Regional Water Quality Control Board
Central Valley Region
Board Meeting – 18 October 2024

Response to Written Comments for the CalMat Co. DBA Vulcan Materials Company and the Urrutia 2018 RVOC Trust, through its Trustee, Ed Huff Austin Quarry Madera County Tentative Waste Discharge Requirements

At a public hearing scheduled for 18 October 2024, the Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) will consider the adoption of Waste Discharge Requirements (WDRs) and Monitoring and Reporting Program (MRP) for the CalMat Co. DBA Vulcan Materials Company and the Urrutia RVOC Trust, through its Trustee, Ed Huff, Austin Quarry (Facility) in Madera County.

This document contains responses to written comments received from interested persons regarding the tentative WDRs and MRP circulated on 7 August 2024. Written comments from interested parties were required to be received by the Central Valley Water Board by 5:00 p.m. on 6 September 2024 to receive full consideration. Comments were received by the CalMat Co. DBA Vulcan Materials Company (Vulcan).

Written comments are summarized below, followed by responses from the Central Valley Water Board staff. Staff consolidated some of the comments received that were similar and related in nature. In addition, staff made a few minor changes to the WDRs to improve clarity and fix typographical errors.

Vulcan Comments

Comment #1: Vulcan requested that all instances of "Vulcan Materials Company and Calmat Co." be changed to "CalMat Co. DBA Vulcan Materials Company."

> **Response:** Vulcan submitted an updated Form 200 (dated 11 September 2024) that identifies CalMat Co. DBA Vulcan Materials Company as owners (facility and landowner) and operators of the Facility. However, in an 11 September 2024 meeting, Vulcan informed staff that the land on which the Facility is located is leased. The land is held in the Urrutia 2018 RVOC Trust, through its Trustee, Ed Huff (Urrutia 2018 RVOC Trust). Therefore, CalMat Co. DBA Vulcan Materials Company and the Urrutia 2018 RVOC Trust are jointly referred to as Discharger, and this change was made throughout the WDRs and MRP.

Comment #2: Vulcan requested that Finding 11 be updated as follows: *"The Facility ....includes an office, equipment maintenance shop, settling ponds, clarifier, aggregate*

processing plant (plant), truck scales, and mining areas. The plant includes a series of crushers, screens, aggregate washing, and associated stockpiles."

Response: Staff made the requested updates in Finding 11.

Comment #3 (Consolidated): Vulcan provided the following comments (consolidated) about the tentative WDR Findings related to nitrate data for the facility and underlying groundwater. Regarding a statement in Finding 45 that nearby available groundwater nitrate data does not support the claim that elevated nitrate concentrations in the ponds are indicative of natural groundwater variations, Vulcan commented that, "*pit water contains groundwater, so* [we] *disagree with this statement and historical data disagrees with this statement for MW-7… EIR* [Environmental Impact Report] *states the project was used for dry land cattle grazing previous to mining, and this was indicated as factor in nitrate concentrations... Since groundwater is the only receptor of the discharge from the plant and we believe the discharge to groundwater to be minimal from the settling ponds (only minor loss of water due to continuous discharge and extraction from ponds and silting of bottoms), we suggest quarterly groundwater sampling at existing monitoring wells (specifically monitoring wells MW-4 and MW-5 located downgradient of plant and ponds) to verify water quality compliance and lack of nitrate discharge from aggregate processing rather than a Nitrogen Source Evaluation and Minimization Plan… If groundwater monitoring indicates the settling ponds are resulting in groundwater exceedances for nitrate further evaluation can be informed.*

Response: One exceedance of nitrate was observed in one of the monitoring network wells (MW-7) in 2010, nitrate concentrations collected from other nearby monitoring wells were below 10 mg/L during the same timeframe. Furthermore, the nitrate concentration observed from the source water well for the Facility in 2021 was around 6 mg/L. The 2016 EIR did indicate that land associated with the Austin Quarry site has historically been used for dry land cattle grazing, and that the presence of nitrogen species, especially nitrate, can be an indicator of agricultural contribution. While cattle grazing may be a potential contributor to nitrogen exceedances, there is not enough information to conclude that nitrate exceedances within the pond are due solely to historic land uses (e.g., cattle grazing).

Due to limited nitrogen data, the tentative WDRs require the Discharger to complete a Nitrogen Source Evaluation and Minimization Plan. Instead, the commenter proposed to monitor downgradient wells for groundwater quality impacts from the settling ponds. Staff met with Vulcan representatives on 11 September 2024 to discuss the need for the Nitrogen Source Evaluation Minimization Plan and clarify the deadline for the associated deliverables. Language was added to Provision H.6 of the WDRs to clarify that the Nitrogen

Source Evaluation and Minimization Work Plan will be due within 60 days of adoption of the WDRs, and a Nitrogen Source Evaluation and Minimization Final Report (Final Report) will be due two years following approval of the Workplan.

Mentions of the Nitrogen Source Evaluation and Minimization Plan in the WDRs and MRP have been changed to "Nitrogen Source Evaluation and Minimization Work Plan," In addition, the following revisions and clarifications were made to the WDRs:

Finding 45 was revised as follows:

Reported nitrate as nitrogen data from the settling ponds indicate ~~increasing and~~ elevated concentrations in the process wash water. The Discharger has stated that the elevated concentrations are indicative of natural groundwater variations; however, ~~nearby available groundwater data do not support this claim~~ limited data is available to make this determination. Further monitoring is needed to evaluate the source of nitrate exceedances in the settling ponds.

Finding 46 was revised as follows:

The EIR mentions that several alluvial and bedrock wells at the Facility site were sampled for nitrate (as NO_3) during 2010. Sample results converted to nitrate as nitrogen for all wells were below the MCL of 10 mg/L, with the exception of one sample from an alluvial well near the southern border of the Facility (MW-7), from which nitrate as nitrogen was observed to be 136 mg/L. The approximate converted range of nitrate as nitrogen concentrations from the other wells sampled during 2010 was 3.8 to 9.5 mg/L. ~~No further explanation of this instance of elevated nitrate concentration from MW-7 was provided in the EIR.~~ According to the EIR, dry land cattle grazing has been a historic land use at the Facility, and the presence of nitrogen species, especially nitrate can be an indicator of agricultural contribution. While cattle grazing may be a potential contributor to nitrogen exceedances, there is not enough information to conclude that nitrate exceedances within the settling ponds are due solely to historic land use (e.g., cattle grazing).

Provision H.6 was revised as follows:

***<60 days from adoption>**, develop and implement a **Nitrogen Source Evaluation and Minimization Work Plan** for the proposed discharge. ~~The Work Plan shall identify nitrogen control measures that could reduce the nitrogen concentrations of the proposed discharge. The Work Plan shall provide a description of the tasks, cost, and time required to investigate and*

~~*implement the various elements in the Nitrogen Evaluation and Minimization Work Plan.*~~ *At a minimum, the Work Plan shall include:*

i. Identification of all the sources that contribute, or potentially contribute, to the nitrogen concentrations in Facility's proposed process wastewater discharge.

~~*ii. An analysis of the methods/alternatives that could be used to reduce the sources of nitrogen that discharge into the facility process wastewater streams.*~~

ii. A description of the tasks, costs, and time required to investigate and implement various elements in the Nitrogen Source Evaluation and Minimization Work Plan.

iii. A plan for monitoring the results of the Nitrogen Evaluation and Minimization Work Plan.

Provision H.7 was added as follows:

Within two years following approval of the Nitrogen Source Evaluation and Minimization Work Plan*, the Discharger shall submit a* ***Nitrogen Source Evaluation and Minimization Final Report****. At a minimum, the Final Report shall include:*

i. Summary and findings associated with Nitrogen Source Evaluation and Minimization Work Plan activities.

ii. Proposed method(s) of compliance with the Nitrate Control Program.

iii. An analysis of the methods/alternatives that could be used to reduce the sources of nitrogen that discharge into the facility process wastewater streams.

iv. Identification of recommended source control measures to decrease nitrate concentrations at Facility process water components, where necessary.

v. Timeline for implementation of source control measures.

The Nitrogen Source Evaluation and Minimization Final Report may include a request for reduced monitoring frequencies. The reduction request shall include a data-based justification that the monitoring frequencies required by the MRP are no longer necessary, and new proposed monitoring frequencies.

Comment #4: *What is considered "background quality", would that include all the GW data collected prior to operations commencing? The MRP's only compliance point is NW Well (SW-001)?*

> **Response:** Limited nearby groundwater nitrate data is available. As stated in the Information Sheet, water quality samples collected from the Northwest Well (source water supply), and from the monitoring network wells prior to mining operations are considered to be representative of background conditions, with the exception of MW-7, as discussed in the Findings.

Comment #5: *Per 7/6/23 email response from Katie Carpenter, Settling Ponds have been reconfigured to operate in series (-002>-001>-003), with discharge of SP-003 being representative sampling location.*

> **Response:** Staff updated settling ponds monitoring location to SP-003 throughout the MRP and WDR.

Comment #6: *As indicated in WDR document quarterly nitrate monitoring is proposed consistent with typical groundwater monitoring program frequency. In addition, we are open to including quarterly ground water monitoring from sampling wells near property boundary (specifically wells MW-4 and MW-5).*

> **Response:** Monthly sampling is needed and consistent with the intent of the Nitrogen Source Evaluation and Minimization Workplan. No changes were made to the MRP nitrogen monitoring frequencies. Following submittal of the Nitrogen Source Evaluation and Minimization Final Report, the Discharger may propose reduced monitoring. This request must include a data-based justification for the reduced monitoring.
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> Additionally, the MRP does not require groundwater monitoring, with the exception of source water quality monitoring from the supply well. However, the Discharger may deem it necessary to conduct groundwater monitoring as part of the Nitrogen Source Evaluation and Minimization Work Plan. Any monitoring conducted in addition to that required by the MRP should be reported in the quarterly and annual reports.

Comment #7: Vulcan requested that Section III.B.1. in the MRP be replaced with the following: *"1. Average monthly flows of supply water added to the aggregate wash system (SW-001), clarifier effluent (EFF-001), and water sourced from mining pit operations (MIN-001). Compare the clarifier effluent daily flow to the flow limitations of the WDRs."* Vulcan contended that this "*this would align with requirements of the MRP. Average dry weather flow is not defined in the MRP and not really relevant to the flow limitation in the WDR. How would it be quantified? Making a comparison of "Total" or*

"average monthly flows" to the "flow limitation of the WDRs" doesn't work, since the limit is a maximum daily flow.

Response: Section III.B.1. of the MRP has been revised as follows:

Average monthly flows of supply water (SW-001) added to the aggregate wash system, clarifier effluent (EFF-001), and water sourced from the mining pit operations (MIN-001). The Discharger shall compare the daily clarifier effluent flow (EFF-001) to the daily flow limitation specified in the WDRs.