

Santa Ana Regional Water Quality Control Board

June 6, 2017

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DISCHARGE AUTHORIZATION AND MONITORING AND REPORTING PROGRAM NO. R8-2015-0004-020a, UNDER GENERAL DE MINIMIS PERMIT NO. R8-2015-0004, NPDES NO. CAG998001. USACE SAR PROJECT PHASE 4

Dear Mr. Bradford:

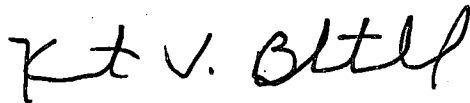
On April 27, 2017, you submitted a complete Notice of Intent to begin discharging wastewater from US Army Corps of Engineers (USACE) Santa Ana River Project Reach 9 Phase 4 under your De Minimis Various Locations Permit R8-2015-0004-020 following the terms and conditions of the Regional Board's renewed general permit, Order No. R8-2015-0004. According to the Notice of Intent (NOI), the project will consist of dewatering activities for the USACE project near Gypsum Canyon Road in Yorba Linda, CA downstream of Coal Canyon on the South side of the Santa Ana River. The dewatering project is necessary to effect channel repairs and reinforce the river banks in order to prevent erosion and protect the 91 Freeway which runs parallel to the river.

You are hereby authorized to discharge wastewater from the Santa Ana River Project Reach 9 Phase 4 site under the terms and conditions of Order No. R8-2015-0004 in the manner and as described in your NOI. Enclosed is Monitoring and Reporting Program (MRP) No. R8-2015-0004-020a, which specifies the frequency of sampling and the constituents to be monitored. Section VIII-C of MRP also requires you to evaluate the effects of your discharge on receiving water quality using the Waste Load Allocation Model (WLAM) currently being updated by the Basin Monitoring Program Task Force administered by the Santa Ana Watershed Project Authority (SAWPA) or a functionally-equivalent water quality model. If you elect to work with the Task Force, you must notify the Regional Board and SAWPA in writing of your commitment before commencing discharge. If you elect to develop your own water quality model, the Regional Board must review and approve that model before any discharge may commence. Please note that you are required to notify this office five (5) days in advance of any dewatering activities.

Monitoring reports are due by the 30th day of each month. The California Water Code Section 13261 specifies civil liability may be assessed for failure to submit a report required under Section 13260. Alternatively, Section 13385 (i) (1) (B) requires the Regional Board to assess a mandatory minimum penalty of \$3,000 for failure to submit a required report. Electronic self-monitoring reports are sent to SantaAna@waterboards.ca.gov.

Upon project completion, please notify the Regional Board that the project is complete and that wastewater discharges has ceased. If you have any questions regarding the Discharge Authorization or the MRP, please contact Ryan Harris of our Wastewater Section at (951) 320-2008 or at Ryan.Harris@waterboards.ca.gov.

Sincerely,



Kurt V. Berchtold
Executive Officer

Enclosures: MRP No. R8-2015-0004-020a
ACOE Dewatering Projects for the SAR Mainstem Project, SAR Reach 2

cc: Susan Beeson SARWQCB, Susan.Beeson@waterboards.ca.gov
Mark McClarty USACE, Mark.W.Mclarty@usace.army.mil
Mark Norton SAWPA, mnorton@sawpa.org

R8-2015-0004-020a
CIWQS Place Id: 220054

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Attachment E – Monitoring and Reporting Program (MRP)

The Code of Federal Regulations (CFR) at 40 CFR §122.48 requires that all NPDES permits specify monitoring and reporting requirements. CWC Sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements that implement the federal and California regulations.

I. GENERAL MONITORING PROVISIONS

A. General Monitoring Provision

1. All sampling and sample preservation shall be in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association).
2. All laboratory analyses shall be performed in accordance with test procedures under 40 CFR 136 (revised as of April 11, 2007) "Guidelines Establishing Test Procedures for the Analysis of Pollutants," promulgated by the United States Environmental Protection Agency (EPA), unless otherwise specified in this Monitoring and Reporting Program. In addition, the Regional Water Board and/or EPA, at their discretion, may specify test methods that are more sensitive than those specified in 40 CFR 136.
3. Chemical analyses shall be conducted at a laboratory certified for such analyses by the State Water Resources Control Board in accordance with Water Code Section 13176, or conducted at a laboratory certified for such analyses by the EPA or at laboratories approved by the Regional Water Board's Executive Officer.
4. The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:
 - a. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
 - b. Sample results less than the reported ML, but greater than or equal to the laboratory's current Method Detection Limit (MDL)¹, shall be reported as "Detected, but Not Quantified," or "DNQ." The estimated chemical concentration of the sample shall also be reported.
 - c. Sample results not detected above the laboratory's MDL shall be reported as "not detected" or "ND."

¹

MDL is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analytical concentration is greater than zero, as defined in 40 CFR 136, Appendix B, revised as of April 11, 2007.

5. The Discharger shall submit to the Regional Water Board reports necessary to determine compliance with effluent limitations in this Order. The Discharger shall report with each sample result:
 - a. The reporting level achieved by the testing laboratory; and
 - b. The laboratory's current MDL, as determined by the procedure found in 40 CFR 136 (revised as of April 11, 2007).
6. The Discharger shall have, and implement an acceptable written quality assurance (QA) plan for laboratory analyses. Duplicate chemical analyses must be conducted on a minimum of ten percent (10%) of the samples, or at least one sample per month, whichever is greater. A similar frequency shall be maintained for analyzing spiked samples. When requested by the Regional Water Board or EPA, the Discharger will participate in the NPDES discharge monitoring report QA performance study.
7. The Discharger shall assure that records of all monitoring information are maintained and accessible for a period of at least five years (this retention period supersedes the retention period specified in Section IV.A. of Attachment D) from the date of the sample, report, or application. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or by the request of the Regional Water Board at any time. Records of monitoring information shall include:
 - a. The information listed in Attachment D - IV Standard Provisions – Records, subparagraph B. of this Order;
 - b. The laboratory which performed the analyses;
 - c. The date(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The modification(s) to analytical techniques or methods used;
 - f. All sampling and analytical results, including
 - (1) Units of measurement used;
 - (2) Minimum reporting level for the analysis (minimum level);
 - (3) Results less than the reporting level but above the method detection limit (MDL);
 - (4) Data qualifiers and a description of the qualifiers;
 - (5) Quality control test results (and a written copy of the laboratory quality assurance plan);
 - (6) Dilution factors, if used; and
 - (7) Sample matrix type.
 - g. All monitoring equipment calibration and maintenance records;
 - h. All original strip charts from continuous monitoring devices;
 - i. All data used to complete the application for this Order; and,
 - j. Copies of all reports required by this Order.
 - k. Electronic data and information generated by the Supervisory Control and Data Acquisition (SCADA) System.

8. Monitoring and reporting shall be in accordance with the following:

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- b. Whenever the Discharger monitors any pollutant more frequently than is required by this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharge monitoring report specified by the Executive Officer.
- c. A "grab" sample is defined as any individual sample collected in less than 15 minutes.
- d. Daily samples shall be collected on each day of the week.

II. MONITORING LOCATIONS

The Discharger shall establish monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order. The monitoring locations shall be located where representative samples of the discharge can be obtained.

III. INFLUENT MONITORING REQUIREMENTS – NOT APPLICABLE

IV. EFFLUENT MONITORING REQUIREMENTS

- A. The following shall constitute the effluent monitoring program for discharges other than decant filter backwash wastewater and/or sludge dewatering filtrate water. If there is no discharge see Section VIII.B.2., below.

Standard Effluent Monitoring Program

Parameter	Unit	Sample Type	Minimum Sampling Frequency
Flow	gpd	Estimate	Daily
Total Petroleum Hydrocarbons ²	mg/L	Grab	During the first 30-minutes of each discharge then weekly, thereafter; or as directed by the Executive Officer
Copper - Total Recoverable	mg/L	"	"
Total Dissolved Solids	mg/L	"	"
Total Suspended Solids ^{3, 4}	mg/L	"	"
Boron	mg/L	"	"
Bromide	mg/L	"	"
Calcium	mg/L	"	"
Chloride	mg/L	"	"
Carbonate	mg/L	"	"
Bicarbonate	mg/L	"	"
Potassium	mg/L	"	"
Magnesium	mg/L	"	"
Sodium	mg/L	"	"
Sulfate	mg/L	"	"
Nitrate	mg/L	"	"
Total Inorganic Nitrogen (TIN)	mg/L	"	"
Sulfides	mg/L	"	"
pH	Std. Units	"	"

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS – NOT APPLICABLE

² Only for groundwater dewatering projects in an area where: (1) gasoline leaks, spills, or contamination has occurred; or (2) active groundwater remediation projects are occurring (e.g., gasoline service station leaking underground storage tanks).

³ Not applicable if all wastewater will percolate prior to reaching receiving waters.

⁴ Not applicable to purged wastewater from developed monitoring or injection wells.

VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE

VII. RECEIVING WATER MONITORING REQUIREMENTS

Whenever there is a discharge and the Discharger asserts that the discharge percolated before it reached a stream with aquatic life, the Discharger shall record in a permanent log the following information: (a) the date(s), time(s), and duration(s) of the discharge; (b) a description of the location where the discharge(s) percolated into the ground, (c) the climatic condition in the area during the discharge and (d) the name of the individual(s) who performed the observation.

For discharges that do reach a stream, the Discharger shall on a weekly basis make visual observations of the receiving water⁵ (only when a discharge is occurring) for any visible oil sheen or coloration of the receiving water. The findings of these observations shall be recorded in a permanent log.

Copies of the above logs shall be submitted with the required monthly report.

VIII. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Federal Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
2. Discharge monitoring data shall be submitted in a format acceptable to the Regional Water Board. Specific reporting format may include preprinted forms and/or electronic media. The results of all monitoring required by this Order shall be reported to the Regional Water Board, and shall be submitted in such a format as to allow direct comparison with the limitations and requirements of this Order.
3. All monitoring reports, or information submitted to the Regional Water Board shall be signed and certified in accordance with 40 CFR 122.22 and shall be submitted under penalty of perjury.
4. Five days prior to any discharge from locations already reported, the Discharger shall notify the Regional Board staff by phone or e-mail indicating the date and time of the proposed discharge.
5. Five days prior to any planned discharge⁶ from locations not yet reported, the discharger shall notify the Regional Board staff by phone or by a fax letter indicating the following:
 - a. Specific type of the proposed wastewater discharge (see listing on Finding 1 of the Order);
 - b. The estimated average and maximum daily flow rates;
 - c. The frequency and duration of the discharge;
 - d. The affected receiving water(s);
 - e. A description of the proposed treatment system (if appropriate); and

⁵ For discharges from monitoring or injection wells, document the visual description of the discharged water at the point of discharge at the well location.

⁶ For those unplanned discharges, as much prior notification as possible is required before any discharge is initiated.

- f. A description of the path from the point of initial discharge to the ultimate location of discharge (fax a map if possible);

6. Noncompliance Reporting

- a. The discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided to the Executive Officer (951-782-4130) and the Office of Emergency Services (1-800-852-7550) orally within 24 hours from the time the discharger becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause, the period of noncompliance, including exact dates and times and, if the noncompliance has not been corrected, the anticipated time it is expected to continue, and, steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
 - b. Any violation of a maximum daily discharge limitation for any of the pollutants listed in this Order shall be included as information that must be reported within 24 hours.
 - c. The Regional Water Board may waive the above required written report on a case-by-case basis.
7. Except for data determined to be confidential under Section 308 of the Clean Water Act (CWA), all reports prepared in accordance with the terms of this Order shall be available for public inspection at the offices of the Regional Water Quality Control Board and the Regional Administrator of EPA. As required by the CWA, effluent data shall not be considered confidential.
8. For Dischargers discharging at a volume equal to or greater than 150,000 gallons per day, the Discharger shall submit semi-annual reports that tabulate all measured flows and measured parameters within the most recent six month period. Where discharges associated with these projects last less than 6 months, a report covering the period of discharges shall be submitted. Copies of these monitoring reports shall be submitted to the Regional Water Board and to the Water Quality Director of the Orange County Water District at P.O. Box 8300, Fountain Valley, CA 92728-8300.

B. Self-Monitoring Reports (SMRs)

1. Monitoring reports shall be submitted by the 30th day of each month following the monitoring period and shall include:
 - a. The results of all physical/chemical analyses for the previous month,
 - b. The daily flow data,
 - c. A copy of the receiving water observation log,
 - d. A summary of the month's activities including a report detailing compliance or noncompliance with the task for the specific schedule date, and

2. If no discharge occurs during the previous monitoring period, a letter to that effect shall be submitted in lieu of a monitoring report.
3. At any time during the term of this Order, the Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>). Until such notification is given, the Discharger shall submit hard copy SMRs. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.

C. Other Reports

1. The permittee is required to evaluate the net effect of its de minimus discharges on downstream surface and groundwaters using a water quality model reviewed and approved by the Regional Board.
2. The permittee may elect to meet this reporting obligation by assisting the Basin Monitoring Program Task Force's on-going effort to update the Waste Load Allocation Model (WLAM), previously approved by the Regional Board, and ensure that the revised WLAM takes into consideration all actual and planned discharges by the permittee. Work products prepared by the Task Force and submitted to the Regional Board constitute full compliance with this reporting requirement. The Task Force is supervised and administered by the Santa Ana Watershed Project Authority (SAWPA) and the costs of participation are determined by the stakeholders not the Regional Board.
3. Alternatively, the permittee may meet this reporting obligation by developing a separate water quality model to evaluate the net effect of its discharges on downstream surface and groundwaters under a wide range of potential flow conditions. The alternative water quality model must be reviewed and approved by the Regional Board before any discharge may commence.

ACOE Dewatering Projects for the SAR Mainstem Project, SAR Reach 2

The Santa Ana River watershed is located in southern California and is approximately 2,840 square miles in size. The tributaries of the Santa Ana River begin in the San Bernardino, San Gabriel, San Jacinto, and Santa Ana Mountains. The tributaries merge with the Santa Ana River which flows to the Pacific Ocean. The watershed includes portions of San Bernardino County, Riverside County, Orange County, and a small portion of Los Angeles County.

On January 22, 2004 the RWQCB approved the Basin Plan Amendment for TIN and TDS in the Santa Ana River Watershed. The Basin Plan Amendment defined specific agencies throughout the watershed responsible for several monitoring and analyses programs for TIN and TDS. In May 2004, the Santa Ana Watershed Project Authority (SAWPA) assisted these defined agencies in establishing a task force agreement among the parties, approximately 20 water related agencies in the Santa Ana River Watershed. The task force is called the Basin Monitoring Program Task Force (BMP TF). SAWPA serves as the administrator of the task force to conduct the Regional Board required monitoring and analyses programs and has served in the role of manager of the BMP TF since its formation. All task force costs are paid by the task force members. A task force scope, budget and schedule are prepared each year and are approved by both the BMP TF and the SAWPA Commission since the BMP TF operates under the governance of SAWPA.

One of the required tasks by the Regional Board for the task force agencies is to develop and periodically update of the Santa Ana River Wasteload Allocation. Wasteload allocations for regulating discharges of TDS and total inorganic nitrogen (TIN) to the Santa Ana River, and thence to groundwater management zones recharged by the River, are an important component of salt management for the Santa Ana Basin. The Santa Ana River is a significant source of recharge to groundwater management zones underlying the River and, downstream, to the Orange County groundwater basin. The quality of the River thus has a significant effect on the quality of the Region's groundwater, which is used by more than 5 million people. Control of River quality is appropriately one of the Regional Board's highest priorities.

Under the Clean Water Act, violations of water quality objectives for surface waters must be addressed by the calculation of the maximum wasteloads that can be discharged to achieve and maintain compliance. The wasteload allocations distribute a share of the total TDS and TIN wasteloads to each of the discharges to the River or its tributaries. The allocations are implemented principally through TDS and nitrogen limits in waste discharge requirements issued to municipal wastewater treatment facilities or POTWs that discharge to the River, either directly or indirectly. Further, the wasteload allocation includes projections of anticipated TDS and TIN wasteloads along with SAR discharges. Over time, the wasteload allocation is periodically updated to reflect changes in discharge amounts, non-point source flows and changing land use in the watershed.

The latest SAR Wasteload Allocation Update commenced on Jan. 17, 2017 with a contract among SAWPA and the consultant, Geosciences Inc., to conduct this work through the BMP Task Force and SAWPA. Funding to conduct this work was collected from the BMP Task Force over a two fiscal year period, FY 15-16 and FY 16-17. The average cost per agency for the task force work which included collecting funding for the FY 17-18 SAR Wasteload Allocation Update was \$13,924 in FY 15-16 and

\$20,180 in FY 16-17. The average annual cost per agency that was budgeted for FY 17-18 is \$14,019. It is anticipated that the annual cost per agency for future years will be approximately the same as FY 17-18 for the next 2-3 years.

ACOE is required to evaluate the effects of its dewatering discharges on surface and groundwater quality downstream of the project. They have the option of using the Waste Load Allocation Model (WLAM) currently being updated by the Basin Monitoring Program Task Force or by developing their own water quality model. The latter option would require considerable time and expense because the new model would have to be approved by the Regional Board before any discharge could commence.

Time is of the essence because the ACOE project is necessary to prevent stream erosion from undermining the 91 Freeway. Therefore, the Task Force has agreed allow ACOE help co-sponsor development of the revised WLAM without requiring them to become an official "member" of the Task Force. ACOE's cost-share would be set equal to other members of the Task Force.

Since work on the revising the WLAM began in FY16-17 and will likely be completed in FY17-18, ACOE's must pay a total of \$48,123 to co-sponsor the work for that two-year period. If ACOE continues to discharge after June 30, 2018, it must pay an additional \$14,019 per year to the Task Force to help pay the costs of preparing the triannual water quality update required by the Regional Board.