



San Diego Regional Water Quality Control Board

EFFECTIVE DATE

Pino Vitti
President
Citizens Development Corporation
1105 La Bonita Dr
San Marcos, CA 92078
pv@cdcsanmarcos.com

Sent by Email Only

In reply refer to:
771065:jchhor

Subject: Notice of Applicability (NOA) Working Proposal, General Waste Discharge Requirements for Groundwater Extraction Discharges to Surface Waters within the San Diego Region, Order R9-2015-0013, NPDES Permit CAG919003 (General Order)

Lake San Marcos, 115 La Bonita Dr, San Marcos, CA (Project)

Dear Pino Vitti:

The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) has reviewed the December 1, 2020, Notice of Intent (NOI) application package for coverage under the General Order submitted by Citizens Development Corporation (Discharger), with supplemental information received on May 24, 2021, and March 28, 2023. The San Diego Water Board has determined that the NOI is complete, and the Discharger is eligible for coverage under the General Order. The Discharger is authorized to discharge under the terms and conditions of the General Order and this NOA working proposal.

NOA Working Proposal Information

The Discharger, Discharge Location, and Enrollment Information are summarized in Tables 1 through 3 below. Table 4, Administrative Information, contains the approval date, effective date, and expiration date applicable to this NOA working proposal.

Table 1 - Discharger Information

Discharger	Citizens Development Corporation
Name of Facility	Lake San Marcos
Facility Address	Lake San Marcos San Marcos, CA 92078 San Diego County

Table 2 – Discharge and Well Locations

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Treated or Untreated Groundwater	33.120136°	-117.209928°	Lake San Marcos
002	Treated or Untreated Groundwater	33.127260°	-117.203420°	Lake San Marcos
003	Treated or Untreated Groundwater	33.109492°	-117.208947°	Lake San Marcos

Table 3 - Enrollment Information

WDID	9 000003895
Facility Contact, Title, Agency, and Phone	Pino Vitti, President, Citizens Development Corporation, (858) 755-0216
Authorized Person to Sign and Submit Reports	Same as Facility Contact
Mailing Address	Pino Vitti, President Citizens Development Corporation 1105 La Bonita Dr. San Marcos, CA 92078
Billing Address	Same as Mailing Address
Type of Facility	Groundwater Well Extraction
Major or Minor Facility	Minor
Discharge Category	Category 1 – Highest Threat to Water Quality
Facility Permitted Flow	2.5 million gallons per day (MGD) between April 1 and November 30 No discharge is permitted between December 1 and March 31
Watershed	904.52 - Richland Hydrologic Subarea of the San Marcos Hydrologic Area of the Carlsbad Hydrologic Unit
Receiving Water	Lake San Marcos
Receiving Water Type	Freshwater Inland Surface Water without MUN Beneficial Use

Table 4 - Administrative Information

This NOA was approved by the San Diego Water Board on:	BOARD MEETING DATE
This Enrollment is effective as of:	EFFECTIVE DATE

Project Description

The Discharger proposes to discharge groundwater to Lake San Marcos annually on an as-needed basis between April 1 to November 30 to maintain Lake San Marcos' water levels during the dry season. The Project involves discharging extracted groundwater from up to four wells into Lake San Marcos:

- The existing Executive Golf Course Well (EGC Well) will continue discharging to Lake San Marcos at Discharge Point 001.
- The existing St. Mark Golf Course Well (SMGC Well) will continue discharging to Lake San Marcos at Discharge Point 002.
- Two new wells will be constructed and will jointly discharge to Lake San Marcos at Discharge Point 003.

When the two new wells are fully operational, the two new wells will be the primary sources of extracted groundwater to Lake San Marcos. The EGC Well and SMGC Well will serve as backup sources.

Lake San Marcos is impaired for copper, ammonia (as nitrogen), nutrients, and phosphorous pursuant to Clean Water Act (CWA) section 303(d). On September 20, 2011, the San Diego Water Board issued Investigative Order No. R9-2011-0033 (IO) requiring an investigation into the causes and extent of nutrient impairment in Lake San Marcos. Water quality data and watershed/lake models generated in response to the IO were used to develop a Remedial Investigation/Feasibility Study (RI/FS).

The RI/FS identified several remedial actions to reduce nutrient loading and improve water quality in Lake San Marcos. At least one of the remedial actions will require the discharge of extracted groundwater into Lake San Marcos.

The Discharger is unable to fully comply with the effluent limitations in the General Order. Rather than implementing a treatment system designed to ensure compliance with the General Order, the Discharger has requested time to investigate the applicability of site-specific objectives to Lake San Marcos. Based on information in the NOI and RI/FS, the San Diego Water Board has enrolled the Discharger under the General Order and has also adopted *Time Schedule Order R9-2024-0110 Requiring the Citizens Development Corporation to Comply with Requirements in Order R9-2015-0013, NPDES Permit CA919003 for Groundwater Extraction Discharges to Lake San Marcos* (TSO). The TSO sets forth requirements and a schedule for the Discharger to come into compliance with the effluent limitations in the General Order while also establishing temporary interim effluent limitations.

Each pollutant parameter listed in Table 5 below has a reasonable potential to cause or contribute to an exceedance of applicable water quality standards (see Attachment C-1 of the General Order). Accordingly, this NOA working proposal is conditioned on the requirement that the groundwater discharge must not exceed applicable concentration

and mass-based interim effluent limitations contained in section V.A.3, Table 6 of the General Order or Table 5 of the TSO for the parameters listed in Table 5 below. In making this determination, the San Diego Water Board considered factors including but not limited to the groundwater quality monitoring results provided in the NOI.

Table 5 – Parameters Subject to Effluent Limitations Prescribed in the General Order

Parameter	Units ^[4]	Effluent Limitations		
		AMEL	MDEL	Instantaneous Maximum
Applicable to All Dischargers				
Settleable Solids	ml/L	0.1	--	0.2
Total Suspended Solids	mg/L	30	--	50
Turbidity	NTU	--	--	20 ^[1]
Chronic Toxicity	Pass/Fail	--	Pass ^[2]	--
pH	standard units	--	--	6.5 – 8.5 ^[3]
Based on Results of Reasonable Potential Analysis				
Total Dissolved Solids (TDS)	mg/L	^[5]	--	--
Chloride	mg/L	^[5]	--	--
Sulfate	mg/L	^[5]	--	--
Total Nitrogen	mg/L	1.0 ^[5]	--	2.0
Total Phosphorus	mg/L	0.1 ^[5]	--	0.210
Iron, Total Recoverable	mg/L	^[5]	--	0.3
Manganese, Total Recoverable	mg/L	^[5]	--	0.05
Selenium, Total Recoverable	µg/L	4.1 ^[5]	8.2	--

- ^[1] In addition to an instantaneous maximum of 20 NTU, the discharge shall not exceed the ambient turbidity of the surface water at any time.
- ^[2] As specified in section IV of the Monitoring Reporting Program, Attachment E of the General Order.
- ^[3] pH shall remain within the limits of 6.5 and 8.5 s.u. at all times.
- ^[4] The concentration-based effluent limitations stated in the table above are also applicable as mass-based effluent limitations expressed as lbs/day which are calculated as follows:

$$\text{Parameter Concentration (if expressed as mg/L)} \times \text{Flow Limit (expressed as MGD)} \times 8.34$$

$$\text{(conversion factor)} = \text{Mass-based Effluent Limitation expressed as lbs/day.}$$

$$\text{Parameter Concentration (if expressed as } \mu\text{g/L)} \times \text{Flow Limit (expressed as MGD)} \times 0.00834$$

$$\text{(conversion factor)} = \text{Mass-based Effluent Limitation expressed as lbs/day.}$$
 The Flow Limit (MGD) value used in this equation shall be the Discharger's maximum allowable flow rate limit specified in the NOA working proposal. The discharge shall not cause the calculated mass-based effluent limitations to be exceeded.
- ^[5] The parameter is subject to interim AMELs and conditions, as provided in the TSO.

Basin Plan Water Quality Objectives for Inland Surface Waters

The *Water Quality Control Plan for the San Diego Basin* (Basin Plan) states that inland surface waters shall not contain total dissolved solids (TDS), chloride, and sulfate in concentrations in excess of the numerical objectives described in Table 3-9 of the Basin Plan. Table 3-9 of the Basin Plan includes numerical objectives for TDS, chloride, and sulfate that are applicable to the waters of San Marcos Creek, which includes Lake San Marcos. The discharge of groundwater from the Project exceeding the following concentrations and conditions for TDS, chloride, and sulfate are prohibited:

- Concentrations of TDS in the groundwater discharge shall not exceed 500 mg/L more than ten percent of the time during any one-year period.
- Concentrations of chloride in the groundwater discharge shall not exceed 250 mg/L more than ten percent of the time during any one-year period.
- Concentrations of sulfate in the groundwater discharge shall not exceed 250 mg/L more than ten percent of the time during any one-year period.

Discharge Flowrate Limitation

The discharge of groundwater from the Project exceeding a cumulative flowrate of 2.5 MGD from the RGC Well, SMGC Well, and two new wells between April 1 and November 30 is prohibited pursuant to section IV.C of the General Order. The discharge of groundwater from the Project between December 1 and March 31 is prohibited pursuant to section IV.C of the General Order.

Monitoring and Reporting Requirements

1. As required by Attachment E, *Monitoring and Reporting Program* (MRP) to the General Order and as proposed by the Discharger, the Discharger shall monitor the effluent of the EGC Well, SMGC Well, and each of the two new wells at a location where a representative sample can be obtained. Samples from all the wells shall be taken before the monitored flow joins or is diluted by any other waste stream, body of water, or substance for the parameters listed in Table 6 below. This list includes 1) parameters subject to effluent limitations in the General Order or TSO and 2) other parameters where sample results were reported as “Not Detected” but the laboratory detection levels exceeded applicable water quality standards.

Table 6 – Monitoring Requirements

Parameter	Monitoring Frequency Between April 1 and November 30
Flowrate	1/Day
Settleable Solids	1/Month
Total Suspended Solids	1/Month
Turbidity	1/Month
Chronic Toxicity ^[1]	1/Quarter
pH	1/Month
Total Dissolved Solids	1/Month
Chloride	1/Month
Sulfate	1/Month
Iron, Total Recoverable	1/Month
Manganese, Total Recoverable	1/Month
Selenium, Total Recoverable	1/Month
Total Nitrogen	1/Month
Total Phosphorous	1/Month
Total Residual Chlorine	1/Month

Parameter	Monitoring Frequency Between April 1 and November 30
Hydrogen Sulfide	1/6-month
Mercury, Total Recoverable	1/6-month
2,3,7,8 TCDD	1/6-month
Benzidine	1/6-month
3,3 Dichlorobenzidine	1/6-month
Hexachlorobenzene	1/6-month
Aldrin	1/6-month
Chlordane ^[2]	1/6-month
4,4'-Dichlorodiphenyltrichloroethane (DDT)	1/6-month
4,4'-Dichlorodipenyldichloroethylene (DDE[linked to DDT])	1/6-month
4,4'-Dichlorodipenyldichloroethane (DDD)	1/6-month
Dieldrin	1/6-month
Heptachlor	1/6-month
Heptachlor Epoxide	1/6-month
Polychlorinated Biphenyls (PCBs) sum ^[3]	1/6-month
Toxaphene	1/6-month

^[1] As specified in section IV of the Monitoring Reporting Program, Attachment E of the General Order.

^[2] Chlordane shall be reported as the sum of chlordane-alpha, chlordane-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.

^[3] PCBs shall be reported as the sum of chlorinated biphenyls whose analytical characteristics resemble those of aroclor-1221, aroclor-1232, aroclor-1242, aroclor-1248, aroclor-1254, and aroclor-1260.

2. Pursuant to section II.A.3 of Attachment E to the General Order, in addition to reporting results in concentration units as specified in the MRP, the Discharger shall also report the monitoring results in units of mass (lbs/day) for compliance with the applicable mass-based effluent limitations for the parameters listed in Table 5 above. The mass-based effluent result is calculated using the following formulas:
 - a. Parameter Concentration (if expressed as mg/L) x Daily Flowrate (expressed as MGD) x 8.34 (conversion factor) = Mass-based Effluent Result (expressed as lbs/day).
 - b. Parameter Concentration (if expressed as µg/L) x Daily Flowrate (expressed as MGD) x 0.00834 (conversion factor) = Mass-based Effluent Result (expressed as lbs/day).

3. Pursuant to section V.B of Attachment E to the General Order, the Discharger shall submit all reports and information required under this NOA working proposal and the General Order in electronic format by email to SanDiego@waterboards.ca.gov.

- a. Electronic documents submitted to the San Diego Water Board must include the following identification number in the header or subject line:
771065:jchhor.
 - b. Unless notified separately, the Discharger is not required to submit hard copies or electronic Self-Monitoring Reports (eSMRs) using the California Integrated Water Quality System (CIWQS) program website at this time.
 - c. The Discharger shall submit all supporting documentation with the reports, including but not limited to laboratory reports and chain-of-custody forms.
4. Pursuant to sections I.B and V.B.4 of Attachment E to the General Order, monitoring must be conducted according to sufficiently sensitive test methods approved under title 40 of the Code of Federal Regulations (40 CFR) part 136 for the analysis of pollutants or pollutant parameters or as required under 40 CFR chapter 1, subchapter N or O. For the purposes of this paragraph, a method is sufficiently sensitive when:
- a. The method minimum level (ML) is at or below the level of the most stringent effluent limitation established in the General Order for the measured pollutant or pollutant parameter, and either the method ML is at or below the level of the most stringent applicable water quality criterion for the measured pollutant or pollutant parameter or the method ML is above the applicable water quality criterion but the amount of the pollutant or pollutant parameter in the facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or
 - b. The method has the lowest ML of the analytical methods approved under 40 CFR part 136 or required under 40 CFR chapter 1, subchapter N or O for the measured pollutant or pollutant parameter.
- In the case of pollutants or pollutant parameters for which there are no approved methods under 40 CFR part 136 or otherwise required under 40 CFR chapter 1, subchapters N or O, monitoring must be conducted according to a test procedure specified in the General Order for such pollutants or pollutant parameters. (40 CFR sections 122.21(e)(3), 122.41(j)(4), 122.44(i)(1)(iv).)
5. Pursuant to section V.C.3 in Attachment D to the General Order, if the Discharger monitors any pollutant more frequently than required by the General Order or this NOA working proposal, the results of such monitoring shall be included in the calculation and reporting of the data to the San Diego Water Board.
6. Pursuant to section IV.A in Attachment E to the General Order, the Discharger shall collect a turbidity sample once per month for each discharge location in the receiving waters from an area unaffected by the discharge or other receiving waters. The turbidity sample shall be within 100 feet from the discharge point. The sample result shall be reported in the monthly Self-Monitoring Report.

No Discharge Certification

For any monitoring period in which no discharge occurred, the monitoring report shall include a statement certifying that no discharge occurred during the monitoring period.

Notifications

This NOA working proposal may be modified to require technical or monitoring reports to assess the quality of the discharge and its potential impacts on the water quality and beneficial uses of the receiving water.

Pursuant to Water Code section 13385, subdivisions (h) and (i), violations of effluent limitations contained in a National Pollutant Discharge Elimination System (NPDES) permit subject the Discharger to a Mandatory Minimum Penalty (MMP) of \$3,000 for each serious violation, or for the fourth and each subsequent non-serious violation in a six-month period. The Discharger is also subject to discretionary administrative civil liability for each NPDES permit violation in an amount not to exceed the sum of both the following pursuant to Water Code section 13385, subdivision (c): \$10,000 for each day in which the violation occurs; and \$10 for each gallon of discharge not cleaned up in excess of 1,000 gallons.

Petition for Review

Any person aggrieved by this action of the San Diego Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 *et seq.* The State Water Board must receive the petition by 5:00 p.m., 30 calendar days after the date of this letter. 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.

Termination of Discharge

When the groundwater extraction discharge is terminated, the Discharger is required under section II.F, *Application Requirements* of the General Order to submit a written request, referred to as a Notice of Termination (NOT), to the San Diego Water Board stating the termination date of the discharge and requesting termination of enrollment. The Discharger shall continue to submit reports in accordance with the reporting schedule until the NOT has been approved by the San Diego Water Board.

In the subject line of any response, please include the reference "771065:jchhor". If you have any questions regarding this NOA working proposal or the discharge requirements of the General Order, please contact James Chhor at james.chhor@waterboards.ca.gov or (619) 521-5889.

Respectfully,

DAVID W. GIBSON
Executive Officer

cc by email:

Wayne Chiu, San Diego Water Board, wayne.chiu@waterboards.ca.gov
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Tech Staff Info & Use	
Order	R9-2015-0013
NPDES Permit	CAG919003
CW Place ID (Lake San Marcos)	771065
CW Party/Organization ID (Citizens Development Corporation)	582198
CW Party/Person ID (Pino Vitti)	582199
CW Regulatory Measure (General Order)	400619
CW Regulatory Measure (Enrollment)	452562
WDID	9 000003895