# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

#### ORDER R7-2014-0029

# WASTE DISCHARGE REQUIREMENTS FOR SOUTHERN CALIFORNIA GAS COMPANY, OWNER/OPERATOR BLYTHE COMPRESSOR STATION Blythe - Riverside County

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

1. The Southern California Gas Company (SCG), Owner/Operator, 9400 Oakdale Avenue ML#9314, Chatsworth, California 91311 (Discharger), submitted a Report of Waste Discharge (ROWD) to the Colorado River Basin Water Board, dated September 18, 2013, to update Waste Discharge Requirements (WDRs) for the discharge of wastewater into four, double-lined evaporation ponds at the Blythe Compressor Station, located at 13100 West 14<sup>th</sup> Avenue, Blythe, California 92225, in the Southwest-¼ of the Southeast-¼ of Section 35, Township 6 South, Range 22 East, San Bernardino Base & Meridian, Riverside County, as shown on Attachment A, Location Map, which is incorporated herein and made part of this Board Order by reference.

#### 2. Definition of terms used in this Board Order:

- a. Facility the entire parcel of property where the Blythe Compressor Station industrial operations or related industrial activities are conducted.
- 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, infiltration basin, 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.
- d. Background the concentrations or measures of constituents or indicator parameters in water or soil that have not been affected by the waste constituents or leachate from the waste management unit being monitored.
- e. Background Monitoring Point a well, device, or location specified in the WDRs at which monitoring for background water quality or background soil quality is conducted.
- f. Best Management Practice a practice, or combination of practices, that is the most effective and feasible means of controlling pollution for the attainment of water quality objectives.

- g. Maximum Credible Earthquake (MCE) -- the largest earthquake that appears capable of occurring under the known tectonic framework for a specific fault or seismic source based on geologic and seismologic data.
- 3. SCG's Blythe Compressor Station was constructed in 1947 as a line compressor station to boost natural gas pressure in the three (3) interstate "Texas Pipelines" that deliver natural gas to Los Angeles and San Diego. Municipal, commercial and residential users receive natural gas service from these three pipelines served by SCG.
- 4. The Blythe Compressor Station consists of ten compressor units housed in three main compressor plants. Plant number one consists of three large Clark HBA-8 model, 1,760 horsepower, integral gas compressor units; plant number two consists of five large Clark HBA-8 model 1,760 horsepower, integral gas compressor units, and plant number three consists of two Caterpillar G3612 model 3,785 horsepower engines, driving Ariel reciprocating compressor units. All ten gas compressor units use natural gas as fuel and have a total output of 21,650 horsepower. The compressor station also has five natural gas driven generators and a small natural gas engine which provides compressed air for plant operations and maintenance. The facility layout is shown on Attachment B, Facility Map, incorporated herein and made part of this Board Order by reference.
- 5. Process water is provided from two groundwater supply wells located on the property as shown on Attachment B. The depth of the ground water supply wells is approximately 370 feet below ground surface (bgs). Total dissolved solids (TDS) concentrations range from 450 milligrams per liter (mg/l) to 1,600 mg/l. An average of 10.5 million gallons of water per year is extracted from these two wells. The water is mainly used in the cooling towers and air washers. The remaining portion of the extracted ground water goes through a water softener prior to use as jacket cooling water, swimming pool water, and domestic water use. The jacket cooling water is in a closed loop cooling water system. The domestic wastewater is discharged through a septic tank discharge system.
- 6. Chemicals are added to the closed cooling water system, cooling towers, and air washers for process control. The water in these systems is chemically treated to prevent scaling, biological growth, and corrosion, and to adjust pH. Chemicals currently used are Corrshield MD 4100, a water-based corrosion inhibitor, and Spectrus NX 110, a biocide.
- 7. The Discharger has constructed four, Class II, wastewater surface impoundments, which cover a total of four acres. Assuming a freeboard of two feet, the design capacity of the combined surface impoundment system is approximately 7 million gallons.
- 8. No storm water runoff from the facility enters the wastewater surface impoundments. Storm water runoff from the concrete and asphalted facility is collected and routed through natural drainages downgradient from the Blythe Compressor Station.
- 9. The State Water Resources Control Board (SWRCB) adopted Order 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.

- The Facility is classified as SIC code 4922 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.
- 11. The Discharger states, under normal working conditions, the capacity of the four Class II surface impoundments is large enough to accept all wastewater generated at the facility as well as 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, California Code of Regulations (CCRs). There is also an unlined emergency event pond onsite in addition to the Class II surface impoundments. The emergency event pond is only to be used in emergency situations in the unlikelihood that the four, double-lined ponds are filled to capacity.
- 12. The sources of wastewater from the Blythe Compressor Station are the following:
  - a. Cooling tower blowdown.
  - b. Brine wastewater from regenerating the softener.
  - c. Air washer water used to cool the intake air used in the main unit compressor.
  - d. Oil/water mixture from compressor engines (after the oil has been mainly removed by an oil/water separator tank) and housekeeping processes.
  - e. Wastewater from a steam cleaning pad.
  - f. Wastewater from the closed cooling water systems.
  - g. Hydrostatic test water used to pressure-test piping.
  - h. Wastewater from the swimming pool.

All of the above-listed wastewater streams are directed to the Class II surface impoundments.

- 13. The site geology in the vicinity of the WMUs consists of clays interbedded with silty fine sand. The upper seven to fifteen feet is composed of alluvial sediments composed of a heterogeneous mixture of gravel, sand and silt, with some clay.
- 14. The Discharger reports that the average annual rainfall for this location is approximately 3.6 inches per year and the average annual evaporation is approximately 90 inches per year.
- 15. The depth-to-groundwater in the shallow aquifer ranges from 10 to 15 feet bgs. The direction of groundwater flow at the site is generally to the south, following the path of the Colorado River.
- 16. Groundwater quality is monitored through four monitoring wells (MW-1, MW-2, MW-3, and MW-4) located at the site as shown on Figure 3, incorporate herein and made part of this Board Order by reference. Monitoring wells MW-1 through MW-4 were constructed to assist in determining whether the groundwater is, or has been impacted pursuant to existing WDRs. As of the date of this Order, there have been no leaks reported in the liner system of the four surface impoundments, and no evidence of groundwater impacts as observed in the discharger's monitoring reports.

- 17. 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 groundwater in the Colorado Hydrologic Unit are:
  - a. Municipal Supply (MUN)
  - b. Industrial Supply (IND)
  - c. Agricultural supply (AGR)
- 18. Any hazardous waste generated or stored at the facility will be stored and disposed in a manner compliant with federal and state regulations.
- 19. In accordance with Section 15301, Chapter 3, Title 14 of the California Code of Regulations, 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) (Pub. Resources Code § 21000 et seq.).
- 20. It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This order promotes that policy by requiring discharges to meet maximum contaminant levels designed to protect human health and ensure that water is safe for domestic use.
- 21. The monitoring and reporting requirements in Monitoring and Reporting Program R7-2013-0046, incorporated herein and made a part of this Order by reference, and revisions thereto, are necessary to determine compliance with these WDR's and to determine the Facility's impacts, if any, on receiving waters.
- 22. The Colorado River Basin Water Board has notified the Discharger and all known interested agencies and persons of its intent to update WDRs for said discharge and has provided them with an opportunity for a public meeting and an opportunity to submit comments.
- 23. The Colorado River Basin Water Board, in a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, that Board Order No. R7-2003-0074 is rescinded, except for enforcement purposes, and in order to meet the provisions contained in Division 7 of the California Water Code and the federal Clean Water Act, and regulations adopted thereunder, the Discharger shall comply with the following:

# A. Specifications

- 1. The treatment or disposal of wastes at this facility shall not cause pollution as defined in Section 13050 of Division 7 of the California Water Code.
- 2. Storage of wastewater shall be limited to the areas designated for such activities. Any revision or modification of the designated area, or any proposed change in operation at

the facility, must be submitted in writing to the Colorado River Basin Water Board's Executive Officer for review and approval before the proposed change in operations or modification of the designated area is implemented.

- 3. Leachate Collection and Recovery System (LCRS) monitoring sumps shall be maintained at each Class II surface impoundment.
- 4. Any material increase or change in the annual average volume of wastewater or the daily maximum volume to be discharged at the WMUs must be submitted in writing to the Colorado River Basin Water Board's Executive Officer for review and approval.
- 5. Prior to 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 Colorado River Basin Water Board's Executive Officer a written report explaining the proposed discharge and a request for approval.
- 6. A minimum depth of two feet of freeboard shall be maintained at all times in each Class II surface impoundment.
- 7. The Class II surface impoundments shall be designed, constructed, operated, and maintained to limit, to the greatest extent possible, erosion, slope failure, overtopping, inundation or washout, and damage resulting from natural disasters such as floods from a 24-hour storm event having a predicted frequency of once in 1000 years pursuant to Section 20375, Title 27, CCR, the Maximum Credible Earthquake (MCE) pursuant to Table 4.1, Article 4, Section 20310, Title 27, CCR, and severe wind storms
- 8. Adequate protective works shall be provided to ensure that flood or surface drainage water does not erode or otherwise render portions of the WMUs inoperable.
- 9. 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 Colorado River Basin Water Board's Executive Officer.
- 10. Ninety days prior to the cessation of all discharges to the Class II surface impoundments at the Facility, the Discharger shall submit a workplan, subject to approval of the Colorado River Basin Water Board's Executive Officer, for assessing the extent, if any, of contamination of natural geologic materials and waters of the Colorado Hydrological Unit by the waste. The Discharger shall submit a technical report presenting the results of the contamination assessment within 120 days following workplan approval. A California Professional Civil Engineer or Professional Geologist must prepare the workplan, assessment, and engineering report.
- 11. Upon ceasing operations at the facility, all waste, all geologic material contaminated by waste, and all surplus or unprocessed material shall be removed from the Facility and disposed of in accordance with applicable laws and regulations to the satisfaction of the Colorado River Basin Water Board's Executive Officer.
- 12. The Discharger shall establish an irrevocable bond for closure in an amount acceptable

to the Colorado River Basin Water Board's Executive Officer or provide other means of financial security for closure at the WMUs. 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.

- 13. Fluids and/or materials discharged to and/or stored in the WMUs shall not overflow the basins.
- 14. Each Class II Surface Impoundment shall be double-lined. A leachate collection and removal system (LCRS) shall be installed between the liners. The outer liner shall be a composite liner consisting of at least 12 inches of clay or bentonite panels with a hydraulic conductivity of no greater than 1 X 10 –6 cm/sec or equivalent, and a flexible membrane liner of 60 mil high-density polyethylene (HDPE), or equivalent. The inner liner shall also be a flexible membrane liner of 60 mil HDPE, or equivalent.
- 15. Each cell within each Class II Surface Impoundment shall contain an independent LCRS between the inner and outer liners.
- 16. The Discharger shall use the constituents listed in Monitoring and Reporting Program (MRP) R7-2014-0029, and revisions thereto, as "Monitoring Parameters." These monitoring parameters are subject to the most appropriate statistical or non-statistical test under MRP R7-2014-0029, Part III, and any revised MRP approved by the Colorado River Basin Water Board's Executive Officer.
- 17 The Discharger shall implement MRP R7-2014-0029, and revisions thereto, 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 (or caused by) discharges of waste to the WMU.
- 18. The Discharger shall follow the Water Quality Protection Standard (WQPS) for detection monitoring established by the Colorado River Basin Water Board pursuant to Title 27, Section 20390. The following are four parts of the WQPS as established by the Colorado River Basin Water Board. (The terms used in this Board Order regarding monitoring are defined in Part I of MRP R7-2014-0029, and revisions thereto.
  - a. The Discharger shall test for the Monitoring Parameters at frequencies specified and listed in MRP R7-2014-0029 and revisions thereto.
  - b. Monitoring points and background monitoring points for detection monitoring shall be those listed in Part II of MRP R7-2014-0029 and any revised MRP approved by the Colorado River Basin Water Board's Executive Officer.
  - c. Points of Compliance pursuant to Title 27, Section 20405, the points of compliance shall be those Monitoring Points listed in Part II.B of MRP R7-2014-0029.
  - d. Compliance Period The estimated duration of the compliance period for these Surface Impoundments is the number of years equal to the active life of the Surface Impoundments plus the closure period (Title 27, Section 20410 (a)). The compliance period begins anew each time the Discharger initiates an Evaluation Monitoring

Program (EMP) (Title 27, Section 20410 (b)). If the Discharger is engaged in a Corrective Action Program (CAP) at the scheduled end of the compliance period, the compliance period shall be extended until the Discharger can demonstrate that the Surface Impoundment has been in continuous compliance with its Water Quality Protection Standard (Section 20390) for a period of three (3) consecutive years.

19. Within 120 days of the adoption of this Board Order, the Discharger shall submit to the Colorado River Basin Water Board, in accordance with Section 20380(b) of Title 27, CCR, assurance of financial responsibility acceptable to the Colorado River Basin Water Board's Executive Officer for initiating and completing corrective action for all known or reasonably foreseeable releases from the surface impoundments.

### B. Prohibitions

- 1. The direct discharge of any wastes to any surface waters or surface drainage courses is prohibited except for the use of the emergency event pond.
- 2. The discharge of waste to land not owned or controlled by the Discharger is prohibited.
- 3. The use of hazardous chemicals, including chromates, may not be used in cooling tower water treatment process without prior approval from the Colorado River Basin Water Board's Executive Officer.
- 4. 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 R7-2014-0029.
- 5. The Discharger shall not cause or contribute to an increase in the concentration of waste constituents in soil-pore gas, soil-pore liquid, soil, or other geologic materials outside of the WMU if such waste constituents could migrate to waters of the State, in either the liquid or the gaseous phase, and cause, or threaten to cause, a condition of contamination or pollution.
- 6. The Discharger shall not cause the release of pollutants or waste constituents in a manner that could cause, or threaten to cause, a condition of contamination, or pollution to occur, as indicated by the most appropriate statistical (or non-statistical) data analysis method and retest method listed in Part III of MRP R7-2014-0029, and revisions thereto.

## C. Provisions

- 1. The Discharger shall comply with MRP R7-2014-0029, and revisions thereto, as specified by the Colorado River Basin Water Board's Executive Officer.
- Prior to any modifications in this facility that 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 Colorado River Basin Water Board and obtain revised requirements before any modifications are implemented.

- 3. Prior to any change in ownership or management of this operation, the Discharger shall transmit a copy of this Board Order to the succeeding owner/operator, and forward a copy of the transmittal letter to the Colorado River Basin Water Board.
- 4. The Discharger shall ensure that all site-operating personnel are familiar with the content of this Board Order, and shall maintain a copy of this Board Order at the site.
- 5. This Board Order does not authorize violation of any federal, state, or local laws or regulations.
- 6. The Discharger shall allow the Colorado River Basin 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 Board Order, or the place where records must be kept under the conditions of this Board Order;
  - b. Have access to and copy, at reasonable times, any records that shall be kept under the conditions of this Board Order;
  - Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Board Order; and
  - d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Board Order or as otherwise authorized by the California Code of Regulations, any substances or parameters at this location.
- 7. This Board 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.
- 8. Unless otherwise approved by Colorado River Basin 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. All regulated disposal systems shall be readily accessible for sampling and inspection.
- 10. 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 Colorado River Basin Water Board Orders or court orders, requiring corrective action or imposing civil monetary liability, or modification or revocation of these WDRs by the Colorado River Basin Water Board.
- 11. The Discharger shall furnish, under penalty of perjury, technical monitoring program reports, and such reports shall be submitted according to Chapter 30, Division 3, Title 23 of the California Code of Regulations, as data uploads and in Portable Document Format

(PDF) electronically over the internet into the State Water Board's GeoTracker database. Documents that are less than 50 MB normally mailed by the Discharger, such as regulatory documents, submissions, materials, data, and correspondence, to the Colorado River Basin Water Board shall be converted to Portable Document Format (PDF) and emailed to RB7-wdrs\_paperless@waterboards.ca.gov. Documents that are 50 MB or larger should be transferred to a disk and mailed to the Colorado River Basin Water board office in Palm Desert. The Facility is identified in the GeoTracker database with global identification number L10006629681 and the California Integrated Water Quality Systems (CWIQS) by WDID No. 7B332022011.

- 12. Pursuant to CCR Title 27, section 21710(d), any report submitted in compliance with CCR Title 27 and this Order, which proposes a design or design change that might affect containment features, erosion and drainage control systems or monitoring systems, shall be approved by a civil engineer or a certified engineering geologist appropriately licensed by the State of California. The Discharger shall provide documentation that plans and reports required under this MRP are prepared by or under the direction of, appropriately qualified professionals. CCR Title 27, sections 20324(b) and 21090(b)(1)(C), and the California Business and Professions Code sections 6735, 7835, and 7835.1, require that engineering and geologic evaluations and judgments be performed by or under the direction of licensed professionals. A statement of qualifications and license numbers of the responsible lead professionals shall be included in all plans and reports submitted by the Discharger. The lead professional shall sign and affix their license stamp to the report, plan or document.
- 13. The Colorado River Basin 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.
- 14. The Discharger shall, within 60 days of a significant earthquake event, submit to the Colorado River Basin 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.
- 17. The Discharger shall comply with all applicable provisions of Title 27, CCR that are not specifically referenced in this Order.
- 18. This Board Order is subject to Colorado River Basin 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.

I, Robert E. 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 May 8, 2014.

Robert Perdue
Executive Officer