the Limited Threat General Order.

Pollutants shall be analyzed using the analytical methods described in 40 CFR part 136 or by methods approved by the Central Valley Water Board or the State Water Board.

Quarterly monitoring reports must be submitted until your coverage is formally terminated in accordance with the Limited Threat General Order, even if there is no discharge during the reporting quarter.

Table 5. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On	Monitoring Period	Quarterly Report Due Date
Continuous	NOA Effective Date	All	1 May 1 August 1 November 1 February, of following year
1/Month	First day of calendar month following NOA effective date or on NOA effective date if that date is the first day of the month	1 st day of calendar month through last day of calendar month	1 May 1 August 1 November 1 February, of following year
1/Quarter	Closest of 1 January, 1 April, 1 July, or 1 October following NOA effective date	1 January through 31 March 1 April through 30 June 1 July through 30 September 1 October through 31 December	1 May 1 August 1 November 1 February, of following year
2/Year	1 January or 1 July following (or on) NOA effective date	1 January through 30 June 1 July through 31 December	1 August 1 February, of following year
1/Year	1 January following (or on) NOA effective date	1 January through 31 December	1 February, of following year
1/Permit Term	1 January following (or on) NOA effective date	1 January through 31 December	1 February, of following year

The Discharger shall electronically submit SMRs using the State Water Board's California Integrated Water Quality System (CIWQS) Program website http://www.waterboards.ca.gov/water issues/programs/ciwqs/. The CIWQS website will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal.

TOXICITY REDUCTION EVALUATION REQUIREMENTS

For compliance with the Basin Plan's narrative toxicity objective, the Limited Threat General Order requires dischargers to conduct chronic whole effluent toxicity (WET) testing, as specified in the Monitoring and Reporting Program (Attachment C, section V). Furthermore, the Toxicity Reduction Evaluation Requirements provision (Section IX.C.2.a) requires dischargers to investigate the causes of, and identify corrective actions to reduce or eliminate effluent toxicity. The Provision includes a numeric monitoring trigger and accelerated monitoring specifications. This NOA includes a site-specific numeric toxicity monitoring trigger as shown below:

Numeric Toxicity Monitoring Trigger – The numeric toxicity monitoring trigger to initiate accelerated monitoring is >1 TUc (chronic toxicity units) for all chronic toxicity end points.

Note that TUc = 100/NOEC (No Observed Effect Concentration). The monitoring trigger is not an effluent limitation; it is the toxicity threshold at which the Discharge is required to begin the accelerated monitoring, as specified in Section IX.C.2.a.ii.

SATISFACTION OF ANTI-BACKSLIDING REQUIREMENTS

See Attachment B.

GENERAL INFORMATION AND REQUIREMENTS

The Discharger must notify Central Valley Water Board staff within 24 hours of 1) the start of the discharge, and 2) having knowledge of noncompliance. The Central Valley Water Board shall be notified immediately if any effluent limit violation is observed during implementation of the project.

Discharge of material other than what is described in the application is prohibited. The required annual fee (as specified in the annual billing you will receive from the State Water Resources Control Board) shall be submitted until this NOA is officially terminated. You must notify this office in writing when the discharge regulated by the Limited Threat General Order is no longer necessary by submitting the Request for Termination of Coverage (Attachment E of the Limited Threat General Order). If a timely written request is not received, the Discharger will be required to pay additional annual fees as determined by the State Water Resources Control Board.

ENFORCEMENT

Failure to comply with the Limited Threat General Order may result in enforcement actions, which could include civil liability. Effluent limitation violations are subject to a Mandatory Minimum Penalty (MMP) of \$3,000 per violation. In addition, late monitoring reports may be subject to MMPs or discretionary penalties of up to \$1,000 per day late. When discharges do not occur during a quarterly report monitoring period, the Discharger must still submit a quarterly monitoring report indicating that no discharge occurred to avoid being subject to enforcement actions.

COMMUNICATION

The Central Valley Regional Water Quality Control Board has transitioned to a paperless office system, therefore, please convert all documents to a searchable Portable Document Format (pdf) and email them to CentralValleyFresno@waterboards.ca.gov. Please include the following information in the body of the email: Discharger's name, Facility name, County name, CIWQS Place ID 255546, and the Order number R5-2016-0076-043. Documents that are 50 megabytes or larger shall be transferred to a CD, DVD, or flash drive and mailed to our office at 1685 "E" Street, Fresno, California 93706.

All documents, including responses to inspections and written notifications, submitted to comply with this Limited Threat General Order shall be directed, via the paperless office system, to the Compliance and Enforcement Unit, attention Warren Gross. Mr. Gross can be reached at (559) 445-5128 or Warren.Gross@waterboards.ca.gov.

Questions regarding the permitting aspects of the Limited Threat General Order, and notification for termination of coverage under the Limited Threat General Order, shall be directed, via the paperless office system, to the NPDES Permitting Unit, attention Jeff Robins. He can be reached at (559) 445-5976 or jeff.robins@waterboards.ca.gov.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Resources Control 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 Resources Control Board must receive the petition by 5:00 p.m., 30 days after the date of this NOA, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Resources Control 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:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

Clay L. Ladgers

for Pamela C. Creedon

Executive Officer

Attachments: Attachment A, Project Maps

Attachment B. Satisfaction of Anti-backsliding Requirements

Enclosure Limited Threat General Order R5-2016-0076-01 (Discharger only)

cc: David Smith, U.S. EPA, Region IX, San Francisco (via email)

Division of Water Quality, State Water Board, Sacramento (via email)

Kings River Conservation District, 4886 East Jensen Avenue, Fresno, CA 93725

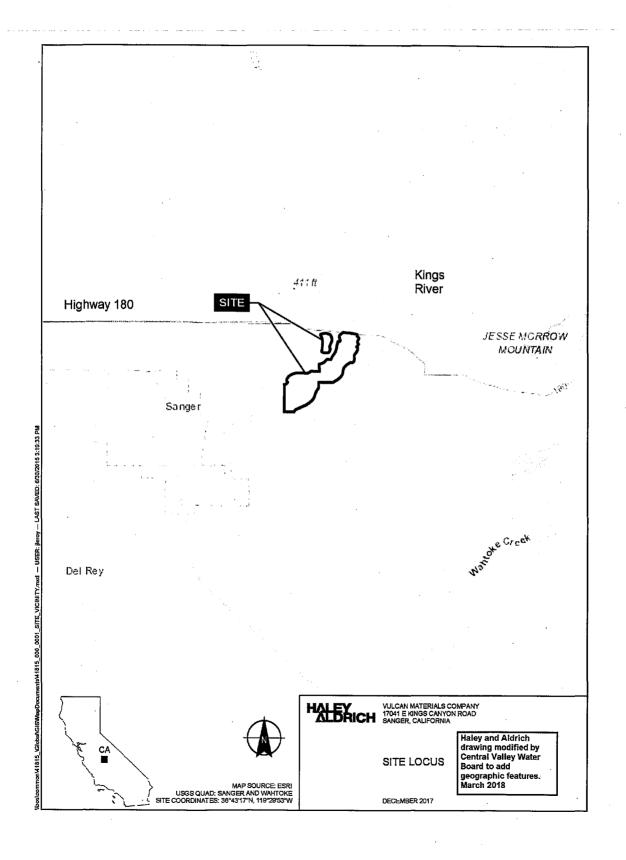
Central Valley Flood Protection Board Fresno County Planning Department

Katy Decker, Haley & Aldrich, Inc. (via email)

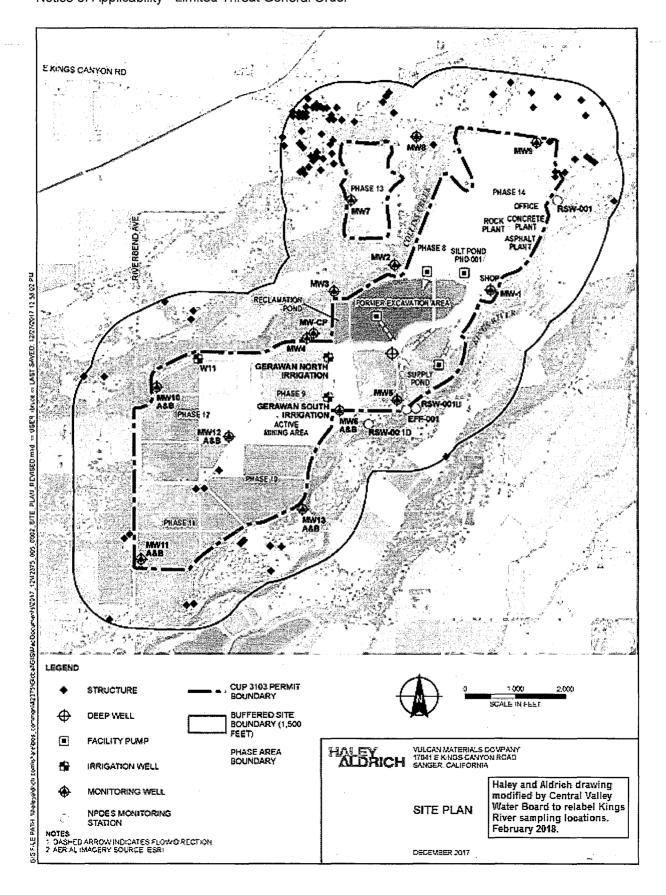
Cesar Aranda, CalMat Co. dba Vulcan Materials (via email)

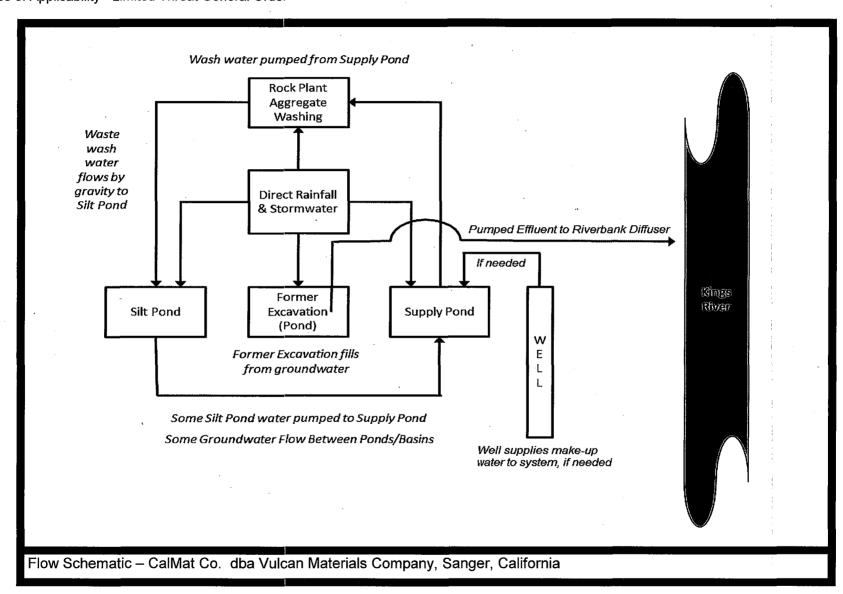
Timothy Seeno, CalMat Co. dba Vulcan Materials (via email)

Tony Varisco, Vulcan Materials Co. (via email)



Fresno County Notice of Applicability - Limited Threat General Order





ATTACHMENT B - RATIONALE FOR EFFLUENT LIMITIATIONS AND MONITORING

1. Satisfaction of Anti-Backsliding Requirements

The Clean Water Act (CWA) specifies that a revised permit may not include effluent limitations that are less stringent than the previous permit unless a less stringent limitation is justified based on exceptions to the anti-backsliding provisions contained in CWA sections 402(o) or 303(d)(4), or, where applicable, 40 C.F.R. section 122.44(l).

The effluent limitations in this Notice of Applicability (NOA) are at least as stringent as the effluent limitations in the previous Order, with the exception of effluent limitations for Electrical Conductivity (EC), acute toxicity, and chronic toxicity. The effluent limitations for these pollutants are less stringent than those in Order R5-2013-0105. This relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.

- a. **CWA section 402(o)(1) and 303(d)(4).** CWA section 402(o)(1) prohibits the establishment of less stringent water quality-based effluent limits "except in compliance with Section 303(d)(4)." CWA section 303(d)(4) has two parts: paragraph (A) which applies to nonattainment waters and paragraph (B) which applies to attainment waters.
 - i. For waters where standards are not attained, CWA section 304(d)(4)(A) specifies that any effluent limit based on a Total Maximum Daily Load (TMDL) or other Waste Load Allocation (WLA) may be revised only if the cumulative effect of all such revised effluent limits based on such TMDL's or WLAs will assure the attainment of such water quality standards.
 - ii. For attainment waters, CWA section 303(d)(4)(B) specifies that a limitation based on a water quality standard may be relaxed where the action is consistent with the antidegradation policy.

The Kings River is considered an attainment water for electrical conductivity (EC) because the receiving water is not listed as impaired on the 303(d) list for this constituent.¹ As discussed below, removal of the effluent limits complies with federal and state antidegradation requirements. Thus removal of the effluent limitations for EC from Order R5-2013-0105 meets the exception in CWA section 303(d)(4)(B).

b. **CWA section 402(o)(2).** CWA section 402(o)(2) provides six exceptions (any one exception is enough to justify a less stringent effluent limitation) to the antibacksliding regulations. Two of the six exceptions are listed below. CWA 402(o)(2) allows a renewed, reissued, or modified permit to contain a less stringent effluent limitation for a pollutant if:

¹ "The exceptions in Section 303(d)(4) address both waters in attainment with water quality standards and those not in attainment, i.e. waters on the section 303(d) impaired waters list." State Water Board Order WQ 2008-0006, Berry Petroleum Company, Poso Creek/McVan Facility.

Attachment B Mr. Timothy Walston, CalMat Co. dba Vulcan Materials Company Sanger Sand and Gravel Plant Fresno County

Notice of Applicability - Limited Threat General Order

17 May 2018

• There have been material and substantial alterations or additions to the permitted facility that justify the relaxation (CWA 402(o)(2)(A)),

• Information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance (CWA 402(o)(2)(B)(i)).

Since the issuance of Order R5-2013-0105, the two exceptions itemized above are pertinent. First, there have been material and substantial alterations or additions to the Facility. Second, updated information, that was not available at the time Order R5-2013-0105 was issued, indicate that EC, acute toxicity, and chronic toxicity for the effluent do not exhibit reasonable potential to cause or contribute to an exceedance of water quality objectives in the receiving water. This updated information (i.e., monitoring data) justifies less stringent effluent limitations for EC, acute toxicity, and chronic toxicity, and satisfies the requirements in CWA section 402(o)(2). More specifically, the material and substantial alterations and updated information that support the relaxation of effluent limitations for these constituents include the following:

i. Material and Substantial Alterations

Shortly after Order R5-2013-0105 took effect, the Discharger made three material and substantial alterations or additions to the wastewater treatment facilities. They were:

- The "Supply Pond" side of the cobble levee/weir was sealed, preventing further discharges from the "Supply Pond" to the Kings River (February 2014),
- A pump and meter were established that pumps from the "Former Excavation Area" to the riverbank discharge diffuser pipe, thereby changing the effluent draw location (February 2014), and
- The pump intake to draw effluent from the "Former Excavation Area" was lowered between sixty to eighty feet below the water surface (May 2015), further changing the effluent draw location.

The Discharger has stated they lowered the effluent draw elevation to address pH fluctuations. Algae in ponds can cause significant changes in pH by consuming carbon dioxide (for photosynthesis) in daylight (raising the pH) and producing carbon dioxide (by respiration) in the dark (lowering the pH) or below the light compensation point. pH is a significant (master) variable in water chemistry affecting, for example, the solubility, species, and toxicity of metal ions in water. Further, pH is important to living organisms and living systems. Living organisms can only survive in a limited pH range and outside that range is considered to be toxic. The Discharger's material and substantial alterations or additions to the wastewater treatment facilities of re-establishing their effluent draw elevation are significant for water quality.

ii. Updated Information

The updated information, from routine monitoring during the period of Order R5-2013-0105, was as follows.

- Electrical Conductivity. From January 2014 through January 2018 the average monthly EC readings for all monthly EC readings was 145.6 μmhos/cm, with a standard deviation of 14.9 μmhos/cm, and a range of 112 μmhos/cm to 182 μmhos/cm. The Basin Plan objective for the relevant reach of the Kings River is 200 μmhos/cm. There has not been a measured exceedance of the EC objective for the entire duration of the Order. Effluent monitoring data collected between January 2014 and January 2018 indicate that EC in the discharge does not exhibit reasonable potential to cause or contribute to an exceedance of water quality objectives.
- Acute and Chronic Toxicity. For all acute toxicity testing under the individual Order R5-2013-0105 during the 2014 to 2018 time period, the test results complied with the standard (survival of aquatic organisms in 96 hours bioassay of undiluted waste shall be no less than: minimum 70% for any one bioassay and 90% median for any three consecutive assays). Further, no toxicity was evident in the chronic toxicity testing during the period. The data indicate that acute or chronic toxicity in the discharge does not exhibit reasonable potential to cause an exceedance of the minimum water quality objective specified in the Basin Plan for toxicity. Chronic toxicity, compared to acute toxicity, tends to be observed at lower constituent concentrations. The Order R5-2016-0076-01 (NPDES No. CAG995002) for Limited Threat Discharges to Surface Water (Limited Threat General Order), will require the discharger to continue chronic toxicity testing. The Discharger will not be required to conduct acute toxicity testing during the permit period.

Thus, removal of the effluent limitations for EC, acute toxicity, and chronic toxicity is in accordance with CWA sections 402(o)(2)(A) and 402(o)(2)(B). Material and substantial alterations or additions to the permitted facility (CWA Section 402(o)(2)(A)) and new information that was not available at the time previous Order R5-2013-0105 was issued (CWA Section 402(o)(2)(B)) justify the relaxation.

2. Antidegradation Policies

This NOA does not allow for an increase in flow or mass of pollutants to the receiving water. Therefore, a complete antidegradation analysis is not necessary. The NOA requires compliance with applicable federal technology-based standards and with WQBEL's where the discharge demonstrates reasonable potential to cause or contribute to an exceedance of water quality standards. The permitted surface water discharge is consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution No. 68-16. Compliance with the requirements of the Limited Threat General Order and the NOA will result

17 May 2018

Attachment B
Mr. Timothy Walston, CalMat Co. dba Vulcan Materials Company
Sanger Sand and Gravel Plant
Fresno County
Notice of Applicability - Limited Threat General Order

in the use of best practicable treatment or control of the discharge. The expected impact on existing water quality will be insignificant.

This NOA removes effluent limitations for EC, acute toxicity, and chronic toxicity based on (1) updated monitoring data demonstrating that the effluent does not cause or contribute to an exceedance of the applicable water quality criteria or objectives in the receiving water, and (2) material and substantial alterations or additions to the permitted facility. The removal of WQBEL's for these parameters is not expected result in an increase in pollutant concentration or loading, a decrease in the level of treatment or control, or an additional reduction of water quality. Thus the removal of effluent limitations is consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution No 68-16.