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

#### ORDER R7-2013-0032 WASTE DISCHARGE REQUIREMENTS FOR SOUTHERN CALIFORNIA GAS COMPANY NORTH NEEDLES COMPRESSOR STATION EVAPORATIVE COOLERS Needles - San Bernardino County

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

- 1. Southern California Gas Company (hereinafter referred to as the Discharger), located at 9400 Oakdale Avenue ML# 9314, Chatsworth, CA 91311, owns and operates a natural gas compressor station located north of the City of Needles in San Bernardino County.
- 2. This Discharge has been subject to waste discharge requirements (WDRs) adopted in Board Order 94-070. The Discharger submitted a Report of Waste Discharge (ROWD), dated January 28, 2013, to update the WDRs for the discharge of water from the North Needles Compressor Station's evaporative coolers. Board Order 94-070 is being updated as part of a statewide program to periodically review and update WDRs to incorporate any changes in ownership or operation.
- 3. The North Needles Compressor Station (NNCS or Facility) is located at 4500 Needles Highway, north of the City of Needles in San Bernardino County. The mailing address of the facility is 9400 Oakdale Avenue, ML# 9314, Chatsworth, CA 91311.
- 4. The discharge at the Facility is from the air cooled heat exchangers and compressor building evaporative coolers that are discharged to a designated land application area (LAA) located to the east of the main compressor station in the NW 1/4 of Section 1, T9N, R22E, SBB&M. The LAA discharge point is about 88 feet from the main facility security fence, and approximately 450 feet from the Discharger's easternmost property boundary line. No discharge leaves the Discharger's property or reaches any natural surface water bodies.
- 5. The updated ROWD describes the existing discharge as follows:

Average Daily Discharge	2,900 GPD
Maximum Daily Discharge	16,000 GPD
Design Capacity	20,000 GPD
Source of Discharge	Cooling Tower Blowdown

- 6. The wastewater is composed of two parts:
  - a. Discharges from evaporative heat exchangers (cooling towers) that cool compressed gas within the pipes. The water is recirculated and discharged as necessary to prevent corrosion and scale from solids concentrations. No chemicals are added to the cooling water.

- b. Discharges from evaporative coolers which are located on the roof of the compressor building. Water cools the incoming air for temperature control in the building. The water makes one pass before being discharged to the field, and is not treated with any chemicals.
- 7. The facility obtains its water supply from two on-site wells located at the east and west sides of the NNCS more than 400 feet from the disposal area. The water from the two wells has a total dissolved solids (TDS) concentration of about 800 milligrams per liter (mg/L). Depth-to-groundwater at the site is estimated by the Discharger to be about 85 feet.
- 8. The facility disposes of its sanitary wastewater through a septic tank and leach line system. Sanitary wastewater is not addressed in this Board Order.
- 9. The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan), as amended to date, designates the beneficial uses of ground and surface waters in this Region.
- 10. The NNCS is located in the Piute Hydrologic Unit. The beneficial uses of ground waters in the Piute Hydrologic Unit are:
  - a. Municipal supply (MUN)
  - b. Industrial supply (IND)
  - c. Agricultural supply (AGR)
- 11. 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).
- 12. 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.

- 13. Some degradation of groundwater from the evaporative cooling system discharge is consistent with Resolution 68-16, provided that this degradation:
  - a. confined to a reasonable area;
  - b. Is minimized by means of full implementation, regular maintenance, and optimal operation of BPTC measures;
  - c. Is limited to waste constituents typically encountered in evaporative cooling tower discharge that contains no chemical amendments; and
  - d. Does not result in the loss of any beneficial use as prescribed in the applicable basin plan, or violation of any water quality objective.
- 14. The discharge of wastewater from the cooling towers, as permitted herein, reflects BPTC. The controls assure the discharge does not create a condition of pollution or nuisance, and that water quality will be maintained which is consistent with the anti-degradation provisions of Resolution 68-16. The facility incorporates:
  - a. Controls to monitor the concentrations of waste constituents;
  - b. Structural controls to dispose of waste constituents in a designated area;
  - c. Staffing to assure proper operation and maintenance; and
  - d. A standby emergency power generator of sufficient size to operate the Facility and ancillary equipment during periods of loss of commercial power.
- 15. Constituents in cooling tower discharge that present the greatest risk to groundwater quality are Total Dissolved Solids (TDS) and dissolved metals. Dissolved metals are not expected to be in concentrations of concern; however, they will be monitored to assure that degradation is not occurring. The soils beneath the disposal area are highly permeable and not likely to prevent groundwater degradation by TDS. Groundwater degradation, if any, should be limited to the area underlying the disposal areas, and to TDS constituents.
- 16. The Basin Plan addresses the impacts of TDS from discharges to groundwater in the following statements:
  - a. "Ideally the Regional Board's goal is to maintain the existing water quality of all nondegraded ground water basins. However, in most cases ground water that is pumped generally returns to the basin after use with an increase in mineral concentrations such as total dissolved solids (TDS), nitrate etc., that are picked up by water during its use. Under these circumstances, the Regional Board's objective is to minimize the quantities of contaminants reaching any ground water basin." (Basin Plan, Chapter 3, Section IV, page 3-8)
  - b. "Ground waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Chapter 15, Article 4, Section 64435,

Tables 2, 3, and 4 as a result of human activity." (Basin Plan, Chapter 3, Section IV.C, page 3-8)

- 17. The Board has notified the discharger and all known interested agencies and persons of its intent to update waste discharge requirements for said discharge and has provided them with an opportunity for a public meeting and an opportunity to submit comments.
- 18. The Board in a public meeting heard and considered all comments pertaining to this discharge.
- 19. In accordance with Section 15301, Chapter 3, Title 14 of the California Code of Regulations, the issuance of these waste discharge requirements, 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 (Public Resources Code, Section 21000 et seq.).

IT IS HEREBY ORDERED, that Board Order 94-070 is rescinded, and in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, the discharger shall comply with the following:

#### A. Effluent Limitations

- 1. The 30-day average daily dry weather discharge flow shall not exceed 16,000 gallons per day (GPD).
- B. Specifications
  - 1. The treatment or disposal of wastes at this facility shall not cause pollution or nuisance as defined in Sections 13050(I) and 13050(m) of Division 7 of the California Water Code.
  - 2. Wastewater discharged to the disposal field shall be confined to the discharger's property with no overflow onto public or other private property or to any drainage channels discharging to the Colorado River.
  - 3. Toxic substances and chemicals which are deleterious to aquatic life and other wildlife shall not be discharged in the wastewater.
  - 4. Any proposed corrosion control or biological control treatment(s) utilized in the discharged cooling water shall be reported to the Board 120 days prior to their use. The report shall include a list of any of EPA's 129 priority pollutants contained in said treatment(s).
  - 5. Prior to adding any chemicals to the evaporative cooling water, the discharger shall obtain a written approval from the Regional Board's Executive Officer.
  - 6. The discharge shall not cause degradation of any water supply.
- C. Prohibitions
  - 1. Discharge of wastewater at a location or a manner different from that described in Findings 4, 5 and 6, above is prohibited.

#### D. Provisions

- 1. The discharger shall comply with Monitoring and Reporting Program (MRP) R7-2013-0032, and future revisions thereto, incorporated herein and made a part of this Board Order by reference, as specified by the Regional Board's Executive Officer.
- 2. 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 Board; and obtain revised requirements, or written approval by the Executive Officer, 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 Regional 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 at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances), which are installed or used by the discharger to achieve compliance with conditions of this Board Order.
- 7. 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 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;
  - c. 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 Water Code, any substances or parameters at this location.
- 8. The Discharger is the responsible party for the WDRs and the monitoring and reporting program for the Facility and shall comply with all conditions of this Board Order. Any noncompliance with this Board Order constitutes a violation of the Porter-Cologne Water Quality Control Act and is grounds for enforcement actions including Regional Board Orders or court orders requiring corrective action or imposing civil monetary liability, or in modification or revocation of these WDRs by the Regional Board.

- 9. The Discharger shall retain records of all monitoring information including all calibration and maintenance records, copies of all reports required by this Board Order, and records of all data used to complete the application for this Board Order. Records shall be maintained for a minimum of three years from the date of the sample, measurement, or report. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Water Board Executive Officer.
- 10. Unless otherwise approved by the Regional Water Board Executive Officer, all analyses shall be conducted at a laboratory certified for such analyses by the State 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.
- 11. The Discharger shall report all instances of noncompliance. Reports of noncompliance shall be submitted with the Discharger's next scheduled self-monitoring report or earlier if requested by the Regional Water Board Executive Officer.
- 12. Adequate measures shall be taken to assure that flood or surface drainage waters do not erode or otherwise render portions of the discharge facilities inoperable.
- 13. 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 Board's Executive Officer. Such specifications are subject to periodic revisions as may be warranted.
- 14. This Board Order does not convey property rights of any sort, or exclusive privileges, nor does it authorize injury to private property or invasion of personal rights, or infringement of federal, state, or local laws or regulations.
- 15. This Board Order may be modified, rescinded, or reissued, for cause. The filing of a request by the Discharger for a Board Order modification, rescission or reissuance, or notification of planned changes or anticipated noncompliance, does not stay any Board Order condition. Causes for modification include a change in land application plans, or sludge use or disposal practices, and adoption of new regulations by the State or Regional Water Board (including revisions to the Basin Plan), or federal government

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 March 21, 2013.

Ordered by: <u>Original signed by</u> ROBERT PERDUE Executive Officer

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

MONITORING AND REPORTING PROGRAM R7-2013-0032 FOR SOUTHERN CALIFORNIA GAS COMPANY NORTH NEEDLES COMPRESSOR STATION EVAPORATIVE COOLERS Needles - San Bernardino County Location of Discharge: NW 1/4, Section 1, T9N, R22E, SBB&M

#### MONITORING

- 1. This Monitoring and Reporting Program (MRP) describes requirements for monitoring a wastewater system and groundwater quality (when needed). This MRP is issued pursuant to California Water Code (Wat. Code) § 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.
- 2. Water Code section 13267 states, in part:

"In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports."

3. Water Code section 13268 states, in part:

"(a) (1) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of § 13267, or failing or refusing to furnish a statement of compliance as required by subdivision (b) of Section 13399.2, or falsifying any information provided therein, is guilty of a misdemeanor, and may be liable civilly in accordance with subdivision (b). (b) (1) Civil liability may be administratively imposed by a regional board in accordance with Article 2.5 (commencing with § 13323) of Chapter 5 for a violation of subdivision (a) in an amount which shall not exceed one thousand dollars (\$1,000) for each day in which the violation occurs."

4. The Discharger owns and operates the wastewater system that is subject to Board Order R7-2013-0032. The reports are necessary to ensure that the Discharger complies with

the Order. Pursuant to Water Cole section 13267, the Discharger shall implement the MRP and shall submit the monitoring reports described herein.

- 5. All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The time, date, and location of each grab sample shall be recorded on the sample chain of custody form. If composite samples are collected, the basis for sampling (time or flow weighted) shall be approved by Regional Water Board staff.
- 6. Field test instruments (such as those used to test pH, dissolved oxygen, and electrical conductivity) may be used provided that:
  - a. The user is trained in proper use and maintenance of the instruments;
  - b. The instruments are field calibrated prior to monitoring events at the frequency recommended by the manufacturer;
  - c. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
  - d. Field calibration reports are submitted as described in the "Reporting" section of this MRP.
- 7. The collection, preservation and holding times of all samples shall be in accordance with U. S. Environmental Protection Agency approved procedures. Unless otherwise approved by the Regional Water Board Executive Officer, all analyses shall be conducted by a laboratory certified by the California Department of Public Health. All analyses shall be conducted in accordance with the latest edition of the "Guidelines Establishing Test Procedures for Analysis of Pollutants" (40 CFR Part 136), promulgated by the USEPA.
- 8. 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 Board Order, and records of all data used to complete the application for this Board Order, for a period of at least five (5) years from the date of the sample, measurement, report or application. Records of monitoring information shall include:
  - a. The date, exact place, and time of sampling or measurement(s);
  - b. The individual(s) who performed the sampling or measurement(s);
  - c. The date(s) analyses were performed;
  - d. The individual(s) who performed the analyses;
  - e. The analytical techniques or method used; and
  - f. The results of such analyses.

### EFFLUENT MONITORING

1. Wastewater discharged to the disposal field shall be monitored for the following:

Constituent	<u>Unit</u>	Type of Sample	Sampling Frequency	
Arsenic	mg/L	24 hour Composite	Quarterly	
Barium	mg/L	24 hour Composite	Quarterly	
Mercury	mg/L	24 hour Composite	Quarterly	
Total Dissolved Solids	mg/L	Grab	Quarterly	
Sulfates (SO <sub>4</sub> )	mg/L	Grab	Quarterly	
Chlorides (Cl)	mg/L	Grab	Quarterly	
Fluorides (F)	mg/L	Grab	Quarterly	
Sodium (Na)	mg/L	Grab	Quarterly	
Hydrogen Ion	pH Units	Grab	Quarterly	
Volume of Wastewater Discharged to Field	Gallons	Average Daily <sup>1</sup>	Daily	
<sup>1</sup> Reported quarterly with monthly average daily flow calculated				

# WATER SUPPLY MONITORING

1. The supply water shall be monitored for the following:

Constituent	Unit	Type of Sample	Sampling Frequency
Arsenic	mg/L	Grab	Quarterly
Barium	mg/L	Grab	Quarterly
Mercury	mg/L	Grab	Quarterly
Total Dissolved Solids	mg/L	Grab	Quarterly
Sulfates (SO <sub>4</sub> )	mg/L	Grab	Quarterly
Chlorides (Cl)	mg/L	Grab	Quarterly
Fluorides (F)	mg/L	Grab	Quarterly
Sodium (Na)	mg/L	Grab	Quarterly

<u>Constituent</u>	<u>Unit</u>	Type of Sample	<u>Sampling</u> Frequency
Hydrogen Ion	pH Units	Grab	Quarterly

## REPORTING

- 1. The discharger shall arrange the data in tabular form so that the specified information is readily discernible. The data shall be summarized in such a manner as to clearly illustrate whether the facility is operating in compliance with waste discharge requirements. Where appropriate, the Discharger shall include supporting calculations (e.g., for monthly averages).
- The result of any analysis taken more frequently than required at the locations specified in this Monitoring and Reporting Program (MRP) shall be reported to the Regional Water Board.
- 3. If the facility is not in operation, or there is no discharge during a required reporting period, the discharger shall forward a letter to the Regional Board indicating that there has been no activity during the required reporting period.
- 4. Monitoring reports shall be certified under penalty of perjury to be true and correct, and shall contain the required information at the frequency designated in this MRP.
- 5. Each report shall contain the following statement:

"I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- 6. The Monitoring Report, and other information requested by the Regional Water Board, shall be signed by a principal executive officer or ranking elected official.
- 7. A duly authorized representative of the discharger may sign the documents if:
  - a. The authorization is made in writing by the person described above;
  - b. The authorization specified an individual or person having responsibility for the overall operation of the regulated disposal system; and
  - c. The written authorization is submitted to the Regional Board's Executive Officer.
- 8. The Discharger shall attach a cover letter to the Self-Monitoring Report. The cover letter shall clearly identify WDRs violations, discuss corrective actions taken or planned, and propose a time schedule for corrective action (if applicable). Identified violations shall describe the requirement violated, and the nature of the violation.

- 9. The Discharger shall report orally any noncompliance that may endanger human health or the environment. The noncompliance shall be reported immediately to the Regional Water Board Executive Officer and the Office of Emergency Services as soon as:
  - a. The Discharger has knowledge of the discharge;
  - b. Notification is possible; and
  - c. Notification will not substantially impede cleanup or other emergency measures.

During non-business hours, the Discharger shall leave a message on the Regional Water Board office voice recorder. A written report shall be provided within five (5) business days the Discharger is aware of the incident. The written report shall include a description of the noncompliance, the cause, period of noncompliance, anticipated time to achieve full compliance, and steps taken or planned, to reduce, eliminate, and prevent recurrence of the noncompliance. The Discharger shall report all intentional or unintentional spills or failures occurring within the facility or disposal system to the Regional Water Board office in accordance with the above time limits. Results of analyses performed shall be provided within 15 days of sample collection.

- 10. Quarterly monitoring reports shall be submitted to the Regional Board by January 15<sup>th</sup>, April 15<sup>th</sup>, July 15<sup>th</sup> and October 15<sup>th</sup> of each year. Annual monitoring reports shall be submitted to the Regional Board by January 15<sup>th</sup> of each year.
- 11. The Discharger shall submit monitoring reports to:

California Regional Water Quality Control Board Colorado River Basin Region 73-720 Fred Waring, Suite 100 Palm Desert, CA 92260

Ordered by: <u>Original signed by</u>

ROBERT PERDUE Executive Officer

March 21, 2013 Date



SITE LOCATION MAP SOUTHERN CALIFORNIA GAS COMPANY NORTH NEEDLES COMPRESSOR STATION EVAPORATIVE COOLERS Needles, San Bernardino County NW 1/4, Section 1, T9N, R22E, S88&M



FACILITY SITE PLAN SOUTHERN CALIFORNIA GAS COMPANY NORTH NEEDLES COMPRESSOR STATION EVAPORATIVE COOLERS Needles, San Bernardino County NW 1/4, Section 1, T9N, R22E, S88&M