

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION**

ORDER R7-2013-0061

WASTE DISCHARGE REQUIREMENTS  
FOR  
SOUTHERN CALIFORNIA GAS COMPANY, OWNER/OPERATOR  
SOUTH NEEDLES COMPRESSOR STATION

South of Needles – San Bernardino County

The California Regional Water Quality Control Board, Colorado River Basin Region (Regional Water Board) finds that:

1. Southern California Gas Company (hereinafter also referred to as the Discharger), 9400 Oakdale Avenue, Chatsworth, CA 91313, submitted a report of waste discharge dated April 1, 2005, to update Order No. 91-020. The update was put on hold to allow groundwater analysis methodology to be studied, which was necessary to ensure compliance with Title 27, California Code of Regulations (CCR).
2. The Discharger owns and operates the South Needles Compressor Station, located 11 miles south of Needles on Highway 95 as shown on Figure 1, which is attached hereto and made a part of this order by reference. The purpose of the South Needles Compressor Station is to increase natural gas pressure for transmission to Southern California.
3. Definition of terms used in this Order:
  - a. Waste Management Facility (WMF) – the entire parcel of property where the South Needles Compressor Station industrial operations or related industrial activities are conducted. Such a facility may include one (1) or more Waste Management Units (WMUs).
  - b. Waste Management Units (WMUs) – the area of lands, or the portions of the facility, where industrial waste or related wastes are discharged. The term includes containment (i.e. evaporation ponds, sumps, etc.) and ancillary features for precipitation and drainage control and monitoring appurtenances.
  - c. Discharger – any person who discharges waste that could affect the quality of the waters of the State, and includes any person who owns the land, waste management unit or who is responsible for the operation of a waste management unit (Title 27 CCR).

4. The current discharge is governed by Waste Discharge Requirements (WDRs) Order No. 91-020. The purpose of this Order is to bring the discharge into compliance with the requirements found in Title 27, CCR and to allow new discharges described in Finding 8.b., below.
5. The Discharger proposes to discharge an annual average of 17,000 gallons-per-day (gpd) of industrial wastewater from the compressor station into three evaporation ponds, which comply with the standards for Class II surface impoundments as defined in Title 27, CCR. These impoundments are located in the southwest quarter of the northwest quarter and the northwest quarter of the southeast quarter of Section 17, Township 7 North, Range 23 East, San Bernardino Base & Meridian.
6. The Class II surface water impoundments were constructed in 1991 in accordance with the standards of Chapter 15, Title 23, CCR, which preceded Title 27, CCR. The Discharger has been submitting semi-annual groundwater monitoring reports since 1992 under Order 91-020.
7. There are a total of seven (7) large natural gas fired engines that drive compressors, and four (4) smaller natural gas engines to provide electricity and compressed air for plant operations. Process supply water is provided from two (2) ground water supply wells, located about 10 miles away in Needles, due to the scarcity of groundwater available at the facility. An average of 18 million gallons of water per year is extracted from these wells. The water is mainly used in the cooling towers. The remaining portion of the extracted ground water goes through a water softener prior to use as domestic water. The domestic wastewater is treated and discharged through a septic tank and leachfield system. The system was installed in 1957, before the County of San Bernardino assumed permitting authority for septic tanks, and has been maintained by the Discharger. A layout of the South Needles Compressor Station is shown on Figure No 2, attached hereto and made part of this order by reference.
8. The current and proposed additional sources of wastewater from the South Needles Compressor Station are the following:
  - a. Current Discharges
    - i. Cooling Tower – Currently, the cooling tower blowdown is discharged to three Class II surface impoundments (Maximum gpd: 28,000 and Average gpd: 17,000). Bromine, Continuum 3108, and Depositrol are added to this

system to prevent scaling, biological growth, corrosion, and to control pH.

The wastewater from the cooling tower is collected in one (1) sump before being discharged to one of the three Class II surface impoundments. The sump is monitored for total dissolved solids (TDS) concentration. The TDS of the cooling tower discharge water is maintained from 6,000 ppm – 12,000 ppm.

- ii. Water Softeners – Brine wastewater from regenerating the softener averages 7,000 gpd from zeolite-brine softeners and is discharged to the Class II surface impoundments.

b. Proposed New Discharges

- i. Steam Cleaning Wash Pad/Clarifier - A steam cleaning pad will be utilized for the purpose of cleaning engine components with steam. The clarifier capacity is 440 gallons and the projected flow rate is 1,000 gallons per year. Wastewater from the steam cleaning pad will go through a 3-stage clarifier that removes most of the oil, and then will be directed to the Class II surface impoundments. The remaining content of the clarifier will be pumped and disposed of according to federal and state regulations.
- ii. Closed Cooling Water System –Approximately 6,000 gallons of non-contact process water is used to cool the engines and the engine oil. Chemicals are added to the closed cooling water system to prevent scaling, biological growth, and corrosion. Wastewater from the closed cooling water systems will be discharged to the Class II surface impoundments as needed. (Expected Frequency: 1/Year).
- iii. Ground Water Monitoring Purge Water – Approximately 4,000 gallons of purge water removed from the ground water monitoring wells during the required analytical testing methods will be discharged to the Class II surface impoundments. The characterization of this water will be similar to the requirements for ground water sampling as described in Monitoring and Reporting Program (MRP) R7-2013-0061, attached hereto and made part of this Order by reference.
- iv. Hydrostatic Test Water - Approximately 50,000 gallons of water may be used to pressure test new piping, as needed, and will be discharged to the Class II surface impoundments (Expected Frequency: 1/Year).

9. The Discharger states that the Class II surface impoundments (under normal working conditions) have a capacity of 6,657,137 gallons, which is large enough to contain the current and additional proposed discharge and precipitation from a storm event with a 1000-year return frequency pursuant to Table 4.1 of Section 20320, which is referenced in Section 20375, Title 27, CCR.
10. No storm water runoff from the facility enters the Class II surface impoundments. Storm water runoff is collected and routed to several natural land drainages downgradient from the station. The facility utilizes a current Integrated Storm Water/Spill Prevention, Control, and Countermeasure (ISP/SPCC) plan for management of storm water.
11. Federal regulations for storm water discharges were promulgated by the United States Environmental Protection Agency (USEPA) (40 CFR Parts 122, 123, and 124). The regulations require specific categories of facilities which discharge storm water associated with industrial activity to obtain National Pollutant Discharge Elimination System (NPDES) permits and to implement Best Conventional Pollutant Technology (BCT) and Best Available Technology Economically Achievable (BAT) to reduce or eliminate industrial pollution.
12. The State Water Resources Control Board adopted Order No. 97-03-DWQ (General Permit No. CAS000001) specifying WDRs for discharges of storm water associated with industrial activities, excluding construction activities, and requiring submittal of a Notice of Intent (NOI) by industries to be covered under the Permit.
13. The Facility is classified as 4922 SIC code – Gas Transmission. It is not a listed SIC code required for coverage under the SWRCB General Permit 97-03-DWQ, therefore coverage is not required.
14. The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan), which was adopted on November 17, 1993, and amended on November 16, 2012, designates the beneficial uses of ground and surface waters in the Region. The beneficial uses of ground waters in the Piute Hydrologic Unit are:
  - a. Municipal supply (MUN)
  - b. Industrial supply (IND)
  - c. Agricultural supply (AGR)
15. Waste Discharge Requirements (WDRs) implement narrative and numeric water quality objectives for ground and surface waters established by the Basin Plan. The numeric objectives for groundwater designated for municipal and domestic supply are the

maximum contaminant levels (MCLs), and bacteriological limits specified in Section 64421 et seq. of Title 22, California Code of Regulations (CCRs). The narrative objectives are:

- a. Ground water for use as domestic or municipal water supply (MUN) shall not contain taste or odor-producing substances in concentrations that adversely affect beneficial uses as a result of human activity (Basin Plan, page 3-8).
  - b. Discharges of water softener regeneration brines, other mineralized wastes, and toxic wastes to disposal facilities which ultimately discharge in areas where such wastes can percolate to ground water usable for domestic and municipal purposes are prohibited (Basin Plan, page 3-8).
16. State Water Resources Control Board (State Water Board) Resolution 68-16 (“Policy with Respect to Maintaining High Quality Waters of the State”) (hereinafter Resolution No. 68-16) requires a Regional Water Board in regulating the discharge of waste to maintain high quality waters of the state (i.e., background water quality) until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than as described in plans and policies (e.g., violation of any water quality objective). Moreover, the discharge is required to meet WDRs that result in the best practicable treatment or control (BPTC) of the discharge necessary to assure pollution or nuisance will not occur, and highest water quality consistent with maximum benefit to the people will be maintained.
  17. The site is underlain by older alluvium consisting of a heterogeneous mixture of gravel, sand, and silt, with some clay. The origin of the alluvial sediment is characteristically of a clastic and lacustrine carbonate depositional environment. Specific to the site, it has been noted that massive granular, well-graded sand, rounded gravel and cobbles were observed during past excavations at the site.
  18. The depth-to-ground water in the shallow aquifer beneath the Facility currently ranges from 40 feet to 115 feet below ground surface. The monitored intervals are referred to as the Fanglomerate and Bedrock intervals, both of which have been observed to yield very little water. The direction of ground water flow at the site is generally to the north-northeast; moving from the higher elevations of the subject site toward the lower elevations along the Colorado River. Based on historical

hydrogeologic reports, the movement of groundwater is primarily controlled by fracture flow and faults in this region. As such, the potential for groundwater beneath the site to reach the Colorado River, approximately 8.05 miles to the north-northeast, is very low to negligible.

Based on the historical site use and existing groundwater quality data (from 1993 to 2013), it has been determined that a Detection Monitoring Program utilizing intra-well comparisons is the preferred methodology for evaluation of groundwater quality over time. Determination of Proposed Concentration Limits (PCLs) for each well is most appropriate due to the types of formations/intervals being monitored, and given the unique setting of the site, allowing existing water quality data to be utilized without bias or potential confounders using other parametric and non-parametric statistical methods.

19. The Board has notified the Discharger and all known interested agencies and persons of its intent to update WDRs for this discharge and has provided them with an opportunity for a public meeting and an opportunity to submit comments.
20. The Board, in a public meeting, heard and considered all comments pertaining to this discharge.
21. In accordance with Section 15301, Chapter 3, Title 14, CCR, the issuance of these WDRs, which govern the operation of an existing facility involving negligible or no expansion of use beyond that previously existing, is exempt from the provisions of the California Environmental Quality Act (CEQA) (Public Resources Code, Section 21000 et seq.).

IT IS HEREBY ORDERED, that Order No. 91-020 is rescinded, except for enforcement purposes, and in order to meet the provisions contained in Division 7 of the California Water Code, and the provisions of the Federal Clean Water Act, and regulations adopted thereunder, the Discharger shall comply with the following:

A. Specifications

1. The Discharger shall implement the attached MRP R7-2013-0061 and revisions thereto, which is made a part of this Order by reference, in order to detect, at the earliest opportunity, any unauthorized discharge of waste constituents from the facility, or any

impairment of beneficial uses associated with (caused by) discharges of waste to the WMU.

2. The three (3) Class II surface impoundments shall be maintained with a double-lined, 60-mil, secondary High-Density Polyethylene (HDPE) liner, an 80-mil HDPE primary liner on top, and a layer of geonet in between. The annual average flow volume shall not exceed 17,000 gpd with a maximum flow volume of 28,000 gpd. Leachate detection monitoring sumps shall be maintained at each Class II surface impoundment.
3. Final disposal of residual wastes and cleanup of the Class II surface impoundments and sumps shall be accomplished to the satisfaction of the Regional Water Board's Executive Officer upon abandonment or closure of operations.
4. Fluids and/or materials discharged to and/or stored in the Class II surface impoundments and sumps shall not overflow the impoundments.
5. Prior to the use of new chemicals for the purpose of adjustment or control of microbes, pH, scale and corrosion of the open and closed cooling water systems, the Discharger shall submit to the Regional Water Board's Executive Officer a written request for approval.
6. The Class II surface impoundments shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods from a 24-hour storm event having a predicted frequency of once in 1000 years.
7. Each Class II surface impoundment shall contain an independent leak detection and removal system (LDRS) between the inner and outer liners.
8. The discharge of industrial wastewater shall be confined to the three Class II surface impoundments located and described in Finding No. 5 of this Order.
9. A minimum depth of two (2) freeboard feet shall be maintained at all times in each Class II surface impoundment. This includes capacity for seasonal precipitation and the 24-hour, 1000-year design storm event pursuant to Section 20375, Title 27, CCR
10. Adequate protective works shall be provided to ensure that flood or surface drainage water does not erode or otherwise render portions of the disposal facilities inoperable.
11. Residual solids obtained by evaporation of process wastewater shall be discharged only at a waste management facility approved to receive such wastes and as approved by the Regional Water Board's Executive Officer.
12. The Discharger shall use the constituents listed in MRP R7-2013-0061 and revisions thereto, as "Monitoring Parameters".

13. The Discharger shall comply with the Water Quality Protection Standard (WQPS) for Detection Monitoring established by the Regional Water Board in this Order pursuant to Section 20390, Title 27, CCR. The following are five (5) parts of the WQPS as established by the Regional Water Board (the terms used in this Order regarding monitoring are defined in Part I.B. of MRP R7-2013-0061, and revisions thereto).
- a. Constituents of Concern (Section 20395, Title 27, CCR). The Constituents of Concern shall be those constituents listed in Part III, "Summary of Self-Monitoring and Reporting Programs" of MRP R7-2013-0061 and revisions thereto.
  - b. Concentration Limit (Section 20400, Title 27, CCR). For each Monitoring Point assigned to a Detection Monitoring Program (monitoring points described in MRP Part II.B.4.), the concentration limit for each Constituent of Concern (or Monitoring Parameter) shall be its background values obtained during that Reporting Period (defined in MRP R7-2013-0061 Part I.B.5.) as determined by using the non-statistical method as cited in Part III.A.2. The concentration limit(s) will be based on a concentration range established for each Monitoring Point, comparing the COC concentration value for that reporting period to the existing data at that Monitoring Point, as well as the Background Monitoring Points.
  - c. Monitoring Points and Background Monitoring Points for Detection Monitoring (Section 20415, Title 27, CCR) shall be those listed in Part II.B.4. of attached MRP R7-2013-0061, and any revised Monitoring and Reporting Program approved by the Regional Water Board's Executive Officer. Monitoring Points are shown on Figure 3, which is made a part of this order by reference.
  - d. Points of Compliance (Section 20405, Title 27, CCR) shall be those Monitoring Points listed in Part II.B.4, as shown on Figure 3, and extend down through the zone of saturation.
  - e. Compliance Period (Section 20410, Title 27, CCR). The estimated duration of the compliance period for this WMF is six (6) years. Each time a Standard is not met (i.e. a release is discovered), the WMF begins a Compliance Period on the date the Regional Water Board directs the Discharger to begin an Evaluation and Monitoring Program (EMP). If the Discharger's Corrective Action Program (CAP) has not achieved compliance with the standard by the scheduled end of the Compliance Period, the Compliance Period is automatically extended until the WMF has been in continuous compliance for at least three (3) consecutive years.



## B. Prohibitions

1. The Discharger shall not cause degradation of any groundwater aquifer or water supply in compliance with State Water Resource Control Board Resolution No. 68-16 as described in Findings 15-16 of this Order.
2. The Discharger shall not cause or permit the release of pollutants, or waste constituents, in a manner which could cause or contribute to a condition of contamination, nuisance, or pollution to occur.
3. Direct or indirect discharge of any wastewater from the facility to any surface waters or surface drainage courses is prohibited.
4. The use of hazardous chemicals including chromates may not be used in cooling tower water treatment process without prior approval from the Regional Water Board's Executive Officer.
5. The discharge or deposit of hazardous waste (as defined in Title 27, CCR) at this site is prohibited.
6. The discharge of waste to land not owned or controlled by the Discharger is prohibited.
7. Discharge of treated or untreated wastewater at a location or in a manner different from that described in this Order is prohibited.
8. The discharge shall not cause the concentration of any Constituent of Concern or Monitoring Parameter to exceed its respective background value in any monitored medium at any Monitoring Point assigned to Detection Monitoring pursuant to Part II.B.4. of MRP R7-2013-0061. Respective background value here refers to each well's evaluation (as determined by intra-well comparisons), and established Proposed Concentration Limits (PCLs).

## C. Provisions

1. The Discharger shall comply with MRP R7-2013-0061, and revisions thereto, as specified by the Regional Water Board's Executive Officer.
2. The Discharger is the responsible party for the WDRs and the MRP for the facility. The Discharger shall comply with all conditions of these WDRs. Violations may result in enforcement actions, including Regional Water Board Orders or court orders, requiring corrective action or imposing civil monetary liability, or modification or revocation of these WDRs by the Regional Water Board.
3. The Discharger shall comply with all applicable provisions of Title 27 CCR that are not specifically referred to in this order.

4. In accordance with the requirements for ground water quality monitoring in Title 27, CCR, the Discharger shall implement a groundwater detection monitoring program (DMP) as described in MRP R7-2013-0061.
5. Any hazardous waste generated or stored at the facility will be stored and disposed in a manner compliant with federal and state regulations.
6. The Discharger shall ensure that all site-operating personnel are familiar with the content of this Order, and shall maintain a copy of this Order at the facility site.
7. The Discharger shall, at all times, properly operate and maintain all systems and components which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of this Order.
8. Unless otherwise approved by the Regional Water Board's Executive Officer, all analyses shall be conducted at a laboratory certified for such analyses by the California Department of Public Health. All analyses shall be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants", promulgated by the United States Environmental Protection Agency.
9. The Discharger shall report any noncompliance that may endanger human health or the environment. The Discharger shall immediately report orally information of the noncompliance as soon as (1) the Discharger has knowledge of the discharge, (2) notification is possible, and (3) notification can be provided without substantially impeding cleanup or other emergency measures, to the Regional Water Board office and the Office of Emergency Services. During non-business hours, the Discharger shall leave a message on the Regional Water Board office voice recorder. A written report shall also be provided within five (5) business days of the time the Discharger becomes aware of the incident. The written report shall contain a description of the noncompliance and its cause, the period of noncompliance, the anticipated time to achieve full compliance, and the steps taken or planned, to reduce, eliminate, and prevent recurrence of the noncompliance. The Discharger shall report all intentional or unintentional significant spills that occur within the facility to the Regional Water Board office in accordance with the above time limits.

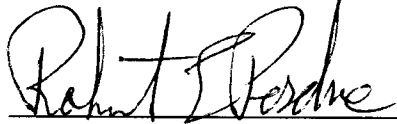
10. The Discharger shall allow the Regional Water Board, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:
  - a. Enter upon the premises regulated by this Order, or the place where records must be kept under the conditions of this Order;
  - b. Have access to and copy, at reasonable times, any records that shall be kept under the conditions of this Order;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
  - d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Order or as otherwise authorized by the California Water Code, any substances or parameters at this location.
11. The Discharger shall comply with the following:
  - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
  - b. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least 5 years from the date of the sample, measurement, report or application.
  - c. Records of monitoring information shall include:
    1. The date, exact place, and time of sampling or measurements.
    2. The individual(s) who performed the sampling or measurements.
    3. The date(s) analyses were performed.
    4. The individual(s) who performed the analyses.
    5. The results of such analyses.
12. Prior to any change in ownership or management of this operation, the Discharger shall transmit a copy of this Order to the succeeding owner/operator, and forward a copy of the transmittal letter to the Regional Water Board.
13. Prior to any modifications in this facility, which would result in material change in the quality or, quantity of wastewater treated or discharged, or any material change in the

location of discharge, the Discharger shall report all pertinent information in writing to the Regional Water Board and obtain revised requirements before any modifications are implemented.

14. This Order does not authorize violation of any federal, state, or local laws or regulations.
15. The Discharger shall establish an irrevocable bond for closure in an amount acceptable to the Regional Water Board's Executive Officer or provide other means to ensure financial security for closure when needed. The closure fund shall be established (or evidence of an existing closure fund shall be provided) within six (6) months of the adoption of this Order.
16. All regulated disposal systems shall be readily accessible for sampling and inspection.
17. The Discharger shall furnish, under penalty of perjury, technical monitoring program reports, and such reports shall be submitted in accordance with the specifications prepared by the Regional Water Board's Executive Officer. Such specifications are subject to periodic revisions as may be warranted.
18. The Discharger may be required to submit technical monitoring reports as directed by the Regional Water Board's Executive Officer to determine compliance with this Order.
19. All containment structures and erosion and drainage control systems shall be designed and constructed under direct supervision of a California Registered Civil Engineer or Certified Engineering Geologist, and shall be certified by the individual as meeting the appropriate prescriptive standards and performance goals of Title 27, CCR. The Regional Water Board considers the property owner to have a continuing responsibility for correcting any problems that may arise in the future as a result of this waste discharge.
20. The Discharger shall, within 60 days of a significant earthquake event (i.e. Modified Mercalli Intensity V or greater at or near the Facility), submit to the Regional Water Board a detailed post-earthquake report describing any physical damages to the containment features, groundwater monitoring and/or leachate control facilities and a corrective action plan to be implemented at the facility.
21. This Order is subject to Regional Water Board review and updating, as necessary, to comply with changing state or federal laws, regulations, policies, or guidelines, or changes in the discharge characteristics.

22. This Order does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

I, Robert Perdue, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on June 20, 2013.

A handwritten signature in black ink, appearing to read "Robert Perdue", written over a horizontal line.

Executive Officer