STATE OF NEW MEXICO
SECRETARY OF ENVIRONMENT

NEW MEXICO ENVIRONMENT DEPARTMENT,

Complainant,

v.

No. AQCA 05-22 (CO)

GIANT INDUSTRIES ARIZONA, INC.,
(Ciniza Refinery)

Respondent.

NEW MEXICO ENVIRONMENT DEPARTMENT,

Complainant,

v.

No. AQCA 02-09 (CO)

GIANT INDUSTRIES ARIZONA, INC.,
(Bloomfield Refinery)

Respondent.

STIPULATED FINAL ORDER

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STIPULATED FINAL ORDER

Complainant Environmental Protection Division ("Division") of the New Mexico Environment Department ("Department") and Respondents Giant Industries Arizona, Inc. ("Giant Industries Arizona"), and San Juan Refining Company ("San Juan Refining"), pursuant to 20.1.5.601.B NMAC, stipulate and agree to resolve these compliance orders on the terms and conditions specified in this Stipulated Final Order ("Order").

I. BACKGROUND

A. Parties

1. The Division is an organizational unit of the Department, created pursuant to NMSA 1978, §9-7A-6.B(3) (1991). The Secretary of the Department delegated to the Director of the Division the authority to seek administrative enforcement, including injunctive relief and civil penalties, for violations of the Air Quality Control Act, NMSA 1978, §74-2-1 *et seq.*, and the Air Quality Control Regulations.

2. Giant Industries Arizona is an Arizona corporation. Giant Industries Arizona owns and operates the Ciniza Refinery located east of Gallup, New Mexico. San Juan Refining, a wholly owned subsidiary of Giant Industries Arizona, is a New Mexico corporation. San Juan Refining owns, and Giant Industries Arizona operates, the Bloomfield Refinery located in Bloomfield, New Mexico.

B. Alleged Violations

1. On June 3, 2005, the Division issued a compliance order alleging air quality violations at the Ciniza Refinery. The alleged violations were discovered during the Division's

inspection on April 24-26, 2001. Exhibit A. Giant Industries Arizona filed a request for hearing.

2. On August 27, 2002, the Division issued a compliance order alleging air quality violations at Bloomfield Refinery. The alleged violations were discovered during the Division's inspections on August 27-28, 2001, and September 24, 2001. Giant Industries Arizona filed an answer and request for hearing. On June 3, 2005, the Division filed an amended compliance order. Exhibit B.

3. Concurrently with the Order, the U.S. Environmental Protection Agency ("EPA") files a Complaint and Consent Agreement and Final Order alleging additional violations at the Ciniza and Bloomfield Refineries. Exhibit C.

C. Resolution. The Division, EPA, Giant Industries Arizona, and San Juan Refining have negotiated the Order and the Consent Agreement and Final Order to resolve the alleged violations in the Division's compliance orders and EPA's administrative complaint. EPA, Giant Industries Arizona, and San Juan Refining have resolved the alleged violations and stipulated to the Consent Agreement and Final Order on the terms and conditions set forth therein. The Division, Giant Industries Arizona, and San Juan Refining stipulate to the Order for the sole purpose of resolving the alleged violations in the compliance orders, any other violations that could have been asserted on the basis of the facts and legal conclusions alleged therein, and any violations of NSR Requirements occurring before the Date of Entry of the Order. Giant Industries Arizona and San Juan Refining deny the alleged violations in the compliance orders, contests the civil penalty calculations, does not admit any liability, fact, or legal conclusion by stipulating to this Order, and represents and warrants that it has exercised due diligence and determined that it has not made any modification at the Refineries subject to review under the

NSR Requirements in the twenty-four (24) months preceding the Date of Entry of the Order.

II. JURISDICTION

For the purpose of this proceeding, and pursuant to 20.1.5.600.B NMAC, Giant Industries Arizona and San Juan Refining admit jurisdiction and consent to the relief specified herein.

III. BINDING EFFECT

The Order shall be binding on the parties and their officers, directors, employees, agents, subsidiaries, successors, assigns, trustees, or receivers. If Giant Industries Arizona or San Juan Refining propose to sell or transfer all or part of its ownership interest or change its operator status in either refinery, prior to such sale, transfer or change in operator status, Giant Industries Arizona and San Juan Refining shall advise the purchaser, transferee, or new operator in writing of its obligation to comply with the terms of this Order, and Giant Industries Arizona and San Juan Refining shall send a copy of such written notification to the Division at least thirty (30) days before such proposed sale, transfer, or change in operator status. The sale, transfer, or change in operator status shall relieve Giant Industries Arizona or San Juan Refining of its obligations to perform under the Order only if the Division, Giant Industries Arizona, San Juan Refining, and the purchaser, transferee, and new operator agree to modify the Order to release Giant from and make the purchaser, transferee, and new operator liable for all obligations of the Order.

IV. DEFINITIONS

Unless otherwise defined herein, terms used in the Order and related documents shall have the meaning given by the federal Clean Air Act ("CAA"), the New Mexico Air Quality Control Act ("AQCA"), and their implementing regulations.

A. "NSR Requirements" means the permitting requirements of Parts C and D of Subchapter I of the Act, 42 U.S.C. §§7475 & 7503, and the federal implementing regulations at 40 C.F.R. Parts 51 and 52, and the state implementing regulations at 20.2.74 NMAC - *Permits - Prevention of Significant Deterioration*, and 20.2.79 - *Permits - Nonattainment Areas.*

B. "Bloomfield Refinery" means the refinery owned by San Juan Refining and operated by Giant Industries Arizona in Bloomfield, New Mexico.

C. "Calendar quarter" means the three-month period ending on March 31st, June 30th, September 30th, and December 31st.

D. "Calibration Drift Assessment" means the difference between the initial and final calibration precision instrument response, calculated as follows:

$$\frac{\text{Final Instrument Response, ppm} - \text{Initial Instrument Response, ppm}}{\text{Calibration Gas Cylinder Value, ppm}} \times 100$$

E. "CEMS" means a continuous emissions monitoring system.

F. "Cycle-ending shutdown of a process unit" means an intentionally scheduled downtime for the routine, periodic cleaning, inspection, and maintenance of essentially all equipment in a process unit.

G. "Ciniza Refinery" means the refinery owned and operated by Giant Industries Arizona near Gallup, New Mexico.

H. "CMS" means a continuous monitoring system.

I. "CO" means carbon monoxide.

J. "COMS" means a continuous opacity monitoring system.

K. "Consent Agreement" means the Complaint and Consent Agreement and Final Order

issued to Giant Industries Arizona and San Juan Refining by EPA attached as Exhibit C to this Order.

L. "Covered Heater or Boiler" means each heater and boiler identified in Appendix A with a heat input rate capacity greater than or equal to 40 million British thermal units ("MMBTU")/hour and any new Heater or Boiler at either refinery with a heat input rate capacity greater than or equal to 40 MMBTU/hr for which a permit application is submitted on or before December 31, 2010.

M. "Date of Entry of the Order" means the date the Order is signed by the Secretary of the Department.

N. "Day" or "Days" means a calendar day or days.

O. "Department" means the New Mexico Environment Department and any successor departments or agencies of the State of New Mexico.

P. "EPA" means Region 6 of the U.S. Environmental Protection Agency.

Q. "FCCU" means a fluidized catalytic cracking unit and its regenerator and associated CO boiler(s) where present.

R. "Fuel Oil" means any liquid fossil fuel with sulfur content of greater than 0.05% by weight.

S. "Giant" means Giant Industries Arizona and San Juan Refining, their successors and assigns, and their officers, directors, and employees in their official capacities.

T. "H_2S" means hydrogen sulfide.

U. "HAPs" means hazardous air pollutants listed pursuant to Section 112(b) of the federal Clean Air Act, 42 U.S.C. §7412(b).

V. "Flaring" means the combustion of refinery-generated gases in a Flaring Device.

W. "Flaring Device" means a flare device used to combust the excess volume of a refinery-generated gas. Currently, the Ciniza and Bloomfield Refineries each have one Flaring Device. Until this Order is terminated, any Flaring Device (except for the emergency ground flare for the Alkylation Unit at the Ciniza Refinery) existing or installed in the future at the Refineries is covered by this Order.

X. "Flaring Incident" means the continuous or intermittent flaring of refinery-generated gas at a Flaring Device that results in the emission of SO_2 equal to or greater than five hundred (500) pounds in a 24-hour period; provided, however, that if five hundred (500) pounds or more of SO_2 have been emitted in a twenty-four (24) hour period and the flaring continues into subsequent, contiguous, non-overlapping twenty-four (24) hour period(s), each period of which results in emissions equal to, or in excess of five-hundred (500) pounds of SO_2, then only one Flaring Incident shall be deemed to have occurred. Subsequent, contiguous, non-overlapping periods are measured from the initial commencement of flaring within the Flaring Incident.

Y. "Low NOx Combustion Promoter" means a catalyst not containing platinum that is added to a FCCU to minimize NOx emissions while maintaining its effectiveness as a combustion promoter.

Z. "Malfunction" has the meaning specified in 40 C.F.R. §60.2 ("Any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.").

AA. "Next Generation Ultra-Low NOx Burners" or "Next Generation ULNB" means

those burners that are designed to achieve a NOx emission rate of 0.012 to 0.020 lb/MMBTU HHV when firing natural gas at 3% stack oxygen at full design load without air preheat even if upon installation the actual NOx emission rate exceeds 0.020 lb/MMBTU HHV.

BB. "NOx" means nitrogen oxides.

CC. "NSPS" means the federal New Source Performance Standards, 40 CFR Part 60.

DD. "Order" means this Stipulated Final Order and attached exhibits.

EE. "PM" means particulate matter.

FF. "PEMS" means a predictive emissions monitoring system as described in Exhibit D.

GG. "Parties" means Giant, the Department, and as appropriate, EPA.

HH. "Qualifying Control" means the permanent shutdown of a heater or boiler, the installation of Next Generation ULNB or such other control technology or technique which Giant demonstrates to the Department's satisfaction, after consultation with EPA, should reduce NOx emissions to 0.040 pounds of NOx per MMBTU heat input or lower.

II. "Refinery" or "Refineries" means the Ciniza and Bloomfield Refineries.

JJ. "Root Cause" means the primary cause(s) of a Flaring Incident as determined through a process of investigation.

KK. "Scheduled Maintenance" means any shutdown of an emission unit or control equipment that Giant schedules at least fourteen (14) days in advance of the shutdown for the purpose of undertaking maintenance of the unit or control equipment.

LL. "Shutdown" means the cessation of operation of equipment for any purpose.

MM. "Startup" means the setting in operation of equipment for any purpose.

NN. "SO_2" means sulfur dioxide.

OO. "Sulfur Recovery Plant" or "SRP" shall mean a process unit that recovers sulfur from H_2S by a vapor phase catalytic reaction of SO_2 and H_2S.

PP. "Torch Oil" shall mean FCCU feedstock or light cycle oil that is combusted in the FCC regenerator to assist in starting up or restarting the FCCU.

QQ. "VOCs" shall mean volatile organic compounds as defined in 40 C.F.R. Part 51.100(s)(1).

V. LEAK DETECTION AND REPAIR PROGRAM

A. Summary. In order to minimize fugitive emissions of VOCS, HAPs, and benzene from equipment in light liquid and/or in gas/vapor service, Giant shall undertake the following measures to increase the effectiveness of the Leak Detection and Repair ("LDAR") programs at the Refineries.

B. Written Refinery-Wide LDAR Program. No later than one hundred eighty (180) days after the Date of Entry of the Order, Giant shall develop and maintain a written refinery-wide LDAR compliance program for each Refinery. The refinery-wide LDAR programs shall include:

1. an overall, refinery-wide leak rate goal that will be a target for achievement on a process-unit-by-process-unit basis;

2. an identification of all equipment in light liquid and/or in gas/vapor service within each process unit that has the potential to leak VOCs, HAPs, and benzene and the regulatory LDAR provisions such equipment is subject to;

3. procedures for identifying leaking equipment within process units;

4. procedures for repairing and keeping track of leaking equipment;

5. procedures for identifying and including new equipment in the LDAR program; and

6. a process for evaluating new and replacement equipment to promote the consideration and installation of equipment that will minimize leaks and/or eliminate chronic leakers.

C. Training. No later than sixty (60) days after the development of refinery-wide LDAR programs, Giant shall implement the following LDAR training programs:

1. for personnel newly-assigned to LDAR responsibilities, Giant shall provide and require completion of LDAR training prior to each employee beginning this work;

2. for all personnel assigned LDAR responsibilities, Giant shall provide and require completion of annual LDAR training; and

3. for all other operations and/or maintenance personnel (including contract personnel), Giant shall provide and require completion of an initial training program and an annual LDAR review that includes instruction on aspects of LDAR that are relevant to the person's duties. Refresher training in LDAR shall be performed on a three-year cycle.

4. Training shall include:

a. an overview of the LDAR regulations;

b. leak definitions for the refinery-wide programs;

c. identification of leaking components by utilizing an instrument for quantifying leaks, as well as by visual, auditory and olfactory means;

d. proper calibration of the instrument utilized for quantifying leaks;

e. requirements for repair of leaking components; and

f. recordkeeping and reporting requirements.

D. LDAR Monitoring Frequency. No later than sixty (60) days after the development of refinery-wide LDAR programs, Giant shall implement quarterly monitoring of all valves and pumps at the Refinery subject to LDAR monitoring (except pumps otherwise subject to monthly monitoring). Giant shall provide the Department with notice at least fourteen (14) days before a quarterly monitoring event, and shall allow Department inspectors to be present during each event. If, after providing the required notice to the Department, the scheduled date for the quarterly monitoring event must be changed, Giant shall notify the Department of the new date no later than one (1) business day after determining to change the scheduled date and no less than three (3) business days before the new date, except that the fourteen (14) day prior notification requirement shall apply only if the new date is fourteen (14) or more days in the future.

E. Quality Assurance/Quality Control Program. No later than sixty (60) days after the development of the refinery-wide LDAR programs, Giant shall develop and implement a procedure to ensure a quality assurance/quality control ("QA/QC") review of all data generated by LDAR monitoring technicians. Giant shall ensure that any LDAR monitoring data provided to Giant by a contractor are reviewed for QA/QC by the contractor prior to submittal. At least quarterly (including all monthly LDAR monitoring events occurring during the quarter), Giant shall perform QA/QC of the contractor's monitoring data, including the number of components monitored per technician, the time between monitoring events, and abnormal data patterns, if any.

F. LDAR Audits

1. Third-Party Audits. No later than two hundred forty (240) days after the development of the refinery-wide LDAR programs, Giant shall retain a contractor to perform two third-party audits for each refinery-wide LDAR program. Giant shall conduct the first third-party audits within five hundred forty (540) days after the Date of Entry of the Order. These audits shall be completed no later than seven hundred eighty (780) days after the Date of Entry of the Order. Giant shall conduct the second third-party audits within seven hundred twenty (720) days following the completion of the first third-party audits. These audits shall be completed no later than five (5) years following the Date of Entry of the Order. All audits shall include a review of all LDAR monitoring events occurring during the preceding quarter, comparative monitoring of all valves, records review, tagging, and data management. All audits shall commence no earlier than fifteen (15) days, and no later than thirty (30) days after the completion of the most recent quarterly LDAR monitoring event.

2. Internal Audits. Giant shall conduct internal audits of each refinery-wide LDAR program by sending personnel familiar with the LDAR program and its requirements from one Refinery or from the Giant Yorktown Refinery to audit the other Refinery. Giant shall complete the first round of internal LDAR audits no later than two (2) years after the date of completion of the first third-party audits required in Section V.E.1. Internal audits of each Refinery shall be held every four (4) years thereafter.

3. Audit Schedule. To ensure that an audit at each Refinery occurs every two (2) years, third-party and internal audits shall be separated by two (2) years. As an alternative to the internal audits required by Section V.E.2, Giant may retain third parties to undertake these audits,

provided that an audit of each Refinery occurs at least every two (2) years.

4. Audit Response. If the results of an audit identify any area(s) of noncompliance, Giant shall implement, as soon as practicable, all steps necessary to correct the area(s) of noncompliance and to prevent, to the extent practicable, a recurrence of the cause of the noncompliance. Giant shall retain the audit reports and maintain a written record of the corrective actions taken in response to any noncompliance identified in the audits.

5. Audit Policy. Nothing in this section is intended to limit or disqualify Giant, on the grounds that information was not discovered and supplied voluntarily, from seeking to apply the Department's audit policy, if applicable, to any LDAR violation or noncompliance discovered during the course of an audit required by this section.

G. Leak Definition

1. No later than sixty (60) days after the development of the refinery-wide LDAR programs, Giant shall utilize the following internal leak definitions:

a. 500 ppm for valves in light liquid and/or gas/vapor service, excluding pressure relief devices, unless regulatory changes require the use of lower leak definitions; and

b. 2,000 ppm for pumps, unless regulatory changes require the use of lower leak definitions.

2. For the purpose of regulatory reporting, Giant may continue to report leak rates in valves and pumps against the applicable regulatory leak definition or may use the lower, internal leak definitions in this section.

3. Giant shall record, track, repair (subject to the "delay of repair" provisions in Section V.N), and remonitor all leaks in excess of the internal leak definitions specified in

Section V.G.1, except that Giant shall have thirty (30) days to make repairs and remonitor leaks that are greater than the internal leak definitions, but less than the applicable regulatory leak definitions. Giant shall remonitor all valves found leaking for two (2) consecutive months.

H. Initial Attempt at Repairs on Valves. No later than sixty (60) days after the development of the refinery-wide LDAR programs, Giant shall make an "initial attempt" at repair on any valve that is subject to monitoring pursuant to this section that has a reading greater than 200 ppm VOCs. Subsequent remonitoring for leaks shall be completed no later than five (5) days after the leak is identified (except for control valves, check valves, and relief valves). Giant shall not be obligated to make more than one "initial attempt" if the repair was unsuccessful, provided that the leak is below the internal leak definition required by Section V.G.1(a).

I. Electronic Storage Database. No later than sixty (60) days after the development of the refinery-wide LDAR programs, Giant (or its LDAR contractor) shall establish and maintain an electronic database for storing and reporting all LDAR data. For each monitoring event, the collected monitoring data shall include the recording of the time and date, operator identification, and instrument identification. In instances when monitoring data cannot be collected electronically, such data shall be recorded manually and entered in the electronic storage database within five (5) days.

J. Contracted Programs. No later than sixty (60) days after the development of the refinery-wide LDAR programs, if Giant subcontracts its LDAR monitoring program at the Refinery, then Giant shall require its LDAR contractor to submit daily monitoring activity reports and conduct a QA/QC review of all data before the data is included in an LDAR quarterly monitoring report.

K. LDAR Personnel. No later than sixty (60) days after the development of the refinery-wide LDAR programs, Giant shall establish a program that will hold LDAR personnel accountable for LDAR performance. Giant shall designate one individual at each refinery, who may change from time to time, as the person responsible for LDAR coordination, and this person shall be authorized to implement the LDAR Program and initiate improvements. If Giant changes the individual responsible for LDAR coordination, Giant shall submit notification of the change to the Department in the next quarterly report under Section XIV.

L. Adding New Valves and Pumps. No later than sixty (60) days after the development of the refinery-wide LDAR programs, Giant shall establish a program to track or shall demonstrate, to the Department's satisfaction, that an existing program, such as a management-of-change program used for process safety or risk management, is adequate to track maintenance records to ensure that valves and pumps in light liquid and/or in gas/vapor service added to the Refinery during maintenance or construction are integrated into the LDAR program.

M. Calibration Drift Assessment. For LDAR monitoring events occurring on or after sixty (60) days after the development of the refinery-wide LDAR programs, Giant shall conduct calibration drift assessments of the LDAR monitoring equipment, at a minimum, at the end of each monitoring shift. The calibration precision procedure of 40 CFR Part 60, U.S. EPA Reference Method 21, Section 8.1.2 shall be followed before (initial) and after (final) each monitoring shift, except that one (1) instrument measurement of the span gas shall be made rather than three (3) instrument measurements of the zero and span gas. If any calibration drift assessment shows a downward drift of more than ten (10) percent, Giant shall remonitor all valves that were monitored since the last calibration and that had readings greater than 200 ppm

and shall remonitor all pumps that were monitored since the last calibration and that had readings greater than 500 ppm.

N. Delay of Repair. No later than sixty (60) days after the development of the refinery-wide LDAR programs, for any valves that Giant is required under the applicable regulations to place on the "delay of repair" list, Giant shall:

1. require sign-off by the unit supervisor that it is infeasible to repair the valve without process unit shutdown;

2. undertake its best efforts to fix the leak rather than put the valve on the "delay of repair" list, unless there is a safety, mechanical, or major environmental concern posed by repairing the leak;

3. include valves on the "delay of repair" list in its regular LDAR monitoring, and if the leak reaches 10,000 ppm, undertake its best efforts to fix the leak, unless there is a safety, mechanical, or major environmental concern posed by repairing the leak; and

4. for the purpose of this section, "best efforts" shall mean attempting more than one method to repair the valves if the first or subsequent attempt(s) at repair is unsuccessful (e.g. using "drill and tap" if another method was unsuccessful), or making more than one attempt to repair the valves using the same method if another repair method is not feasible. "Best efforts" means an effort as defined in Section V.N.4 must be made, not that a successful repair must occur, provided that if drill and tap is attempted, best efforts shall mean two (2) such attempts.

O. Initial Attempt at Repair on Pumps.

1. Beginning no later than two hundred forty (240) days after the Date of Entry of the Order, Giant shall make a first attempt at repair on any pump leaking at a rate greater than

2000 ppm and re-monitor within five (5) days of detection. If the first attempt at repair is not successful in reducing the leak to less than 2000 ppm, Giant shall use other means to repair the leak within thirty (30) days (which may include replacing the seal on that pump with an in-kind replacement) and re-monitor; provided however, that (i) the pump can be taken off-line to allow such repair without requiring a process unit shutdown, and (ii) the facility shall not be required to replace the seal on any given pump more than two (2) times during the period between the start of the 2000 ppm leak definition and December 31, 2006.

2. Beginning January 1, 2007, Giant shall repair any pump leak greater than 2000 ppm within thirty (30) days of detection; provided however, that Giant may delay the repair for pumps if the repair or replacement would be technically infeasible without a process unit shutdown, in which event Giant shall repair or replace the pump by the end of the next cycle-ending shutdown of that process unit. Giant also may delay the repair for pumps if the repair would require either (i) replacing the existing seal design with a new system that Giant has determined will provide better performance, or (ii) replacing the leaking pump with one equipped with advanced seal design, provided that the replacement is completed no later than one hundred eighty (180) days after the leak was detected.

VI. NO_X AND SO_2 EMISSION REDUCTIONS FROM FCCUs BEFORE THE TURNAROUNDS SCHEDULED TO OCCUR IN 2009 AND 2012

A. Summary. Giant shall implement a program to reduce or minimize NO_X and SO_2 emissions and to monitor NO_X, SO_2, CO, and PM emissions from the FCCUs at both Refineries as described below.

B. Monitoring. No later than October 31, 2006, Giant shall install, certify, calibrate,

maintain, and operate COMS for opacity and CEMS for NO_X, SO_2, and O_2, and CO (or PEMS for CO upon EPA's approval of an Alternative Monitoring Plan ("AMP")) at the Ciniza FCCU, and CEMS for NO_X, SO_2, and O_2, and CO (or PEMS for CO upon EPA's approval of an AMP) at the Bloomfield FCCU, and will use such data to report compliance with the terms and conditions of this Order. Giant shall make COMS, CEMS, PEMS, and process data available to the Department upon request. Giant shall install, certify, calibrate, maintain, and operate the COMs and CEMS in accordance with the requirements of 40 CFR §§60.11 (COMS), 60.13 (CEMS) and 40 CFR Part 60 Appendix A (CEMS), and the applicable performance specifications of 40 CFR Part 60 Appendix B and the QA/QC procedures of Appendix F.

C. Baseline Data. By no later than October 31, 2007, Giant shall have collected baseline data over a period of not less than three hundred and sixty-five (365) days that includes, at a minimum, the following data (on a daily average basis):

1) Regenerator flue gas temperature;

2) Coke burn rate (calculated daily);

3) FCCU feed rate;

4) FCCU feed sulfur in weight percent (determined weekly);

5) Percentage of recycle feed components in the FCCU combined feed; and

6) Hourly and daily NOx, SO_2, and O_2 concentrations.

By no later than November 30, 2007, Giant shall submit the baseline data to the Department.

D. Refinery Turnaround Schedules and Applicable Programs

1. Ciniza FCCU Final Emission Limits in 2009. If Giant elects to comply with Section VII (Emission Reductions from FCCUs after the Turnarounds Scheduled to Occur in

2009 and 2012) at the Ciniza FCCU during the turnaround scheduled to occur in 2009, then Giant shall implement the NOx catalyst program in Section E.1 and the SO_2 catalyst program in Section E.3 at the Bloomfield FCCU.

2. **Bloomfield FCCU Final Emission Limits in 2009.** If Giant elects to comply with Section VII (Emission Reductions from FCCUs after the Turnarounds Scheduled to Occur in 2009 and 2012) at the Bloomfield FCCU during the turnaround scheduled for 2009, then Giant shall implement the O_2 program in Section E.2 and the SO_2 catalyst program in Section E.3 at the Ciniza FCCU.

E. NOx and SO_2 Catalyst and O_2 Reduction Programs

1. NOx Catalyst Program at Bloomfield FCCU

a. By no later than July 1, 2007, Giant shall initiate, and by December 31, 2007, shall complete, its replacement of conventional platinum-based combustion promoter with an approved Low NOx Combustion Promoter. By no later than December 31, 2006, Giant shall give written notice to the Department of the Low NOx Combustion Promoter(s) it proposes to use. The Department may approve the proposed Low NOx Combustion Promoter(s) or require the use of a different promoter after consultation with EPA. Any dispute regarding the Department's approval of the promoter(s) or requirement to use a different promoter shall be resolved in accordance with the dispute resolution provisions of the Order.

b. Giant may use a conventional combustion promoter on an intermittent basis as needed to avoid unsafe operation of the FCCU regenerator or to comply with the CO emission limits in NSPS Subpart J, 40 CFR §60.103, and NESHAP Subpart UU, 40 CFR

§63.1565. Giant shall undertake appropriate measures and/or adjust operating parameters to eliminate or minimize such use. Notwithstanding the foregoing, Giant shall not be required to undertake appropriate measures and/or adjust operating parameters in a manner that would limit the conversion or processing rates. Within thirty (30) days of using conventional combustion promoter, Giant shall submit a report to the Department and EPA documenting when and why it used the conventional combustion promoter, and the actions, if any, taken to eliminate or minimize such use of conventional combustion promoter.

2. O_2 Program at the Ciniza FCCU. Giant shall conduct an optimization study to ensure good combustion practices, including physical and operational changes, at the Ciniza FCCU with a goal of reducing stack O_2 as much as feasible, consistent with identified safety and demonstrated afterburn concerns. Giant shall submit such study and its recommendations to the Department by September 30, 2007, and shall implement such recommendations by December 31, 2007 (or such later date as may be approved by the Department).

3. SO_2 Catalyst Program at the Ciniza and Bloomfield FCCUs

a. By no later than December 31, 2006, Giant shall give written notice of the SO_2 Reducing Catalyst Additive(s) that it proposes to use at each FCCU and submit a proposed protocol for the manner in which the Approved Additive(s) will be introduced into the FCCU to the Department and EPA. The Department may approve the proposed SO_2 Reducing Catalyst Additive(s) and/or protocol or require the use of a different additive and/or protocol, after consultation with EPA. The approved SO_2 Reducing Catalyst Additive(s) shall be called the "Approved Additive(s)". Any dispute regarding the Department's approval of the additive(s) and/or proposed protocol or requirement to use a different additive and/or protocol shall be

resolved in accordance with the dispute resolution provisions of the Order.

b. By no later than December 31, 2006, Giant shall notify the Department and EPA as to which FCCU at which it will comply with Section VII (Emission Reductions from FCCUs after the Turnarounds Scheduled to Occur in 2009 and 2012) during the turnaround scheduled for 2009. As to the other FCCU and by no later than July 1, 2008, Giant shall initiate a program to demonstrate the performance of the Approved Additive at an addition rate of 5.0 Weight % Approved Additive. Giant shall continue this program until the FCCU complies with Section VII (Emission Reductions from FCCUs after the Turnarounds Scheduled to Occur in 2009 and 2012) during the turnaround scheduled for 2012.

c. By no later than December 31, 2009, Giant shall submit a report of the preliminary results of this program to the Department and EPA, including at least twelve (12) months of data identified under Section C.

VII. EMISSION REDUCTIONS FROM FCCUs AFTER THE TURNAROUNDS SCHEDULED TO OCCUR IN 2009 AND 2012

No later than sixty (60) days after startup of the FCCU after the turnaround currently scheduled to occur in 2009 at either refinery, and no later than sixty (60) days after startup of the FCCU after the turnaround currently scheduled to occur in 2012 at the remaining refinery (but no later than December 31, 2009 and December 31, 2012 respectively, or if Giant closes either refinery, then no later than December 31, 2009 at the remaining refinery), Giant shall accept NSPS applicability at the FCCUs and achieve compliance with the following emission limits. Upon written request from the Department, Giant shall submit CEMS and process data regarding compliance with the following emission limits.

A. NO_X. Maximum NO_X emission concentrations of 20 ppmvd on a 365-day rolling average basis and 40 ppmvd on a 24-hour rolling average basis, each corrected to 0% oxygen, as demonstrated through CEMS.

B. SO_2. Maximum SO_2 emission concentrations of 25 ppmvd on a 365-day rolling average basis and 50 ppmvd on a 7-day rolling average basis, each corrected to 0% oxygen, as demonstrated through CEMS.

C. PM. Maximum PM emission concentrations of 1.0 pound PM per 1000 pounds of coke burned on a 3-hour average basis, as demonstrated through annual stack tests as provided by 40 CFR §§60.8 and 60.106(b).

D. CO. Maximum CO emission concentrations of 500 ppm, as demonstrated through CEMS (or PEMS upon EPA's approval of an AMP).

VIII. NO_X EMISSION REDUCTIONS FROM HEATERS AND BOILERS

A. Summary. Giant shall implement a five (5) year program to reduce by fifty (50) percent in the aggregate, but on a refinery-by-refinery basis in the event that one refinery is permanently shutdown, the NO_X emission limits from Covered Heaters and Boilers. The co-generation units at the Ciniza Refinery (designated Z-81-G/B104 and Z-81-G/B105) shall not be included in the NOx emission reduction program required by this Section.

Giant will test the heaters and boilers to develop baseline emission data and to determine the maximum heat input rate of each heater or boiler necessary to establish initial NOx emission limits. Giant then will select and apply control technology to achieve emission reductions from these initial NOx emission limits. After application of the control technology, Giant will retest the heaters and boilers to develop final NOx emission limits. Finally, Giant will demonstrate

compliance with the final NOx emission limits through CEMS, PEMS, or annual stack tests, or through portable analyzers upon the Department's approval of a protocol after consultation with EPA.

B. Baseline Data. No later than March 30, 2006, Giant shall identify and test at least ninety (90) percent of the total combined heat input rate capacity of all Covered Heaters and Boilers with a heat input rate capacity equal to or greater than forty (40) MMBTU/hr, as identified in Appendix A, to develop NOx emission baseline data in units of lb/MMBTU and to determine their maximum heat input rate capacity. Test protocols shall be submitted to and approved by the Department prior to commencing the tests. The tests shall be based upon the average of three (3) one hour testing periods and shall be used to develop representative operating parameters for each affected unit. Each unit shall be fired at its maximum heat input rate. Giant shall submit the data to the Department no later than September 31, 2006.

C. Initial NO_X Emission Limits. No later than December 31, 2006, Giant shall submit permit applications to the Department in which Giant proposes initial NO_X emission limits for each Covered Heater and Boiler expressed in lb/MMBTU on a 3-hour average basis as demonstrated through testing under Section VIII.B. The proposed permit limits shall be based on the actual performance of the affected units as demonstrated by performance tests with a margin of safety not to exceed fifteen (15) percent, except that Giant may increase the margin of safety to account for variability in the test results upon the Department's review and approval, which shall not be unreasonably withheld. The Department will incorporate the initial NOx emission limits (i.e., limits expressed in lb/MMBTU into federally-enforceable permits as required by Section XVII, and Giant shall conduct annual performance tests to demonstrate compliance with the

limits.

D. NOx Emission Reductions and Compliance

1. Giant shall utilize and/or install Qualifying Controls on Covered Heaters and Boilers representing at least fifty (50) percent of those units' total combined maximum heat input rate capacity in the aggregate, including at least thirty (30) percent of the combined maximum heat input rate capacity at any one refinery; provided however that in the event that one refinery is permanently shut down, then Giant shall utilize and/or install Qualifying Controls on Covered Heaters and Boilers representing at least fifty (50) percent of the total maximum heat input rate capacity at the remaining refinery. Giant shall have sole discretion to select which heaters or boilers to control and which Qualifying Control to apply to a heater or boiler. If Giant must use a CEMS to monitor compliance with the final NOx emission limits, the Department may allow a three hundred sixty five (365) day rolling average at Giant's request.

2. No later than December 31, 2009, Giant shall submit permit applications to the Department in which Giant proposes final NOx emission limits for the affected units expressed in lb/MMBTU on a 3-hour average basis. The proposed final NOx emission limits shall reflect a fifty (50) percent reduction in the aggregate, but on a refinery-by-refinery basis in the event that one refinery is permanently shutdown, in the NOx emission rates from the initial, baseline NOx emission limits.

3. The Department shall incorporate final NOx emission limits, CEMS, or stack tests, or portable analyzers after consultation with EPA, for affected units with capacities ≤ 100 mmBtu, CEMS or PEMS for affected units with capacities between 100 and 150 MMBTU, and CEMS for affected units with capacities $\geq$ 150 MMBTU, into operating permits as required by

Section XVII (Integration with Permits).

4. No later than June 30, 2010, Giant shall demonstrate compliance with the final NOx emission limits using CEMS or PEMS, or stack tests, or portable analyzers upon the Department's approval of a protocol after consultation with EPA, as applicable.

5. No later than December 31, 2010, Giant shall demonstrate that the final NOx emission limits reflect the required reductions by satisfying the following inequality:

$$\frac{\sum_{i=1}^{n} (E_{initial})_i - \sum_{i=1}^{n} (E_{final})_i}{\sum_{i=1}^{n} (E_{initial})_i} \times 100 \geq 50$$

Where:

$(E_{initial})_i$ = [(The initial NO_X emission limit less the margin of safety in pounds per million BTU for heater or boiler i based on baseline data)/(2000 pounds per ton)] x [(the higher of either the maximum heat input rate determined during testing under Section VIII.B or the average annual actual heat input rate for any consecutive twenty-four (24) month period during the preceding ten (10) years immediately preceding the Date of Entry of the Order, if such is more representative of anticipated operation and is approved by the Department, provided that such maximum heat input rate shall be no greater than that allowed under applicable permits in effect as of June 30, 2005 in million BTU per hour for heater or boiler i) x (the lower of 8760 or permitted hours per year)]

$(E_{final})_i$	=	[(The final NO_X emission limit in pounds per million BTU for heater or boiler i based on CEMS, PEMS, stack testing, or portable analyzer results)/(2000 pounds per ton)] x [(the maximum heat input rate capacity in million BTU per hour for heater or boiler i used in initial calculation) x (the number of hours per year used in the initial calculation)]
n	=	The number of heaters and boilers with NOx control technology selected by Giant to satisfy the requirements of the equation.

6. If Giant submits a permit application for a new Covered Heater or Boiler on or before December 31, 2010, such new heater or boiler shall be subject to all requirements of Section VIII, including Sections VIII.D.1 and VIII.D.5, provided that the $E_{initial}$ and E_{final} for such new heater or boiler shall use the NOx emission limit in lb/MMBTU and maximum heat input rate in MMBTU/hr that is reflected in such permit application.

IX. SO_2 EMISSION REDUCTIONS AND NSPS APPLICABILITY FOR HEATERS AND BOILERS

A. Summary. Giant shall reduce SO_2 emissions from all heaters and boilers by restricting H_2S in refinery fuel gas and by discontinuing and not commencing the burning of Fuel Oil except as provided below.

B. NSPS Applicability. No later than June 30, 2007, all heaters and boilers shall be "affected facilities" as that term is used in 40 CFR Part 60, Subparts A and J, and shall be subject to and shall comply with the requirements of 40 CFR Part 60 Subparts A and J. No later than December 31, 2009, Giant shall install, certify, calibrate, maintain, and operate fuel gas CMS at each Refinery in accordance with the requirements of 40 CFR §§60.11, 60.13, 60.105, and 40 CFR Part 60, Appendix A, and the applicable performance specification test of 40 CFR Part 60

Appendix B. The CMS shall be used to demonstrate compliance with the SO_2 emission limits.

C. Elimination/Reduction of Fuel Oil Burning. After the Date of Entry of the Order, Giant shall not burn Fuel Oil in any heater or boiler.

X. SULFUR RECOVERY PLANTS

The SRPs utilize a combination of chelation, oxidation, and precipitation for sulfur recovery. As a result, the SRPs are not Claus SRPs as defined in 40 CFR §60.101. Therefore, the SRPs are not "affected facilities" under 40 CFR Part, 60 Subpart J. If Giant installs a Claus SRP with a capacity greater than twenty (20) long tons per day, the unit would be an affected facility under 40 CFR Part 60, Subpart J.

XI. NSPS APPLICABILITY OF FLARING DEVICES

A. Identification of Flaring Devices. The Flaring Devices shall be "affected facilities" under 40 CFR Part 60. No later than June 30, 2006 for the Bloomfield Refinery, and no later than June 30, 2007 for the Ciniza Refinery, the Flaring Devices shall comply with the requirements of 40 CFR Part 60, Subparts A and J, for fuel gas combustion devices.

B. Emission Limits

1. No later than June 30, 2006 at Bloomfield and June 30, 2007 at Ciniza, any Flaring Device that combusts routinely-generated refinery fuel gas, whether continuous or intermittent, shall be removed from service or shall comply with the emission limit in 40 CFR §60.104(a)(1).

2. Giant may use a Flaring Device to combust non-routinely generated refinery fuel gas resulting from the Startup, Shutdown, or Malfunction of a process unit or released as a result of relief valve leakage caused by excessive pressure build-up or other

emergency or Malfunction. During such use, the Flaring Device shall not be subject to the emission limit in 40 CFR §60.104(a)(1).

C. Good Air Pollution Control Practices. For all Flaring Devices, Giant shall implement good air pollution control practices to minimize Flaring Incidents as required by 40 CFR §60.11(d).

XII. FLARING INCIDENTS

A. Summary. Giant has identified the cause(s) of Flaring Incidents occurring before the Date of Entry of the Order, and is implementing (or is in the process of identifying and implementing) corrective actions to minimize the number and duration of Flaring Incidents. Giant shall implement a program to investigate the cause of Flaring Incidents occurring after the Date of Entry of the Order, take reasonable steps to correct the cause(s) that caused or contributed to Flaring Incidents, and minimize Flaring Incidents. Giant shall follow the procedures in this section to evaluate whether Flaring Incidents occurring after the Date of Entry of the Order are due to Malfunctions or are subject to stipulated penalties. The procedures in this section require a root cause analysis, corrective action, and stipulated penalties if the root cause(s) does not include a Malfunction.

B. Investigation and Reporting. No later than sixty (60) days after the end of a Flaring Incident, Giant shall submit a report to the Department containing the following information:

1. the date and time that the Flaring Incident started and ended. To the extent that the Flaring Incident involved multiple releases either within a twenty-four (24) hour period or within subsequent, contiguous, non-overlapping twenty-four (24) hour periods, Giant shall set forth the starting and ending date and time of each release;

2. an estimate of the quantity of SO_2 that was emitted and the calculations used to determine that quantity;

3. the steps taken to limit the duration and quantity of SO_2 emissions associated with the Flaring Incident;

4. a detailed analysis describing the Root Cause and each contributing cause of the Flaring Incident;

5. an analysis of the corrective action(s), if any, that are available to reduce the likelihood of a Flaring Incident resulting from the same Root Cause and each contributing cause. The analysis shall discuss the available corrective action(s) and their probable effectiveness and cost, possible design, operation and maintenance changes, and whether an outside consultant should be retained to assist in the analysis. If Giant concludes that corrective action(s) is required under Section XII.C, the report shall include a description of the corrective action(s) and a schedule for implementation, including proposed commencement and completion dates, if not already completed. If Giant concludes that corrective action(s) is not required under Section XII.C, the report shall explain the basis for that conclusion;

6. a statement that:

a. identifies each ground for stipulated penalties in Sections XII.D.1 and D.2, and describes whether the Flaring Incident falls under any of those grounds;

b. if a Flaring Incident falls under Section XII.D.4, describes which subsection applies and why; and

c. if a Flaring Incident falls under Section XII.D.2 or D.4.b, states whether Giant asserts a defense to the Flaring Incident, and if so, a description of the defense;

and

7. to the extent that an investigation of the cause(s) or corrective action(s) is ongoing on the due date of the report, a request for an extension of time and a statement of the anticipated date by which Giant will submit a follow-up report fully conforming to the requirements of this section; provided, however, that if Giant has not submitted a timely report containing the information required by Sections XII.B.1, B.2, and B.3, the stipulated penalty provision of Section XII.D shall apply. Nothing in this section shall be deemed to excuse Giant from its obligation to investigate, report, and correct any Flaring Incident that occurs after a Flaring Incident for which Giant has requested an extension of time under Section XII.B.7. If Giant has not completed the corrective action identified pursuant to Section XII.B.5 by the time it submits the report, Giant shall submit, no later than thirty (30) days after completing the corrective action, a report identifying the corrective action(s) taken and the dates of commencement and completion.

C. Corrective Action.

1. In response to a Flaring Incident, as expeditiously as practicable, Giant shall take corrective action(s) consistent with good engineering practice to minimize the likelihood of a recurrence of the Root Cause and each contributing cause of the Flaring Incident.

2. If the Department does not notify Giant in writing within sixty (60) days of receipt of the report required by Section XII.B that it objects to the proposed corrective action(s) or implementation schedule, then that action(s) and schedule shall be deemed acceptable for purpose of compliance with Section XII.B; provided, however, that the Department does not, by its consent to the entry of this Order or by the Department's failure to object to any corrective

action or implementation schedule that Giant may take in the future, warrant or aver in any manner that corrective action(s) in the future shall result in compliance with the CAA, the AQCA, or their implementing regulations. Notwithstanding the Department's review of a submittal under Section XII, Giant shall remain solely responsible for noncompliance with the CAA, AQCA, and their implementing regulations. Nothing in Section XII shall be construed as a waiver of the Department's rights under the CAA, AQCA, and their implementing regulations regarding future violations of these laws and regulations.

3. If the Department objects, in whole or in part, to the proposed corrective action(s) or the implementation schedule, or to the absence of a proposed action or schedule, it shall notify Giant within sixty (60) days following receipt of the report required by Section XII.B. If the Department and Giant cannot agree on the appropriate corrective action(s) or implementation schedule, Giant shall invoke the dispute resolution provision in Section XXI.

4. Nothing in Section XII shall be construed to limit the right of Giant to take those corrective action(s) it deems necessary and appropriate in response to a Flaring Incident or during the preparation of reports under this section.

D. <u>Stipulated Penalties</u>

1. The stipulated penalty provision of Section XX shall apply to any Flaring Incident for which the Root Cause was one or more or the following acts, omissions, or events:

a. error resulting from careless operation by the personnel charged with the responsibility for the SRP or upstream process units;

b. failure to follow written procedures;

c. a failure of equipment that is due to a failure by Giant to operate and

maintain the equipment in a manner consistent with good engineering practice. Except for an event caused by *force majeure* pursuant to Section XXII.C, Giant shall have no defense to a demand for stipulated penalties for a Flaring Incident falling under Section XII.D.1.

2. The stipulated penalty provisions of Section XX shall apply to any Flaring Incident that either:

a. results in emissions of SO_2 at a rate greater than twenty (20) pounds per hour continuously for three (3) consecutive hours or more and Giant failed to take any action during the Flaring Incident to limit the duration and/or quantity of SO_2 emissions associated with such incident; or

b. causes the total number of Flaring Incidents in a rolling twelve (12) month period to exceed five (5).

3. With respect to a Flaring Incident falling under Section XII.D.2, Giant shall be entitled to assert a Malfunction and/or *force majeure* defense. If a dispute arising under this section is considered under the dispute resolution provision in Section XXI, nothing in this section shall be construed to prevent Giant from asserting that, in addition to the Malfunction and *force majeure* defenses, the defenses are available for Flaring Incidents under 40 C.F.R.§60.104(a)(1), nor to stop the Department from asserting its view that these defenses are not available. If a Flaring Incident falls under both Sections XII.D.1 and D.2, then Section XII.D.1 shall apply.

4. With respect to a Flaring Incident not identified in Sections XII.D.1 or D.2, the following provisions shall apply:

a. <u>First Time.</u> If the Root Cause of the Flaring Incident was not a

recurrence of the same Root Cause that resulted in a Flaring Incident after the Date of Entry of the Order, then:

(i) if the Root Cause of the Flaring Incident was sudden, infrequent, and not reasonably preventable through the exercise of good engineering practice, then the cause shall be designated as a Malfunction for the purpose of reviewing subsequent Flaring Incidents; but

(ii) if the Root Cause of the Flaring Incident was sudden and infrequent, but was reasonably preventable through the exercise of good engineering practice, then the cause shall not be designated as a Malfunction for the purpose of reviewing subsequent Flaring Incidents, and Giant shall implement corrective action(s) pursuant to Section XII.C.

b. Recurrence. If the Root Cause is a recurrence of the same Root Cause that resulted in a Flaring Incident after the Date of Entry of the Order, then Giant shall be liable for stipulated penalties under Section XX unless:

(i) the Flaring Incident resulted from a Malfunction; or

(ii) the Root Cause previously was designated as a Malfunction under Section XII.D.4.a(i); provided, however, that if a dispute arising under this section is considered under the dispute resolution provision in Section XXI, nothing in this section shall be construed to prevent Giant from asserting that, in addition to the Malfunction and/or *force majeure* defenses, the defenses are available for Flaring Incidents under 40 C.F.R.§60.104(a)(1), nor to stop the Department from asserting its view that these defenses are not available; or

(iii) the Root Cause was a recurrence of a Root Cause for which Giant developed or was in the process of developing a corrective action plan which had not been

fully implemented under Section XII.D.4.a(ii).

E. Miscellaneous

1. Calculation of the Quantity of SO_2 Emissions. For the purpose of the Order, the quantity of SO_2 emissions resulting from a Flaring Incident shall be calculated by the following formula:

Tons of SO_2 = [FR][TD][ConcH2S][8.44×10^5]

The quantity of SO_2 emitted shall be rounded to one decimal point. (For example, for a calculation that results in the quantity of 10.050 tons of SO_2, the quantity of SO_2 emitted shall be rounded to 10.1 tons.) For the purpose of determining the occurrence of, or the total quantity of SO_2 emissions resulting from a Flaring Incident that is comprised of intermittent Flaring, the quantity of SO_2 emitted shall be equal to the sum of the quantities of SO_2 flared during each period of intermittent Flaring.

2. Calculation of the Rate of SO_2 Emissions. For the purpose of the Order, the rate of SO_2 emissions resulting from a Flaring Incident shall be expressed in terms of pounds per hour, and calculated by the following formula:

ER = [FR][ConcH2S][0.169]

The emission rate shall be rounded to one decimal point. (For example, for a calculation that results in an emission rate of 19.95 pounds of SO_2 per hour, the emission rate shall be rounded to 20.0 pounds of SO_2 per hour; for a calculation that results in an emission rate of 20.05 pounds of SO_2 per hour, the emission rate shall be rounded to 20.1 pounds per hour.)

3. Meaning of Variables and Derivation of Multipliers.

ER = Emission rate in pounds of SO_2 per hour

FR = Average flow rate to Flaring Device during a Flaring Incident, in standard cubic feet per hour

TD = Total duration of a Flaring Incident in hours

ConcH_2S = Average concentration of H_2S in gas during a Flaring Incident (or immediately prior to a Flaring Incident if all gas is being flared) expressed as a volume fraction (scf H_2S/scf gas)

8.44×10^5 = [lb mole H_2S/379 scf H_2S][64 lbs SO_2/lb mole H_2S][Ton/2000 lbs]

0.169 = [lb mole H_2S/379 scf H_2S][1.0 lb mole SO_2/1 lb mole H_2S][64 lb SO2/1.0 lb mole SO2]

The flow of gas to the Flaring Device shall be that value measured by the relevant flow meter or reliable flow estimation parameters. H_2S concentration shall be determined from the SRP feed gas analyzer, knowledge of the sulfur content of the process gas being flared, direct measurement by Tutwiler or Draeger tube analysis, or by any other method approved by the Department. If any of these data points are unavailable or inaccurate, the missing data point(s) shall be estimated by best engineering judgment. The report required under Section XII.B shall include the data used in the calculation and an explanation of the basis for any estimate of missing data point(s).

XIII. BENZENE WASTE NESHAP PROGRAM ENHANCEMENTS

A. Summary. In addition to continuing to comply with all applicable requirements of the Benzene Waste NESHAP, 40 CFR Part 61, Subpart FF ("BWN" or "Subpart FF"), Giant shall undertake the following measures to enhance compliance with Subpart FF and minimize or eliminate fugitive benzene waste emissions.

B. Current Compliance Status. As of the Date of Entry of the Order, Giant believes that each Refinery has a Total Annual Benzene ("TAB") less than 10 Mg/yr. Giant will review

and verify the TABs for each Refinery consistent with the requirements of Section XIII.D.

C. Refinery Compliance Status Changes. If at any time after the Date of Entry of the Order, either Refinery is determined to have a TAB that equals or exceeds 10 Mg/yr, Giant shall comply with the compliance option in 40 CFR §61.342(e) (hereinafter referred to as the "6BQ compliance option").

D. One-Time Review and Verification of Refinery TABs

1. Phase One. No later than December 31, 2005, Giant shall complete a review and verification of the TAB for each Refinery, including:

a. an identification of each waste stream that is required to be included in the Refinery's TAB (e.g., slop oil, tank water draws, spent caustic, desalter rag layer dumps, desalter vessel process sampling points, other sample wastes, maintenance wastes, and turnaround wastes);

b. a review and identification of the calculations and measurements used to determine the flow of each waste stream for the purpose of ensuring the accuracy of the annual waste quantity for each waste stream;

c. an identification of the benzene concentration in each waste stream, including sampling for benzene concentration at no less than 10 waste streams per Refinery consistent with the requirements of 40 CFR §61.355(c)(1) and (3); provided, however, that previous analytical data or documented knowledge of waste streams may be used for streams not sampled as allowed by 40 CFR §61.355(c)(2); and

d. an identification of whether the stream is controlled consistent with the requirements of Subpart FF.

No later than thirty (30) days following the completion of Phase One, Giant shall submit a BWN Compliance Review and Verification Report ("BWN Report") to the Department. The BWN Report shall describe the results of Phase One, including the items identified in Section XIII.D(1). Giant may submit two separate BWN reports or one BWN Report that includes the results of both Refineries.

2. Phase Two. Based on the Department's review of the BWN Report, the Department may select up to ten (10) additional waste streams at each Refinery for sampling for benzene concentration. Within ninety (90) days of receipt of the Department's selection, Giant shall conduct the required sampling and submit the results to the Department. Giant shall use the results of this additional sampling to recalculate the TAB for each Refinery. To the extent that the Department requires Giant to resample a Phase One waste stream, Giant may average the results of the two sampling events. No later than ninety (90) days after completion of Phase Two, Giant shall submit a final BWN Report to the Department.

E. Implementation of Corrective Actions

1. Amended TAB Reports. If the results of the final BWN report indicate that a Refinery has failed to file the reports required by 40 CFR §61.357(c), or that a Refinery's most recently-filed report is inaccurate or does not satisfy the requirements of Subpart FF, no later than sixty (60) days after completion of the final BWN Report, Giant shall submit an amended TAB to the Department. A final BWN Report shall be deemed an amended TAB for the purpose of Subpart FF reporting to the Department.

2. Compliance Plan. If the final BWN Report indicates that a Refinery has a TAB that equals or exceeds 10 Mg/yr, no later than one hundred eighty (180) days after

completion of the final BWN Report, Giant shall submit a plan to the Department identifying the compliance strategy and schedule that Giant will implement to ensure that each Refinery complies with the 6BQ compliance option as soon as practicable and continuing thereafter, including a revised end-of-line sampling plan.

3. Review and Approval of Compliance Plans. The Department will approve, approve with conditions, disapprove, or request modification of the compliance plan. No later than sixty (60) days after receipt of the Department's disapproval or request for modification, Giant shall submit a revised plan to the Department that responds to all identified deficiencies. Immediately upon receipt of the Department's approval or approval with conditions, Giant shall implement the plan. Any dispute regarding this section shall be resolved in accordance with the dispute resolution provision of Section XXI.

4. Certification of Compliance with the 6BQ Compliance Option. No later than thirty (30) days after implementation of the compliance plan, Giant shall submit a report to the Department certifying that each Refinery complies with Subpart FF.

5. TAB Less than 1 Mg/yr. If the final BWN Report indicates that a Refinery has a TAB less than 1 Mg/yr, the Refinery shall comply with those portions of Subpart FF applicable to the Refinery.

F. Annual Program. Giant shall establish an annual program to review process information for each Refinery, including construction projects, to ensure that all new benzene waste streams are included in the Refinery's waste stream inventory.

G. Benzene Spills. For each spill at a Refinery, Giant shall review the spill to determine if benzene waste was generated. Giant shall include benzene waste generated by spills in the

TAB for each Refinery.

H. Training

1. If and when a Refinery's TAB equals or exceeds 1 Mg/yr, then no later than ninety (90) days after Giant's receipt of information showing that a Refinery's TAB equals or exceeds 1 Mg/yr, Giant shall develop and implement annual training for all employees drawing benzene waste samples.

2. If and when a Refinery's TAB equals or exceeds 10 Mg/yr, Giant shall develop standard operating procedures for all control equipment used to comply with Subpart FF. Giant shall provide and complete an initial training program regarding procedures for all operators assigned to this equipment. Comparable training shall be provided and completed by all persons who subsequently become operators prior to their assumption of this duty. Refresher training shall be provided and completed on a periodic basis. Giant shall propose a schedule for the initial and refresher training at the same time that it proposes a plan under Sections XIII.E or J.

3. The training program shall ensure that the employees of any contractors hired to perform the requirements of this section are properly trained to implement all provisions of this section.

I. Waste/Slop/Off-Spec Oil Management. No later than ninety (90) days after the Date of Entry of the Order, Giant shall submit schematics to the Department that:

1. Depict the waste management units (including sewers) that handle, store, and transfer waste/slop/off-spec oil streams (including all product streams) at each Refinery;

2. Identify the control status of each waste management unit at each Refinery; and

3. Show how such oil is transferred within each Refinery.

The Department and Giant shall confer about the appropriate characterization of each Refinery's waste/slop/off-spec oil streams for the waste management units handling the oil streams for the purpose of calculating each Refinery's TAB. At the Department's request, Giant shall submit revised schematics reflecting the Department and Giant's agreement regarding the characterization of waste/slop/ off-spec oil streams and the appropriate control standards for each Refinery.

J. <u>End-of-Line Sampling (TAB more than 1 Mg/yr but less than 10 Mg/yr)</u>

1. This section shall apply from the date that Giant submits a final BWN Report showing that a Refinery's TAB equals or exceeds 1 Mg/yr.

2. Once per calendar year, Giant shall conduct sampling, consistent with the requirements of 40 CFR §§61.355(c)(1) and (3), of all waste streams containing benzene that contributed 0.05 Mg/yr or more to the TAB set forth in the final BWN Report or in the previous year's TAB, whichever is later.

3. No later than ninety (90) days after Giant submits the final BWN Report, the Department and Giant shall meet at the Refinery to identify an appropriate procedure for conducting end-of-line ("EOL") sampling and measuring EOL benzene quantity on a quarterly basis. The Department and Giant shall confer about potential EOL sample locations and review process and flow information and oil movement transfers. No later than thirty (30) days after the meeting, Giant shall submit a plan to the Department proposing sampling locations and methods for flow calculations to be used to determine the EOL benzene quantity. Until the termination of this Order, if changes in processes, operations, or other factors cause Giant to conclude that either the approved sampling locations or the approved methods for determining flow

calculations no longer provide an accurate measure of the Refinery's EOL benzene quantity, then Giant shall submit a revised plan to the Department. Upon receipt of the Department's approval, Giant shall immediately implement the plan.

4. On a quarterly basis commencing in the first full calendar quarter after the Department approves the plan, Giant shall determine the EOL benzene quantity. Giant shall take and analyze at least three (3) representative samples from each approved sampling location. Giant shall use the average of the samples as the benzene concentration for the stream at the approved location. Based on the EOL annual sampling results and the approved flow calculations, Giant shall calculate the annual EOL benzene quantity.

5. On a quarterly basis, Giant shall calculate a projected calendar year TAB utilizing all EOL results for that calendar year and any other relevant information (such as process turnarounds). If the projected calendar year TAB calculation equals or exceeds 10 Mg, no later than thirty (30) days after the end of the calendar quarter that resulted in a projection of the calendar year TAB that equals or exceeds 10 Mg, Giant shall submit a plan to the Department identifying the actions that Giant shall take to ensure that the calendar year TAB for the Refinery does not equal or exceed 10 Mg, and the schedule for such actions.

6. If Giant cannot take appropriate actions to ensure that the Refinery maintains a TAB less than 10 Mg/yr, then Giant shall retain a third party contractor to undertake a comprehensive TAB study and compliance review ("Third-Party TAB Study"). At a time agreed by the Department and Giant, Giant shall submit a proposal to the Department identifying the contractor, the scope of work, and the schedule for the Third-Party TAB Study. No later than thirty (30) days after receipt of the proposal, the Department may disapprove or request

modification of the proposal. If the Department disapproves or requests modification of the proposal, no later than the time specified by the Department, Giant shall submit a revised proposal addressing the identified deficiencies. If the Department fails to disapprove or request modification of the proposal or revised proposal, Giant shall authorize the contractor to commence work. No later than forty-five (45) days after receipt of the results of the Third-Party TAB Study, Giant shall submit the results to the Department and initiate informal discussions regarding the results with the Department. No later than thirty (30) days after receipt of the results of the Third-Party TAB Study, or such other time as the Department and Giant may agree, Giant shall submit a plan to the Department identifying the compliance strategy that Giant will implement to ensure compliance with the 6BQ compliance option as soon as practicable. The Department will review and approve the plan in accordance with Section XIII.E.3. Giant shall certify compliance in accordance with Section XIII.E.4.

K. Miscellaneous Measures

1. Giant shall comply with the Subpart FF provisions applicable to ground water remediation conveyance systems at each Refinery having such systems.

2. This section shall apply after a Refinery's TAB equals or exceeds 10 Mg/yr and after the Refinery has completed the implementation of an approved compliance plan submitted pursuant to Sections XIII.E or J. This section shall continue to apply until termination of the Order. Giant shall:

a. conduct monthly visual inspections of all water traps within the Refinery's individual drain systems; and

b. on a weekly basis, visually inspect all conservation vents or indicators

on process sewers for detectable leaks, reset any vents where leaks are detected, and record the results of the inspections. After two (2) years of weekly inspections, and based upon an evaluation of the recorded results, Giant may submit a request to the Department to modify the frequency of the inspections, which consent shall not be unreasonably withheld. Nothing in this section shall require Giant to monitor conservation vents on fixed roof tanks.

3. From the date that the final BWN Report shows that the Refinery's TAB equals or exceeds 1 Mg/yr, Giant shall identify and mark all area drains that are segregated storm water drains.

XIV. QUARTERLY REPORTS

A. Contents. Beginning with the calendar quarter that begins October 1, 2005, no later than forty-five (45) days after the end of the calendar quarter and continuing until termination of the Order, Giant shall submit a calendar quarterly progress report ("CQP Report") for each Refinery to the Department. Upon Giant's request, the Department may adjust the due date of the CQP Report to be concurrent with the due date(s) for other report(s) submitted by Giant for each Refinery. The CQP Report shall contain the following information:

1. a progress report on the implementation of the requirements of the Order;

2. a summary of the emissions data for the calendar quarter required by the Order;

3. a description of any problems anticipated with respect to meeting the requirements of the Order;

4. any additional matter that Giant believes should be brought to the Department's attention;

5. LDAR monitoring data, including:

a. a list of the process units monitored during the quarter;

b. whether each process unit is complying with quarterly monitoring;

c. the number of valves and pumps monitored in each process unit;

d. the number of valves and pumps found leaking;

e. the projected date of the next monitoring event, including a list of all valves and pumps on the delay-of-repair list and the date each component was put on such list;

f. for the first CQP Report in which the following requirements become effective:

(i) a certification that the "initial attempt at repair" program has been implemented;

(ii) a certification that the QA/QC procedures for review of data generated by LDAR technicians have been implemented;

(iii) an identification of the person at the Refinery responsible for LDAR performance;

(iv) a certification of the development of a tracking program for new valves and pumps added during maintenance and construction;

(iv) a certification that Giant utilizes electronic data collection devices during LDAR monitoring;

(v) a certification that calibration drift assessment procedures have been implemented;

(vi) a certification that the "delay of repair" procedures have been implemented;

6. the annual, non-EOL sampling required at the Refinery (this information shall be submitted in the first CQP Report for the first calendar quarter of each year); and

7. the results of the quarterly EOL sampling for the calendar quarter, including a list of waste streams sampled, the results of the benzene analysis for each sample, and the computation of the EOL benzene quantity for the respective quarter. The Refinery shall identify whether the quarterly EOL benzene quantity equals or exceeds 6.0 Mg and whether the projected calendar year EOL benzene quantity equals or exceeds 10 Mg.

B. <u>One-Time Reports.</u> Giant shall submit the following information with the first CQP Report following the quarter in which the information is completed.

1. certifications that the training programs have been implemented, including a description of the different training programs;

2. copies of the written Refinery-wide LDAR programs;

3. operational specifications for electronic data collection during LDAR Monitoring;

4. Certifications of Use of Electronic Data Collection during LDAR Monitoring;

5. final BWN reports;

6. final TAB Reports;

7. compliance plans for the 6BQ compliance option, if applicable;

8. Subpart FF compliance certifications;

9. final schematics of waste/slop/off-spec oil movements;

10. EOL Sampling Plans;

11. if the 6BQ compliance option has been triggered, a plan to ensure that

uncontrolled benzene does not equal or exceed, as applicable, 6 or 10 Mg/yr, or is minimized, based on the projected calendar year uncontrolled benzene quantity as determined through EOL sampling; and

12. descriptions of the measures taken to comply with the benzene training provisions.

C. Certification. Each CQP Report shall contain the following certification for each Refinery covered by the CQP Report by either the Refinery representative responsible for environmental management and compliance or by the Giant representative responsible for overseeing implementation of this Order:

> I certify under penalty of law that this information was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my directions and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

XV. ANNUAL REPORTING FOR HEATERS AND BOILERS

A. Requirement. Commencing in 2006, on January 31 of each calendar year, and continuing until completed and certified in a final report, Giant shall submit a report to the Department describing the progress of installation of the NO_X control technology required by Section VIII.

B. Content. The report shall contain:

1. a list of all heaters and boilers on which Qualifying Controls were installed;

2. the type of Qualifying Control that was used or installed on each heater and boiler, including the manufacturer name, model, and designed emission factors;

3. the results of all performance tests conducted on each heater and boiler;

4. a list of all heaters and boilers scheduled to have Qualifying Controls installed during the next calendar year, the projected date of installation, and the type of NO_X control technology proposed or expected to be installed; and

5. an identification of proposed and established NOx emission limits applicable to each heater or boiler for which NO_X control technology has been installed.

XVI. EMISSION CREDIT GENERATION

A. Summary. This section is intended to prohibit Giant from using the emission reductions that will result from compliance with this Order ("Emission Reductions") for the purpose of a emission netting or offset, while still allowing Giant to use a fraction of the Emission Reductions if (1) the emissions unit for which Giant seeks to use the Emission Reductions are modified or constructed to comply with Tier II gasoline or low sulfur diesel requirements; and (2) the emissions from the modified or newly-constructed units are below the levels required by this Order.

B. General Prohibition. Giant shall not use Emission Reductions that result from the controls and projects required by the Order (1) as a netting reduction or emission offset in any major or minor new source review permit proceeding, (2) as a credit or offset in another enforcement action, or (3) in an emission trading or early reduction program.

C. Exception to General Prohibition

1. Conditions Precedent to Exception to General Prohibition. Notwithstanding the general prohibition in Section XVI.B, Giant may use Emission Reductions provided the

following conditions are satisfied:

a. Giant shall not use Emission Reductions for a netting reduction or emission offset prior to the time that the actual Emission Reduction has occurred;

b. Giant may use Emission Reductions only at the Refinery that generated them;

c. Giant may use Emission Reductions only for the purposes described in Section XVI.C.2; and

d. Giant shall be subject to all federal and state regulations applicable to the major and minor new source review permitting processes.

2. Exception to General Prohibition. Notwithstanding the general prohibition in Section XVI.B, and subject to the conditions in Section XVI.C.1, Giant may use Emission Reductions of ten (10) tons per year of NOx and twenty (20) tons per year of SO_2 as a netting reduction or emission offset in a major or minor new source review permit proceeding that occurs after the Date of Entry of the Order, provided that the new or modified emissions unit (1) is being constructed or modified to comply with Tier 2 gasoline or low sulfur diesel requirements; and (2) at the time of the permit application, already has emissions limits equal or less than the following:

a. for heaters and boilers, a limit of 0.020 lbs NOx per million BTU, on a 3-hour rolling average basis;

b. for heaters and boilers, a limit of 0.10 grains of H_2S per dry standard cubic foot of fuel gas or 20 ppmvd SO_2 corrected to 0% O_2, both on a 3-hour rolling average;

c. for heaters and boilers, no liquid or solid fuel firing capabilities;

d. for FCCUs, a limit of 20 ppmvd NOx, corrected to 0% O_2, on a 365-day rolling average basis;

e. for FCCUs, a limit of 25 ppmvd SO_2, corrected to 0% O_2, on a 365-day rolling average basis; and

f. for Claus-type SRPs, NSPS Subpart J emission limits.

D. Outside the Scope of General Prohibition. Nothing in this section is intended to prohibit Giant from seeking to use (1) a netting reduction or emission offset from a Refinery unit covered by the Order to the extent that the proposed reduction or offset represents the difference between the emissions limit for the Refinery unit established in the Order and the more stringent emissions limit for the Refinery unit that Giant may accept voluntarily in a permitting process; or (2) a netting reduction or emission offset from a Refinery unit not covered by the Order.

XVII. INTEGRATION WITH PERMITS

A. NSR Permits. To the extent required by 20.2.72 NMAC - *Construction Permits*, Giant shall submit applications and obtain revisions or modifications to the NSR Permits for the Refineries to implement the requirements of the Order. Giant shall submit the application(s) in sufficient time to achieve compliance with the requirements of the Order, taking into account the public notice and comment and administrative completeness and technical review requirements of the permitting process, but in no case, no later than 180 days before the deadline of a requirement of the Order for which a revision or modification to the NSR Permit is required. Giant shall consult with the Department to ensure that the applications are administratively and technically complete, and shall cooperate with the Department in the processing of the applications, including the prompt submittal of all information requested by the Department.

B. Operating Permits. All requirements set forth in Sections V (Leak Detection and Repair Program), VI (NOx, SO_2, CO, PM Emission Reductions From FCCUs Before the Next Turnaround Occurring After January 1, 2009), VII (NOx, SO_2, CO, PM Emission Reductions From FCCUs After the Next Turnaround Occurring After January 1, 2009), VIII (NOx Emission Reductions From Heaters and Boilers), IX (SO_2 Emission Reductions and NSPS Applicability for Heaters and Boilers), X (Sulfur Recovery Plants), XI (NSPS Applicability of Flaring Devices), XII (Flaring Incidents), and XIII (Benzene Waste NESHAP Program Enhancements), including all applicable definitions in Section II (Definitions), shall be incorporated as applicable requirements into the Operating Permits for the Refineries. Giant shall incorporate these applicable requirements into the Operating Permits for the Refineries at such time as it is required to renew the Operating Permits. In addition, Giant shall incorporate those revisions and modifications of the NSR Permits specified in Section XVII.A into the Operating Permits for the Refineries at such time as Giant is required to renew the Operating Permits. Giant shall at no time, in any subsequent application for a modified or renewed Operating Permit for either Refinery, seek to revise any requirement incorporated into the Operating Permits for the Refineries pursuant to this Section that would have the effect of rendering such requirement less stringent. This prohibition shall survive termination of the Order as an enforceable obligation between the Department and Giant.

XVIII. CIVIL PENALTIES

A. No later than thirty (30) days after the Date of Entry of the Order, Giant shall pay a civil penalty of $850,000 as follows: (1) $650,000 to the State of New Mexico, of which $150,000 shall be a cash payment and $500,000 shall be for environmental projects under

Section XIX (Supplemental Environmental Projects); and (2) the Division and Giant acknowledge that Giant has agreed to pay $200,000 to the United States, of which $100,000 shall be a cash payment and $100,000 shall be for environmental projects as specified in the Consent Agreement and Final Order between EPA and Giant.

B. The cash payment to the State of New Mexico shall be made by certified or corporate check payable to the State of New Mexico and sent to the following address:

General Counsel
Office of General Counsel
New Mexico Environment Department
P.O. Box 26110
1190 St. Francis Drive
Santa Fe, NM 87502-6110

C. The civil penalty in this section, including the amounts spent for environmental projects under Section XIX (Supplemental Environmental Projects), shall be a penalty within the meaning of Section 162(f) of the Internal Revenue Code, 26 U.S.C. §162(f), and Giant shall not treat the civil penalty as tax deductible for the purpose of federal, state, or local law.

D. Upon the Date of Entry of the Order, the Order shall constitute an enforceable judgment for the purpose of post-judgment collection in accordance with state law. The State of New Mexico shall be deemed a judgment creditor for the purpose of collecting any unpaid amount of civil and stipulated penalties and interest.

XIX. SUPPLEMENTAL ENVIRONMENTAL PROJECTS

A. PSD Increment Analysis and Report

1. Summary. Giant agrees to retain an independent consultant ("Independent

Consultant") to conduct an analysis and prepare a report regarding PSD increment consumption and expansion for NOx, SO_2, and PM_{10} at Mesa Verde National Park, Bandelier National Monument, Weminuche Wilderness, and San Pedro Park Wilderness.

2. Analysis. The analysis shall evaluate the consumption and expansion of PSD increment for NOx, SO_2, and PM_{10} at Mesa Verde National Park, Bandelier National Monument, Weminuche Wilderness, and San Pedro Park Wilderness. The analysis shall include the development of meteorological data and emissions inventory and the conduct of air quality dispersion modeling.

3. Report. The report shall be submitted no later than June 30, 2007, and shall present the information specified above for the purpose of advising federal, state, and tribal governments in the Four Corners Region in the implementation of their responsibilities under applicable law.

4. Selection of Independent Consultant. The Department shall provide the scope of work for the PSD increment study. Based on the scope of work, and no later than sixty (60) days after receipt of the scope of work, Giant shall propose one or more candidates to be the Independent Consultant. The candidates shall demonstrate competence and technical proficiency in the analysis of PSD increment consumption and expansion. Upon approval of the candidate by the Department, the Department, Giant, and the selected candidate shall negotiate, and Giant and the selected candidate shall execute a contract for the PSD increment study consistent with the scope of work provided by the Department. The contract shall specify procedures for the contractor to submit protocols regarding the development of meteorological data, emissions inventory, and air quality dispersion modeling for the Department's review and approval, provide

periodic progress reports to and review of preliminary work products by the Department, and establish milestones for each phase of the analysis, including the date for submittal of the final report.

5. SEP Cost and Credit. Except as provided in Section XIX.C, Giant shall pay the cost of the PSD increment study up to a maximum of $225,000. Giant shall submit a certified statement of cost no later than sixty (60) days after submittal of the report or August 31, 2007, whichever comes first. Upon the Department's approval of the report and certified statement of cost, Giant shall receive a credit of $225,000 for environmental projects under Section XVIII.A (Civil Penalties).

B. Air Quality Monitor

1. Purchase and Installation. Giant shall purchase and install an air quality monitor, along with related equipment and infrastructure, capable of measuring NOx, SO_2, PM, ozone, and mercury, including elemental, particulate, and speciated forms, and meteorological conditions on lands owned by the Pueblo of Zuni. The type of monitor and related equipment and infrastructure shall be specified by the Department. Recurring costs for operation and maintenance of the monitor shall be the responsibility of the Pueblo of Zuni. The Department and the Pueblo of Zuni shall be responsible for providing a site equipped with utilities, fencing, and access. No later than sixty (60) days after the Date of Entry of the Order, Giant shall retain an agent to implement the purchase and installation of the monitor. No later than one hundred fifty (150) days after Giant's receipt of notification by the Department that the site is ready, the agent shall complete the purchase and installation of the monitor.

2. SEP Cost. Except as provided in Section XIX.C, Giant shall pay the cost to

purchase and install the air quality monitor, including the agent's fee, up to a maximum of $190,000. Giant shall submit a certified statement of cost no later than two hundred (200) days after Giant's receipt of notification by the Department that the site is ready. Upon the Department's approval of the monitor and certified statement of cost, Giant shall receive a credit of $190,000 for environmental projects under Section XVIII.A (Civil Penalties).

C. Balance of Amount for SEPs. Upon the Department's approval, Giant shall pay any additional amounts to complete the SEPs, but in no event more than a total additional amount of $85,000. In the event that Giant does not pay a total additional amount of $85,000 under this section, no later than thirty (30) days after Giant receives the SEP credits specified in Sections XIX.A(5) and B(2), it shall pay a civil penalty of $85,000 less the total additional amount paid under this section.

XX. STIPULATED PENALTIES

A. Schedule. Giant shall pay stipulated penalties for each failure to comply with a term or condition of the Order as provided herein. Stipulated penalties shall be calculated in the amounts specified below. For the purpose of stipulated penalties under Sections VII and VIII.D(2), stipulated penalties shall not start to accrue until there is noncompliance with the concentration-based, rolling average emission limit for five (5) percent or more of the unit's operating time during a calendar quarter. All stipulated penalties shall be calculated per unit, per refinery, per day, beginning on the first day after the specified deadline for the applicable requirement, unless otherwise stated. For stipulated penalties calculated on a weekly basis, the stipulated penalty shall be prorated per day during which the violation continued.

1. LDAR Program Enhancements. For each violation of a requirement with a

specified frequency, the amounts identified below shall apply on the first day of violation, shall be calculated for each incremental period of violation (or portion thereof), and shall be doubled beginning on the fourth consecutive, continuing period of violation. For each violation of a requirement without a specified frequency, the amounts identified below shall not be doubled.

a. For failure to develop a written refinery-wide LDAR program, Giant shall be liable for $3,500 per week.

b. For failure to implement a training program, Giant shall be liable for $2,500 per week.

c. For failure to conduct quarterly monitoring of all valves and pumps subject to LDAR monitoring, Giant shall be liable for $750 per component.

d. For failure to give notice of monitoring or to allow inspectors to observe the monitoring, Giant shall be liable for $1,000 per event.

e. For failure to conduct a QA/QC review, Giant shall be liable for $5,000 per event.

f. For failure to conduct an audit, Giant shall be liable for $1,500 per week.

g. For failure to utilize an internal leak rate definition, Giant shall be liable for $1,000 per week.

h. For failure to make an initial attempt at repair on a valve, Giant shall be liable for $500 per valve.

i. For failure to establish a program to hold persons accountable for the LDAR program, or to designate a person as accountable for LDAR performance, Giant shall be

liable for $2,500 per week.

j. For failure of a subcontractor to submit daily monitoring activity reports or to conduct QA/QC reviews on data before inclusion in reports, Giant shall be liable for $100 per report or review.

k. For failure to establish and maintain an electronic database, Giant shall be liable for $1,500 per week.

l. For failure to establish a tracking program for maintenance records that ensures valves and pumps are included in the LDAR program, Giant shall be liable for $1,500 per week.

m. For failure to conduct calibration drift assessments or remonitor valves and pumps based on calibration drift assessments, Giant shall be liable for $100 per event.

n. For failure to comply with the "delay of repair" requirements, Giant shall be liable for $2,500 per valve or pump.

o. For failure to submit a written deliverable, Giant shall be liable for $1,000 per deliverable, per week.

p. For failure to include all subject valves and pumps in its LDAR program, Giant shall be liable for $750 per component not included.

2. NOx Emission Reductions from FCCUs

a. For failure to comply with a requirement of Section VI.C and D(1), (2) and (4), Giant shall be liable for $2,500 per week.

b. For failure to meet a final NOx emission limit under Section VII, Giant shall be liable for $1,000 for each exceedance of the applicable limit.

c. For failure to install, certify, calibrate, maintain, or operate a NOx CEMS (excluding periods of Startup, Shutdown, or Malfunction of the CEMS), Giant shall be liable for:

Period of Delay	Penalty per day
1st through 30th day after deadline	$500
31st through 60th day after deadline	$1,000
Beyond 60th day after deadline	$2,500

3. SO_2 Emission Reductions from FCCUs

a. For failure to comply with a requirement of Section VI.C and D(3), Giant shall be liable for $2,500 per week.

b. For failure to meet a final SO_2 emission limit under Section VII, Giant shall be liable for $1,000 for each exceedance of the applicable limit.

c. For failure to install, certify, calibrate, maintain, or operate a SO_2 CEMS (excluding periods of Startup, Shutdown, or Malfunction of the CEMS), Giant shall be liable for:

Period of Delay	Penalty per day
1st through 30th day after deadline	$500
31st through 60th day after deadline	$1,000
Beyond 60th day after deadline	$2,500

4. PM Emissions Reductions from FCCUs

a. For failure to meet a final PM emission limit under Section VII, Giant shall be liable for $5,000 for each annual test during which the 3-hour average exceeds the applicable limit.

b. For failure to conduct an annual test, Giant shall be liable for:

Period of Delay	Penalty per day

1st through 30th day after deadline	$500
31st through 60th day after deadline	$1,000
Beyond 60th day after deadline	$2,500

5. CO Emissions Reductions from FCCUs

a. For failure to meet a final CO emission limit under Section VII, Giant shall be liable for $1,000 for each day on which it exceeds the applicable limit.

b. For failure to install, certify, calibrate, maintain, or operate a CO CEMS (excluding periods of Startup, Shutdown, or Malfunction of the CEMS) or to comply with a PEMS approved by EPA, Giant shall be liable for:

Period of Delay	Penalty per day
1st through 30th day after deadline	$500
31st through 60th day after deadline	$1,000
Beyond 60th day after deadline	$2,500

6. NOx Emission Reductions from Heaters and Boilers

a. For failure to install, certify, calibrate, maintain, or operate a CEMS or PEMS (excluding periods of Startup, Shutdown, or Malfunction of the CEMS), Giant shall be liable for:

Period of Delay	Penalty per day
1st through 30th day after deadline	$500
31st through 60th day after deadline	$1,000
Beyond 60th day after deadline	$2,500

b. For failure to submit a written deliverable required by Section VIII, Giant shall be liable for:

Period of Delay	Penalty per day
1st through 30th day after deadline	$500
31st through 60th day after deadline	$1,000
Beyond 60th day after deadline	$2,500

c. For failure to meet a NOx emission limit, Giant shall be liable for $1,000 for each day on which it exceeds the applicable limit.

d. For failure to comply with Section VIII.D.1 and/or Section VIII.D.5, Giant shall be liable for $50,000 per quarter per refinery.

7. SO_2 Emission Reductions from Heaters and Boilers

a. For burning refinery fuel gas that contains H_2S in excess of 0.1 grains per dry standard cubic foot on a 3-hour rolling average, Giant shall be liable for:

Period of Non-Compliance	Penalty per day
1st through 5th day	$1,000
6th through 15th day	$2,000
Over 15 days	$3,000

b. For failure to install, certify, calibrate, maintain, or operate a fuel gas CMS (excluding periods of Startup, Shutdown, or Malfunction of the CEMS), Giant shall be liable for:

Period of Delay	Penalty per day
1st through 30th day after deadline	$500
31st through 60th day after deadline	$1,000
Beyond 60th day after deadline	$2,500

c. For burning Fuel Oil, Giant shall be liable for:

Period of Non-Compliance	Penalty per day
1st through 30th day	$1,000
Beyond 31st day	$2,500

8. NSPS Applicability of Claus Sulfur Recovery Plant. For failure to comply with the NSPS Subpart J emission limits, Giant shall be liable for:

Period of Non-Compliance	Penalty per day
1st through 5th day	$1,000
6th through 15th day	$2,000

Over 15 days	$3,000

9. NSPS Applicability of Flaring Devices

a. For failure to achieve NSPS compliance, Giant shall be liable for:

Period of Delay	Penalty per day
1st through 30th day after deadline	$500
31st through 60th day after deadline	$1,000
Beyond 60th day after deadline	$2,500

b. For failure to install, certify, calibrate, maintain, or operate a CMS (excluding periods of Startup, Shutdown, or Malfunction of the CMS) or to submit and comply with an AMP for a flare that combusts routinely-generated refinery fuel gas, whether continuous or intermittent, Giant shall be liable for:

Period of Delay	Penalty per day
1st through 30th day after deadline	$500
31st through 60th day after deadline	$1,000
Beyond 60th day after deadline	$2,500

10. Flaring Incidents

a. For failure to perform a root cause analysis, submit a written report, or perform a corrective action for a Flaring Incident, Giant shall be liable for:

Period of Delay or Noncompliance	Penalty per day
1st through 30th day	$500
31st through 60th day	$1,000
Beyond 60th day	$2,500

b. For a Flaring Incident subject to Section XII.D.1, D.2, or D.3, Giant shall be liable for $1,000 per incident, except that for a Flaring Incident involving acid gas, Giant shall be liable for the amount specified in the following table:

Tons Emitted in Flaring Incident	Length of Time from Commencement of Flaring within Flaring Incident to Termination of Flaring within Flaring Incident is 3 hours or less	Length of Time from Commencement of Flaring within Flaring Incident to Termination of Flaring within Flaring Incident is greater than 3 hours but less than or equal to 24 hours	Length of Time of Flaring within Flaring Incident is greater than 24 hours
5 Tons or less	$2500 per Ton	$3750 per Ton	$1,000 per Ton
Greater than 5 Tons, but less than or equal to 15 Tons	$1,200 per Ton	$1,800 per Ton	$2,300 per Ton, up to, but not exceeding, $27,500 in any one calendar day
Greater than 15 Tons	$1,800 per Ton, up to, but not exceeding, $27,500 in any one calendar day	$2,300 per Ton, up to, but not exceeding, $27,500 in any one calendar day	$27,500 per calendar day

For purposes of calculating the stipulated penalty, only one cell of the table shall apply. For example, for a Flaring Incident in which the flaring starts at 1:00 p.m. and ends at 3:00 p.m., and for which 14.5 tons of sulfur dioxide are emitted, the penalty would be $17,400 (14.5 x $1,200), not $13,900 [(5 x $2500) + (9.5 x $1,200)]. For purposes of determining the applicable column of the table, when flaring occurs intermittently during a Flaring Incident, the flaring shall be deemed to commence when the flaring triggering the initiation of a Flaring Incident commences, and to terminate when the last episode of flaring within the Flaring Incident terminates. For example, for flaring during a Flaring Incident that (i) commences at 1:00 p.m. on Day 1 and terminates at 1:30 p.m. on Day 1; (ii) recommences at 4:00 p.m. on Day 1 and terminates at 4:30 p.m. on Day 1; (iii) recommences at 1:00 a.m. on Day 2 and terminates at 1:30 a.m. on Day 2; and (iv) no further flaring occurs during the Flaring Incident, the flaring during the Flaring

Incident will be deemed to last 12.5 hours - not 1.5 hours - and the applicable column shall be "greater than 3 hours but less than or equal to 24 hours".

11. Benzene Waste NESHAP Program Enhancements. For each violation of a requirement with a specified frequency, the amounts identified below shall apply on the first day of violation, shall be calculated for each incremental period of violation (or portion thereof), and shall be doubled beginning on the fourth consecutive, continuing period of violation. For each violation of a requirement without a specified frequency, the amounts identified below shall not be doubled.

a. For failure to submit a BWN Report containing the required information, Giant shall be liable for $2,500 per week, per refinery.

b. For failure to implement a corrective action, Giant shall be liable for:

Period of Delay	Penalty per day
1st through 30th day after deadline	$1,000
31st through 60th day after deadline	$3,000
Beyond 60th day after deadline	$5,000

c. For failure to develop or implement a training program, Giant shall be liable for $10,000 per quarter, per refinery.

d. For failure to submit or maintain a record required by Section XIII, Giant shall be liable for $2,500 per record.

e. For failure to conduct EOL sampling, Giant shall be liable for $5,000 per week, per stream.

f. For failure to submit a plan or retain the third-party contractor required by Section VIII.J (if required), Giant shall be liable for $2,500 per week, per refinery.

g. For failure to comply with a miscellaneous compliance measure in Section XIII.K, Giant shall be liable for $500 per water trap not visually inspected monthly, $500 per conservation vent or indicator on a process sewer not visually inspected weekly, $500 per inspection not recorded, and $1,000 per failure to comply with Subpart FF for ground water remediation conveyance systems.

h. For failure to submit a written deliverable not addressed by a separate stipulated penalty herein, Giant shall be liable for $1,000 per week, per deliverable.

i. If the Department determines that a Refinery failed to include all benzene containing waste streams in its TAB calculation, Giant shall be liable for:

Waste Stream	Penalty
for waste streams < 0.03 Mg/yr	$250
for waste streams between 0.03 and 0.1 Mg/yr	$1,000
for waste streams between 0.1 and 0.5 Mg/yr	$5,000
for waste streams > 0.5 Mg/yr	$10,000

12. Reporting. For failure to submit a report or for failure to submit a report conforming to the content requirements, Giant shall be liable for:

Period of Delay	Penalty per day
1st through 30th day after deadline	$500
31st through 60th day after deadline	$1000
Beyond 60th day after deadline	$2,500

13. Integration with Permits. For failure to comply with Section XVII, Giant shall be liable for:

Event or Period of Delay	Penalty per day
Days 1-30	$500
Days 31-60	$1,500
Over 60 Days	$2,500

14. Payment of Civil Penalties. For failure to pay a civil penalty, Giant shall be

liable for $10,000 per day plus interest on the amount overdue at the rate established for judgments and decrees under NMSA 1978, §56-8-4 (1993).

15. Escrow of Stipulated Penalties. For failure to escrow stipulated penalties, Giant shall be liable for $2,500 per day plus interest on the amount overdue at the rate established for judgments and decrees under NMSA 1978, §56-8-4 (1993).

16. Supplemental Environmental Projects. For failure to implement any requirement of Section XIX, Giant shall be liable for:

Period of Delay	Penalty per day
1st through 30th day after deadline	$500
31st through 60th day after deadline	$1,000
Beyond 60th day after deadline	$2,500

B. Payment. Giant shall pay a stipulated penalty no later than thirty (30) days after receipt of a written demand from the Department. The demand shall identify the violation to which the stipulated penalty relates, the stipulated penalty amount that is being demanded (as can be best estimated), the calculation method underlying the demand, and the grounds upon which the demand is based. The payment shall be sent to:

Enforcement Manager
Air Quality Bureau
2048 Galisteo Street
Santa Fe, New Mexico 87505

A copy of the transmittal letter and check shall be sent to:

General Counsel
Office of General Counsel
New Mexico Environment Department
P.O. Box 26110
Santa Fe, New Mexico 87502-6110

C. **Dispute Resolution.** If Giant disputes its obligation to pay all or part of a stipulated penalty, then it may avoid the imposition of a stipulated penalty for failure to pay a stipulated penalty by (1) placing the disputed amount in a commercial interest-bearing escrow account pending resolution of the dispute; and (2) invoking the dispute resolution provision of Section XXI (Dispute Resolution) within the time provided therein for the payment of a stipulated penalty. If the dispute is resolved in Giant's favor, Giant shall be entitled to the amount resolved in its favor, plus the interested accrued in the escrow account on such amount. If the dispute is resolved in the Department's favor, the Department shall be entitled to the amount resolved in its favor, plus the interest accrued in the escrow account on such amount. The Department reserves the right to pursue any other non-monetary remedy to which it is entitled, including injunctive relief for Giant's violations of the Order.

XXI. DISPUTE RESOLUTION

A. The Secretary of the Department shall retain jurisdiction to resolve disputes arising under the Order until it terminates in accordance with Section XXIII (Termination).

B. This dispute resolution procedure shall be available to resolve all disputes arising under the Order, provided that the party invoking this section has made a good faith attempt to resolve the dispute with the other party.

C. This section shall be invoked by giving written notice of a dispute. The notice shall describe the nature of the dispute and the position of the party giving notice. The party receiving the notice shall acknowledge receipt of the notice. No later than twenty (20) days after receipt of the notice, the parties shall hold a meeting to discuss the dispute. The parties may continue such discussions for a period of twenty (20) days after the first meeting; provided, however, that the

parties may agree to extend this time to facilitate resolution of the dispute. No party may proceed to the next step of this dispute resolution procedure until it has made a good faith effort to resolve the dispute as provided above.

D. In the event that the Department and Giant are unable to reach agreement under Section XXI.C, the Department shall submit a written summary to Giant describing its position on the dispute. The Department's position shall be binding on Giant unless, no later than twenty (20) days after receipt, Giant files a written response with the Secretary of the Department. No later than twenty (20) days after receipt of Giant's response, the Department may file a reply. No later than five (5) days after the Department files its reply, either party may request a hearing before the Secretary. Upon receipt of such request, the Secretary shall promptly hold a hearing, which shall be conducted pursuant to the procedures in 20.1.5 NMAC - *Department Adjudicatory Procedures*. The Secretary then will issue a written determination resolving the dispute. The parties agree that the Department shall not be deemed to have taken final action until the Secretary issues a written determination. No later than thirty (30) days after receipt of the Secretary's written determination, Giant may appeal the determination to the Court of Appeals pursuant to the AQCA, NMSA §74-2-9.A (1992).

E. For a dispute requiring a more timely resolution than provided in this section, the above time periods may be shortened by agreement of the Department and Giant, or on a motion filed with the Secretary of the Department.

F. The invocation of dispute resolution shall not be construed to infer or establish any presumption adverse to either the Department or Giant.

G. By mutual consent only, the Department and Giant may extend or modify the schedule of work or an obligation under this Order to account for any delay resulting from invocation of this section and excuse all or part of the stipulated penalties resulting from such delay. During the pendency of dispute resolution, including any appeal to the Court of Appeals, stipulated penalties, if applicable, shall continue to accrue, and Giant shall be liable for any such stipulated penalties unless Giant prevails, provided that Giant shall be liable for any stipulated penalties resulting from its failure to comply with a schedule of work or obligation as extended or modified by the parties or the Court of Appeals.

XXII. GENERAL PROVISIONS

A. Interest. Giant shall be liable for interest on the unpaid balance of the civil penalty specified in Section XVIII and on any unpaid balance of stipulated penalties demanded by the Department. Interest shall accrue at the regular rate established for judgments and decrees under NMSA §56-8-4.A (1993). Interest shall be computed daily and compounded annually. Interest shall be calculated from the date that payment is due under this Order through the date of actual payment, except that interest shall cease to accrue on the amount of any timely stipulated penalty deposited into an commercial interest-bearing escrow account pursuant to Section XX.C.

B. Records and Inspections. An authorized representative of the Department, including an independent contractor, upon the presentation of credentials, shall have a right of entry at any reasonable time upon the premises of the Refineries to monitor compliance with the provisions of the Order, including inspecting plant equipment and inspecting and copying all records maintained by Giant in connection with the Order. Giant shall retain records relating to the

Order, including CEMs data and process information for the FCCUs, until termination of the Order, and shall provide such records to the Department upon request. Nothing in this Order shall limit the authority of the Department to conduct tests, inspections, or other activities under any statutory or regulatory provision.

C. Force Majeure

1. If any event occurs which causes or may cause a delay or impediment to performance in complying with a requirement of the Order, Giant shall notify the Department in writing as soon as practicable, but no later than ten (10) business days after the date when Giant first knew or should have known of the delay or impediment to performance by the exercise of due diligence. The notice shall specifically reference this section and describe the anticipated length of time that the delay or impediment to performance may persist, the cause(s) of the delay or impediment to performance, the measures taken or to be taken by Giant to prevent or minimize the delay or impediment to performance, and the schedule by which those measures shall be implemented. Giant shall implement all reasonable measures to avoid or minimize the delay or impediment to performance. The notice shall be effective upon mailing by certified mail, return receipt requested. Giant's failure to materially comply with the notice requirement shall render the *force majeure* defense voidable by the Department for the delay or impediment to performance for which Giant failed to materially comply with such notice requirement, and, if voided, the *force majeure* defense shall have no effect for that delay or impediment to performance.

2. No later than thirty (30) days after receipt of Giant's notice, the Department shall notify Giant of its determination regarding Giant's claim of a delay or impediment to

performance.

3. If the Department determines that the delay or impediment to performance was or will be caused by circumstances beyond the control of Giant, including any entity controlled by Giant, and that Giant could not have prevented the delay or impediment to performance by the exercise of due diligence, the parties shall stipulate to an extension of the deadline for any requirement affected by the delay or impediment to performance for a period equivalent to the delay actually caused by the circumstances. The stipulation shall be filed as a modification to the Order, and Giant shall not be liable for stipulated penalties during the period of the extension.

4. If the Department determines that the delay or impediment to performance was not caused by circumstances beyond the control of Giant, including any entity controlled by Giant, and that Giant could have prevented the delay or impediment to performance by the exercise of due diligence, Giant shall comply with the requirement or, no later than twenty (20) days after receipt of the Department's determination, invoke the dispute resolution provision in Section XXI (Dispute Resolution) to avoid the payment of stipulated penalties. At the conclusion of the dispute resolution procedure, if the determination is that the delay or impediment to performance was or will be caused by circumstances beyond the control of Giant, including any entity controlled by Giant, and that the delay or impediment to performance could not have been prevented by Giant by the exercise of due diligence, Giant shall be excused as to the requirement and any stipulated penalties that accrued as a result of the delay or impediment to performance, for a period of time equivalent to the delay or impediment to performance. At the conclusion of the dispute resolution procedure, if the determination is that the delay or impediment to performance was not or will not be caused by circumstances beyond the control of

Giant, including any entity controlled by Giant, or that the delay or impediment to performance could have been prevented by Giant by the exercise of due diligence, Giant shall be liable for the requirement and any stipulated penalties that accrued as a result of the delay or impediment to performance, including the period of time equivalent to the delay or impediment to performance and the time required for the dispute resolution procedure.

5. Giant shall bear the burden of proving that the delay or impediment to performance was caused by or will be caused by circumstances beyond the control of Giant, including any entity controlled by Giant, and that Giant could not have prevented the delay or impediment to performance by the exercise of due diligence. Giant also shall bear the burden of proving the duration and extent of any delay or impediment to performance. An extension of one deadline based on a particular delay or impediment to performance may, but will not necessarily, result in an extension of a subsequent deadline.

6. Unanticipated or increased costs or expenses associated with the performance of Giant's obligations under the Order shall not constitute circumstances beyond its control and shall not serve as the basis for an extension of time under this section.

7. Notwithstanding any other provision of the Order, the invocation of this section shall not be construed to infer or establish a presumption adverse to either the Department or Giant.

8. As part of the resolution of any dispute under this section, the schedule for completion of work under the Order may be extended or modified to account for the delay in the work that occurred as a result of a delay or impediment to performance caused by the Department. Giant shall be liable for stipulated penalties for its failure thereafter to complete the

work in accordance with the extended or modified schedule.

D. Enforcement. The Division retains the right to pursue any relief authorized by the federal Clean Air Act, the New Mexico Air Quality Act, or their implementing regulations for any violation not addressed herein. The Division retains the right to enforce the Order by administrative or judicial action, which decision shall be in its sole discretion. In the event that the Division elects to file a judicial action to enforce the Order, the parties agree that the action shall be heard by the district court for Santa Fe County, which shall have exclusive jurisdiction over the parties and the Order, and they waive any right to challenge such jurisdiction in any forum. The laws of New Mexico shall govern the construction and interpretation of the Order.

E. Reservation of Rights and Defenses. Except as provided herein, the Order shall not be construed to prohibit or limit in any way the Division from requiring Giant to comply with any state or federal requirement applicable to either Refinery. Except as provided in the Order, the Order shall not be construed to prohibit or limit in any way the Division from seeking any relief authorized by the Act for violation of any state or federal requirement applicable to either Refinery. The Order shall not be construed to prohibit or limit in any way Giant from raising any defense to a Division action seeking such relief.

F. Waiver of State Liability. Giant shall assume all costs and liabilities incurred in performing any obligation under the Order. The Department, on its own behalf or on behalf of the State of New Mexico, shall not assume liability for Giant's performance of any obligation under the Order.

G. Post-Permit Violations. Nothing in the Order shall be construed to prevent or limit the Department's right to seek injunctive or monetary relief for the violation of a permit required

by the Order; provided however, that with respect to monetary relief, the Department may elect between demanding a stipulated penalty under the Order, if available, or filing a new action for monetary relief.

H. Service of Process. Giant and the Department consent to accept service of process by mail with respect to all matters arising under or relating to the Order. Giant and the Department stipulate that the persons identified in Section XXII.I are authorized to accept service of process with respect to all matters arising under or relating to this Order.

I. Notice. Unless otherwise provided herein, notices and communications between the Department and Giant shall be deemed submitted on the date of postmark and deposit in the U.S. Mail, postage pre-paid, except for notices under Sections XXI and XXII.C, which shall be sent by certified or registered mail, return receipt requested. The following addresses shall be used for all notices and communications:

Department

Chief
Air Quality Bureau
New Mexico Environment Department
2048 Galisteo St.
Santa Fe, New Mexico 87505

General Counsel
Office of General Counsel
New Mexico Environment Department
P.O. Box 26110
1190 St. Francis Dr.
Santa Fe, New Mexico 87502-6110

with a copy to:

Chief, Air Toxics, and Inspections Coordination Branch
EPA Region 6

1445 Ross Avenue
Dallas, Texas 75202-2733

Ciniza Refinery

General Manager
Ciniza Refinery
Giant Industries Arizona, Inc.
Route 3 - Box 7
Gallup, NM 87301

General Counsel
Giant Industries Arizona, Inc.
23733 N. Scottsdale Road
Scottsdale, AZ 85255

Bloomfield Refinery

General Manager
Bloomfield Refinery
Giant Industries Arizona, Inc. d/b/a San Juan Refining Co.
P.O. Box 159
Bloomfield, NM 87413

General Counsel
Giant Industries Arizona, Inc.
23733 N. Scottsdale Road
Scottsdale, AZ 85255

EPA

Chief
Air, Toxics, and Inspections Coordination Branch
EPA Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

The Department, Giant, or EPA may change the recipient or address for providing notices by serving the other parties with a notice setting forth the new recipient or address. By mutual consent, the Department and Giant may modify the nature or frequency of notices and

communications required by the Order.

J. Integration and Modification. The Order merges all prior written and oral communications between the Department and Giant concerning the Order, and contains their entire agreement. The Order shall not be modified without the express written consent of the Department and Giant.

K. Disclosure to Successors-in-Interest. Giant shall disclose the Order to any successor-in-interest to either Refinery and shall advise the successor-in-interest that the Order is binding on the successor-in-interest until the termination of the Order.

XXIII. TERMINATION

A. Requirements. The Order shall be terminated provided that Giant has satisfied all of the following requirements of the Order:

1. installation of all control technologies;
2. compliance with all provisions;
3. payment of all civil and stipulated penalties;
4. completion of all supplemental environmental projects;
5. inclusion of all applicable requirements in operating permits;
6. the Department's receipt of the first CQP Report following the conclusion of the operation for at least twelve (12) months of all units in compliance with the emission limits required by the Order; and
7. Giant's certification of compliance with the requirements listed above, and any certification of permanent full or partial closure as described in Section XXIII.B.

B. Permanent Full or Partial Closure. Giant may close a process, unit, or refinery, and

the obligations of the Order applicable to such process, unit, or refinery shall terminate upon the Department's receipt of certification of permanent full or partial closure, provided however (1) if Giant or any purchaser, transferee, or new operator within the meaning of Section III (Binding Effect) reopens, reconstructs, or replaces the process, unit, or refinery, it shall comply with the obligations of the Order applicable to such process, unit, or refinery; (2) the closure of a process, unit, or refinery shall not effect any obligation of the Order applicable to any other process, unit, or refinery; and (3) the closure of a process, unit, or refinery shall not effect the obligation to achieve a fifty (50) percent emission reductions in Section VIII (NOx Emission Reductions from Heaters and Boilers), except as provided therein. This Section XXIII shall survive termination of the Order as an enforceable obligation between the Department and Giant, shall be expressly disclosed to any purchaser, transferee, or new operator within the meaning of Section III (Binding Effect), and shall be included *verbatim* in any document affecting Giant's ownership interest or operator status for the process, unit, or refinery.

C. Procedure. No later than one hundred twenty (120) days after the receipt of Giant's certification(s) under Section XXIII.A(7), unless the Department objects in writing with specific reasons, the Secretary of the Department may, upon Giant's motion, order that the Order be terminated. If the Department objects to Giant's certification of compliance, the dispute shall be resolved pursuant to Section XXI, in which case Giant shall bear the burden of proving that the Order should be terminated.

D. Survival. The requirements of Sections I.C and XVII.B shall survive termination of this Order as specified therein.

XXIV. SIGNATORIES

The undersigned representatives certify that they are fully authorized to enter into the Order on behalf of their parties, and to execute and to bind their parties to the Order.

DATE: 6/1/05

RON CURRY
SECRETARY OF ENVIRONMENT

WE CONSENT TO THE ENTRY OF THE ORDER:

FOR THE ENVIRONMENTAL PROTECTION DIVISION:

DATE: 8/1/05

JIM NORTON
DIVISION DIRECTOR
P.O. Box 26110
Santa Fe, New Mexico 87502-6110
(505) 827-2932

FOR GIANT INDUSTRIES ARIZONA, INC.:

DATE: July 15, 2005

C. LEROY CROW
EXECUTIVE VICE PRESIDENT
23733 N. Scottsdale Road
Scottsdale, AZ 85255
(480) 585-8934

FOR SAN JUAN REFINING COMPANY:

DATE: July 15, 2005

C. LEROY CROW
EXECUTIVE VICE PRESIDENT
23733 N. Scottsdale Road
Scottsdale, AZ 85255
(480) 585-8934

APPENDIX A

GIANT CINIZA HEATERS AND BOILERS

Unit No.	Unit Type	Manufacturer	Operating Capacity
D-H1	Furnace	Broach	2 MMBTU/hr
D-H2	Furnace	Broach	2 MMBTU/hr
I-H2	Furnace	Petrochem	7.3 MMBTU/hr
H-F1	Furnace	K.W. Anderson, G.C. Broach	12 MMBTU/hr
H-F2	Furnace	K.W. Anderson, G.C. Broach	12 MMBTU/hr
I-H1	Furnace	Radco	13.4 MMBTU/hr
A-H2	Furnace	K.W. Anderson	20 MMBTU/hr
C-H2	Furnace	W-K-M Mfg. Co	25 MMBTU/hr
C-H5	Furnace	Petrochem	30 MMBTU/hr
P-H2	Furnace	Opt. Process Furnace Design	33 MMBTU/hr
F-B1	CO Boiler	Babcock & Wilcox	40/50 MMBtu/hr
I-H3*	Furnace	N/A	41 MMBTU/hr
P-H1	Furnace	U.O.P Design	49 MMBTU/hr
Z-81-B102	Boiler	Vogt	60 MMBtu/hr
C-H1	Furnace	W-K-M Mfg. Co.	60 MMBTU/hr
Z-81-B106	Boiler	Holman Boiler Works	80 MMBtu/hr

* Permitted but not constructed. Unit I-H3 will be treated as a new unit for purposes of the Order.

GIANT BLOOMFIELD HEATERS AND BOILERS

Unit No.	Unit Type	Manufacturer	Operating Capacity
H-801	Heater	GG Broach	4.07 MMBTU/HR
H-802	Heater	GG Broach	5.56 MMBTU/HR
H-901	Heater	KW Anderson	9.00 MMBTU/HR
H-401	Heater	KW Anderson	10.38 MMBTU/HR
H-402	Heater	KW Anderson	13.00 MMBTU/HR
H-404	Heater	Petro-Chem	14.55 MMBTU/HR
H-202	Heater	Born Engg.	15.33 MMBTU/HR
H-102A	Heater	Petro-Chem	16.00 MMBTU/HR
H-102	Heater	ABCO	30.00 MMBTU/HR
B-501 #4	Boiler	Coen Co.	39.56 MMBTU/HR
H-403	Heater	KW Anderson	40.00 MMBTU/HR
B-502 #5	Boiler	Zurn Industries	56.00 MMBTU/HR
H-101	Heater	Petro-Chem	57.60 MMBTU/HR

EXHIBIT A

STATE OF NEW MEXICO
ENVIRONMENT DEPARTMENT

IN THE MATTER OF
GIANT INDUSTRIES ARIZONA, INC.,
(Ciniza Refinery)

No. AQCA 04-_____ (CO)

COMPLIANCE ORDER REQUIRING COMPLIANCE AND ASSESSING A CIVIL PENALTY

The Environmental Protection Division of the New Mexico Environment Department ("Division") issues this Order, pursuant to the New Mexico Air Quality Control Act ("AQCA"), NMSA §74-2-12 (1992), to Giant Industries Arizona, Inc. ("Giant"), to require compliance with and assess civil penalties for violations of Air Quality Control Regulations ("AQCR") and NSR Permit No. 633 ("NSR Permit") at the Ciniza Refinery. The Secretary of the Department has delegated the authority to issue this Order to the Director of the Division.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

I. Background

1. Giant owns and operates the Ciniza Refinery located east of Gallup, New Mexico.

2. Giant is authorized to operate the Ciniza Refinery under the NSR Permit.

II. NSPS Subpart J

3. AQCR, 20.2.77 NMAC – *New Source Performance Standards*, incorporates by reference federal New Source Performance Standard ("NSPS") Subpart J – *Standards of Performance for Petroleum Refineries,* 40 CFR §60.100 *et seq.*

4. NSPS Subpart J applies to fuel gas combustion devices located in petroleum refineries and constructed after June 11, 1973. 40 CFR §60.100.

5. Process Heater AH-2 is a fuel gas combustion device located at the Ciniza Refinery and constructed in 1982.

6. Process Heater AH-2 is subject to NSPS Subpart J.

7. NSPS Subpart J, 40 CFR §60.105(a)(3) & (4), requires the owner or operator of a fuel gas combustion device to install a continuous monitoring system ("CMS") to measure and record hydrogen sulfide before combustion of the fuel gas or sulfur dioxide after combustion of the fuel gas.

8. On April 24-26, 2001, the Department, by Robert Samaniego of the Air Quality Bureau, inspected the Ciniza Refinery, and discovered that Process Heater AH-2 did not have a CMS to measure and record hydrogen sulfide before combustion of the fuel gas or sulfur dioxide after combustion of the fuel gas.

9. Giant violated and continues to violate NSPS Subpart J, 40 CFR §60.105(a), by failing to install a CMS on Process Heater AH-2 to measure and record hydrogen sulfide before combustion of the fuel gas or sulfur dioxide after combustion of the fuel gas.

III. MACT Subpart CC and MACT Subpart R

10. The AQCR, 20.2.82 NMAC – *Maximum Achievable Control Technology Standards for Source Categories of Hazardous Air Pollutants*, incorporates by reference the federal Maximum Achievable Control Technology Standard ("MACT") Subpart CC – *National*

Emission Standards for Hazardous Air Pollutants from Petroleum Refineries, 40 CFR §63.640 *et seq.*

11. MACT Subpart CC applies to petroleum refining process units located at a major source of hazardous air pollutants identified in Section 112(a) of the federal Clean Air Act, 42 U.S.C. §7412(a), and Table 1 of MACT Subpart CC. 40 CFR §63.640(a).

12. MACT Subpart CC, 42 U.S.C. §7412(a)(1), defines a major source of hazardous air pollutants as any stationary source with the potential to emit 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants.

13. Section 112(a) of the federal Clean Air Act, 42 U.S.C. §7412(a), and Table 1 of MACT Subpart CC identifies benzene, xylene, ethyl benzene, toluene, hexane, 2,2,4-trimethylpentane, methyl tert butyl ether, and naphthalene as hazardous air pollutants.

14. The Ciniza Refinery was constructed in 1957.

15. The Ciniza Refinery emits 138.8 tons per year of benzene, xylene, ethyl benzene, toluene, hexane, 2,2,4-trimethylpentane, methyl tert butyl ether, and naphthalene.

16. The Ciniza Refinery is an existing major source of hazardous air pollutants.

17. The Ciniza Refinery is subject to MACT Subpart CC.

18. MACT Subpart CC, 40 CFR §63.650(a), requires the owner or operator of a gasoline loading rack classified under SIC Code 2911 and located within a contiguous area and under common control with a petroleum refinery to comply with MACT Subpart R – *National*

Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations), 40 CFR §§63.421, 422(a) through (c), 63.425(a) through (c), 63.425(e) through (h), 63.427(a) and (b), and 63.428(b), (c), (g)(1), and (h)(1) through (h)(3).

19. MACT Subpart CC, 40 CFR §63.641, defines a gasoline loading rack as the loading arms, pumps, meters, shutoff valves, relief valves, and other piping and valves used to fill gasoline cargo tanks.

20. The gasoline loading rack at the Ciniza Refinery is classified under SIC Code 2911 and located within a contiguous area and under common control with a petroleum refinery.

A. Notification of Compliance Status

21. MACT Subpart CC, 40 CFR §63.654(f), requires the owner or operator of an affected facility to submit a Notification of Compliance Status ("NOCS") no later than January 18, 1999 (e.g., 150 days after the compliance date for MACT Subpart CC).

22. MACT Subpart R, 40 CFR §63.428(c)(2)(i), requires the owner or operator of a bulk gasoline terminal to report simultaneously with the NOCS all data and calculations, engineering assessments, and manufacturer's recommendations used in determining the monitored operating parameter value ("MOPV") under MACT Subpart R, 40 CFR §63.425(b).

23. Giant did not conduct the performance test to determine the MOPV until May 27, 1999.

24. Giant's failure to conduct the performance test to determine the MOPV before January 18, 1999, the submittal date for the NOCS, and to submit the required data with the

NOCS, violated 40 CFR §63.428(c)(2)(i).

B. MOPV Determination

25. MACT Subpart R, 40 CFR §63.425(a), requires the owner or operator subject to the emission standard in MACT Subpart R, 40 CFR §63.422(b), to conduct a performance test on the vapor recovery system.

26. MACT Subpart R, 40 CFR §63.425(b), requires the owner or operator conducting the performance test to determine a MOPV for the vapor recovery system.

27. MACT Subpart R, 40 CFR §63.425(b)(3), requires the owner or operator conducting the performance test to provide for the Department's approval the rationale for the MOPV, monitoring frequency, and averaging time, and why the MOPV, monitoring frequency, and averaging time demonstrate continuous compliance with the emission standard in 40 CFR §63.422(b).

28. On May 27, 1999, Giant conducted the performance test on the vapor recovery system.

29. On July 7, 1999, Giant submitted the report for the performance test.

30. The report did not include the rationale for the monitoring frequency and averaging time to be used in measuring compliance with the MOPV, or the reason why the MOPV, monitoring frequency, and averaging time demonstrate continuous compliance with the emission standard in 40 CFR §63.422(b).

31. The report did not request the Department's approval of the MOPV or the

rationale for the monitoring frequency and average time to be used in measuring compliance with the MOPV.

32. Giant violated MACT Subpart CC, 40 CFR §63.650(a), and MACT Subpart R, 40 CFR §63.425(b)(3), by failing to submit for the Department's approval the rationale for the monitoring frequency and averaging time used in measuring compliance with the MOPV.

C. MOPV Compliance

33. MACT Subpart R, 40 CFR §63.427(b), requires the owner or operator to operate the vapor recovery system in a manner not to exceed the MOPV.

34. MACT Subpart R, 40 CFR §63.427(b), specifies that exceeding the MOPV shall constitute a violation of the emission standard in MACT Subpart R, 40 CFR §63.422(b).

35. Giant exceeded the MOPV on 321 occasions between March 1, 2001 and December 31, 2003 as described in Exhibit A.

36. Giant exceeded the MACT Subpart R emission standard on 321 occasions between March 1, 2001 and December 31, 2003 as described in Exhibit A.

37. Giant violated MACT Subpart R, 40 CFR §§63.422(b) and 427(b) on each occasion described in Exhibit A.

D. MOPV Reporting

38. MACT Subpart R, 40 CFR §63.428(h), requires the owner or operator of a vapor recovery system that exceeds the MOPV to submit an excess emission report.

39. Giant did not submit an excess emission report for any of the occasions between

March 1, 2001 and December 31, 2003 that the MOPV was exceeded as described in Exhibit A.

40. Giant violated MACT Subpart R, 40 CFR §§63.428(h), by failing to submit excess emission reports for any of the occasions between March 1, 2001 and December 31, 2003 that the MOPV was exceeded as described in Exhibit A.

E. MOPV Monitoring

41. MACT Subpart R, 40 CFR §63.427(a), requires the owner or operator of a bulk gasoline terminal to install, calibrate, certify, operate, and maintain a CMS.

42. MACT Subpart A, 40 CFR §63.8(c)(4)(ii), requires all CMS (other than opacity) to complete a minimum of one cycle of operation for each successive 15 minute period.

43. The CMS at the bulk gasoline terminal failed to operate and to complete a minimum of one cycle of operation during 14 periods as described in Exhibit B.

44. Giant violated MACT Subpart R, 40 CFR §63.427(a), and MACT Subpart A, 40 CFR §63.8(c)(4)(ii), by failing to operate and to complete a minimum of one cycle of operation during the periods described in Exhibit B.

IV. NSR Permit

45. During all times relevant hereto, the NSR Permit, Condition 2 and Table 1, established emission limits for Flare FL-1.

46. During all times relevant hereto, the emission limits for Flare FL-1 were based on the combustion of pilot gas only.

PM	0.03 lb/hr
CO	0.37 lb/hr
NOx	0.07 lb/hr
VOCs	0.006 lb/hr
SO_2	0.001 lb/hr

47. On April 24-26, 2001, the Department, by Robert Samaniego of the Air Quality Bureau, inspected the Ciniza Refinery and observed Flare FL-1 combusting excess fuel gas at Flare FL-1.

48. During the inspection, Mr. Samaniego was told that the combustion of excess fuel gas at Flare FL-1 was a routine practice at the Ciniza Refinery.

49. Between March 1, 2001 and April 30, 2001, and June 1, 2002 and December 31, 2003, Flare FL-1 exceeded its emission limits on multiple days:

PM	75 days
CO	77 days
NOx	77 days
VOCs	87 days
SO_2	209 days

Exhibit C.

50. Giant violated the NSR Permit by exceeding the emission limits for Flare FL-1 as described in Paragraph 49.

COMPLIANCE ORDER

51. AQCA §74-2-12.A authorizes the Secretary to issue a compliance order requiring compliance immediately or within a specified time period with any AQCR.

52. No further action is required.

CIVIL PENALTY

53. AQCA §74-2-12.A authorizes the Secretary to issue a compliance order assessing a civil penalty for any violation of an AQCR.

54. AQCA §74-2-12.B authorizes the Secretary to assess a civil penalty of fifteen thousand dollars ($15,000.00) per day of noncompliance for each violation of an AQCR.

55. Pursuant to the Air Quality Bureau Civil Penalty Policy, the Department assesses a preliminary civil penalty of $1,460,322.00 for the violations described above. Exhibit D.

NOTICE OF OPPORTUNITY TO ANSWER AND REQUEST A HEARING

56. Pursuant to AQCA §74-2-12.C and the Department's Adjudicatory Procedures, 20.1.5.200 NMAC, Giant may request a hearing by filing a written request for a public hearing with the hearing clerk no later than thirty days from receipt of this Order. The request for hearing shall include an Answer:

a. Admitting or denying each alleged finding of fact. Any alleged finding of fact which is not specifically denied shall be deemed to be admitted. Giant may assert that it has insufficient knowledge of any alleged finding of fact, and such finding shall be deemed to be denied;

b. Asserting any affirmative defense upon which Giant intends to rely. Any affirmative defense not asserted in the Answer, except an affirmative defense asserting lack of subject matter jurisdiction, shall be deemed to be waived;

c. Signed under oath or affirmation that the information contained therein is

true and correct to the best of the signatory's knowledge; and

d. Attaching a copy of this Order.

57. This Order shall become final upon Giant's receipt of the Order unless Giant files a Request for Hearing and Answer as set forth above. Giant may file a Request for Hearing and Answer at the following address:

Hearing Clerk
New Mexico Environment Department
P.O. Box 261 1 0
Santa Fe, New Mexico 87502-6110

58. The public hearing shall be governed by the Department's Adjudicatory Procedures, 20.1.5 NMAC (copy attached).

SETTLEMENT CONFERENCE

59. Giant may confer with the Department regarding settlement at any time, but a settlement conference or request for a settlement conference shall not extend or waive the deadline for filing a Request for Hearing or Answer. Giant may appear at a settlement conference *pro se* or through counsel. The EPD Director shall execute any settlement as a Stipulated Final Order. A Stipulated Final Order shall resolve all issues raised in this Order, shall bind all parties to this Order, and shall not be appealable.

To confer regarding settlement, contact:

Eric Ames, Esq.
Office of General Counsel
New Mexico Environment Department
P.O. Box 26110
Santa Fe, New Mexico 87502-6110

Telephone: (505) 827-2982
Facsimile: (505) 827-2836

TERMINATION

60. This Order shall terminate upon the EPD Director's approval of a Stipulated Final Order.

BY: _____ **DATE:** 6/2/05

JIM NORTON
DIVISION DIRECTOR

CERTIFICATE OF SERVICE

I certify that on June 3, 2005, I mailed this pleading by First Class U.S. Mail to:

Louis W. Rose, Esq.
P.O. Box 2307
Santa Fe, New Mexico 87504-2307

_____
Eric Ames

Giant Ciniza VRU Exceedences of MOPV of 0.89% Total Organic Carbon

Date	Time	1 hr. rolling avg., %	% exceedence	Comments
4/27/2001	16:00	1.00	12.36%	
4/28/2001	15:00	0.94	5.62%	Isomerate
5/1/2001	23:00	1.05	17.98%	Isomerate
5/2/2001	17:00	0.97	8.99%	Isomerate
5/4/2001	17:00	0.97	8.99%	Isomerate
5/6/2001	10:00	1.10	23.60%	Isomerate
5/7/2001	11:00	1.15	29.21%	Isomerate
5/8/2001	13:00	0.99	11.24%	Isomerate
5/10/2001	12:00	0.90	1.12%	Isomerate
5/15/2001	19:00	1.14	28.09%	Isomerate
5/16/2001	6:00	0.94	5.62%	Isomerate
6/4/2001	7:00	0.93	4.49%	Isomerate
6/4/2001	16:00	0.99	11.24%	Isomerate
6/19/2001	8:00	1.03	15.73%	Isomerate
6/20/2001	6:00	1.04	16.85%	Isomerate
6/23/2001	6:00	0.99	11.24%	Isomerate
6/26/2001	21:00	0.93	4.49%	Isomerate
6/28/2001	8:00	1.00	12.36%	Isomerate
7/6/2001	22:00	0.98	10.11%	Isomerate
7/8/2001	6:00	0.98	10.11%	Isomerate
8/18/2001	1:00	0.95	6.74%	Isomerate
8/19/2001	18:00	1.07	20.22%	Isomerate
8/20/2001	8:00	1.01	13.48%	Isomerate
8/21/2001	12:00	1.01	13.48%	Isomerate
10/2/2001	15:00	0.94	5.62%	Isomerate
10/3/2001	22:00	0.97	8.99%	Isomerate
10/4/2001	19:00	0.93	4.49%	Isomerate
10/8/2001	5:00	1.33	49.44%	Isomerate
10/8/2001	12:00	1.01	13.48%	Isomerate
10/8/2001	22:00	0.97	8.99%	Isomerate
10/9/2001	20:00	1.12	25.84%	Isomerate
10/10/2001	10:00	1.05	17.98%	Isomerate
10/12/2001	20:00	1.10	23.60%	Isomerate
10/13/2001	9:00	1.15	29.21%	Isomerate
10/14/2001	4:00	1.09	22.47%	
10/15/2001	13:00	1.41	58.43%	Isomerate
10/17/2001	5:00	1.15	29.21%	Isomerate
10/19/2001	7:00	1.03	15.73%	Isomerate
10/19/2001	11:00	0.96	7.87%	Isomerate
10/19/2001	12:00	0.98	10.11%	Isomerate
10/20/2001	5:00	1.03	15.73%	Isomerate
10/22/2001	2:00	1.00	12.36%	Isomerate
10/22/2001	16:00	1.06	19.10%	Isomerate
10/24/2001	4:00	1.04	16.85%	Isomerate
10/24/2001	10:00	1.00	12.36%	Isomerate
10/25/2001	19:00	0.94	5.62%	Isomerate
10/26/2001	4:00	0.92	3.37%	Isomerate
10/25/2001	12:00	0.91	2.25%	Isomerate
10/27/2001	13:00	0.93	4.49%	Isomerate
10/27/2001	21:00	1.24	39.33%	Isomerate
10/29/2001	14:00	1.62	82.02%	Isomerate
10/31/2001	7:00	0.92	3.37%	
10/31/2001	21:00	0.90	1.12%	Isomerate
11/1/2001	18:00	0.97	8.99%	Isomerate
12/15/2001	11:00	0.91	2.25%	Isomerate
12/17/2001	2:00	0.95	6.74%	Isomerate
12/19/2001	16:00	0.90	1.12%	Isomerate
12/20/2001	13:00	0.91	2.25%	Isomerate
12/26/2001	12:00	1.00	12.36%	Isomerate
12/27/2001	11:00	1.00	12.36%	Isomerate
12/28/2001	4:00	1.02	14.61%	
12/30/2001	2:00	1.06	19.10%	Isomerate
2/2/2002	14:00	1.05	17.98%	Isomerate
2/5/2002	15:00	0.95	6.74%	Isomerate
2/7/2002	1:00	0.92	3.37%	
2/8/2002	3:00	1.53	71.91%	Isomerate
2/9/2002	12:00	0.95	6.74%	Isomerate
2/10/2002	15:00	0.95	6.74%	Isomerate
2/12/2002	16:00	0.93	4.49%	Isomerate
2/13/2002	15:00	1.06	19.10%	Isomerate
2/16/2002	14:00	0.91	2.25%	Isomerate
2/17/2002	0:00	1.15	29.21%	Isomerate
2/23/2002	6:00	1.14	28.09%	Isomerate
2/23/2002	7:00	0.95	6.74%	Isomerate
2/24/2002	23:00	0.92	3.37%	Isomerate
3/2/2002	18:00	1.10	23.60%	Isomerate
3/2/2002	20:00	1.11	24.72%	Isomerate
3/3/2002	23:00	1.03	15.73%	Isomerate
3/5/2002	14:00	0.99	11.24%	Isomerate
4/2/2002	6:00	1.15	29.21%	
4/6/2002	5:00	1.16	30.34%	
4/24/2002	10:00	0.93	4.49%	Isomerate
4/27/2002	10:00	1.05	17.98%	Isomerate
4/29/2002	6:00	1.07	20.22%	Isomerate
5/2/2002	8:00	1.01	13.48%	
5/5/2002	13:00	1.05	17.98%	Isomerate
5/5/2002	23:00	1.02	14.61%	Isomerate
5/8/2002	23:00	0.94	5.62%	Isomerate
5/10/2002	18:00	0.93	4.49%	Isomerate
5/12/2002	8:00	0.99	11.24%	
5/12/2002	10:00	0.90	1.12%	Isomerate
5/13/2002	15:00	1.03	15.73%	Isomerate
5/14/2002	10:00	0.93	4.49%	Isomerate
5/15/2002	10:00	0.96	7.87%	Isomerate
5/15/2002	12:00	0.90	1.12%	Isomerate
5/16/2002	16:00	1.03	15.73%	Isomerate
5/17/2002	10:00	0.94	5.62%	Isomerate
5/19/2002	23:00	1.03	15.73%	Isomerate
5/22/2002	8:00	1.00	12.36%	Isomerate
5/28/2002	8:00	1.09	22.47%	Isomerate
5/29/2002	9:00	0.98	10.11%	Isomerate
5/29/2002	13:00	1.09	22.47%	Isomerate
5/30/2002	8:00	1.37	53.93%	
5/30/2002	9:00	1.00	12.36%	Isomerate
7/3/2002	19:00	1.92	115.73%	Isomerate
7/4/2002	17:00	1.43	60.67%	Isomerate
7/4/2002	18:00	2.46	176.40%	Isomerate
7/6/2002	9:00	1.17	31.46%	Isomerate
7/7/2002	16:00	0.92	3.37%	
7/22/2002	20:00	1.35	51.69%	Isomerate
7/22/2002	21:00	1.64	84.27%	Isomerate
7/22/2002	22:00	1.70	91.01%	Isomerate
7/24/2002	11:00	1.01	13.48%	Isomerate
7/25/2002	12:00	1.03	15.73%	Isomerate
7/25/2002	14:00	1.02	14.61%	Isomerate
7/28/2002	20:00	1.08	21.35%	
7/28/2002	21:00	0.98	10.11%	
7/29/2002	9:00	0.97	8.99%	Isomerate

EXHIBIT 4 tabbies

Giant Ciniza VRU Exceedences of MOPV of 0.89% Total Organic Carbon

Date	Time	1 hr. rolling avg., %	% exceedence	Comments
7/29/2002	10:00	0.93	4.49%	Isomerate
7/30/2002	13:00	1.50	68.54%	Isomerate
7/30/2002	14:00	1.15	29.21%	Isomerate
8/7/2002	6:00	1.48	66.29%	Isomerate
8/7/2002	10:00	1.34	50.56%	Isomerate
8/7/2002	5:00	0.97	8.99%	Isomerate
8/8/2002	6:00	1.04	16.85%	Isomerate
8/9/2002	5:00	1.22	37.08%	Isomerate
8/9/2002	6:00	0.96	7.87%	Isomerate
8/8/2002	5:00	1.31	47.19%	Isomerate
8/11/2002	13:00	2.07	132.58%	Isomerate
8/11/2002	14:00	1.03	15.73%	Isomerate
8/12/2002	8:00	1.75	96.63%	Isomerate
8/12/2002	9:00	1.17	31.46%	Isomerate
8/12/2002	15:00	1.32	48.31%	Isomerate
8/13/2002	7:00	1.40	57.30%	Isomerate
8/13/2002	9:00	1.36	52.81%	Isomerate
8/13/2002	12:00	1.42	59.55%	Isomerate
8/13/2002	15:00	0.91	2.25%	Isomerate
8/13/2002	16:00	1.07	20.22%	Isomerate
8/14/2002	12:00	1.64	84.27%	Isomerate
8/15/2002	14:00	2.13	139.33%	Isomerate
8/15/2002	15:00	2.44	174.16%	Isomerate
8/15/2002	16:00	1.56	75.28%	Isomerate
8/15/2002	17:00	1.22	37.08%	Isomerate
8/15/2002	18:00	1.20	34.83%	Isomerate
8/16/2002	21:00	1.68	88.76%	Isomerate
8/16/2002	22:00	2.37	166.29%	Isomerate
8/16/2002	23:00	1.11	24.72%	Isomerate
8/19/2002	1:00	1.27	42.70%	Isomerate
8/19/2002	5:00	1.22	37.08%	Isomerate
8/20/2002	5:00	1.00	12.36%	Isomerate
8/20/2002	13:00	1.09	22.47%	Isomerate
8/20/2002	14:00	1.55	74.16%	Isomerate
8/21/2002	10:00	1.18	32.58%	Isomerate
8/21/2002	12:00	1.02	14.61%	Isomerate
8/24/2002	6:00	1.35	51.69%	Isomerate
8/24/2002	12:00	1.58	77.53%	Isomerate
8/26/2002	11:00	1.15	29.21%	Isomerate
8/26/2002	23:00	1.03	15.73%	Isomerate
8/27/2002	8:00	1.02	14.61%	Isomerate
8/27/2002	9:00	1.12	25.84%	Isomerate
8/29/2002	5:00	0.94	5.62%	Isomerate
8/29/2002	7:00	2.08	133.71%	Isomerate
8/29/2002	13:00	1.43	60.67%	Isomerate
8/29/2002	16:00	0.92	3.37%	Isomerate
8/30/2002	13:00	1.99	123.60%	Isomerate
8/30/2002	14:00	1.37	53.93%	Isomerate
8/30/2002	15:00	1.76	97.75%	Isomerate
8/31/2002	12:00	1.46	64.04%	Isomerate
8/31/2002	13:00	1.41	58.43%	Isomerate
8/31/2002	14:00	1.39	56.18%	Isomerate
9/1/2002	21:00	1.25	40.45%	Isomerate
9/2/2002	3:00	2.02	126.97%	Isomerate
9/2/2002	5:00	1.05	17.98%	Isomerate
9/2/2002	8:00	1.76	97.75%	Isomerate
9/2/2002	9:00	1.31	47.19%	Isomerate
9/2/2002	11:00	1.46	64.04%	Isomerate
9/2/2002	12:00	1.21	35.96%	Isomerate
9/3/2002	3:00	0.92	3.37%	Isomerate
9/3/2002	4:00	1.42	59.55%	Isomerate
9/3/2002	13:00	1.69	89.89%	Isomerate
9/3/2002	14:00	2.02	126.97%	Isomerate
9/3/2002	15:00	1.35	51.69%	Isomerate
9/3/2002	16:00	1.98	122.47%	Isomerate
9/3/2002	17:00	1.09	22.47%	Isomerate
9/4/2002	7:00	1.35	51.69%	Isomerate
9/4/2002	22:00	1.14	28.09%	Isomerate
9/5/2002	7:00	2.06	131.46%	Isomerate
9/5/2002	8:00	1.37	53.93%	Isomerate
9/5/2002	14:00	1.23	38.20%	Isomerate
9/5/2002	15:00	1.41	58.43%	Isomerate
9/6/2002	5:00	1.29	44.94%	Isomerate
9/6/2002	11:00	1.53	71.91%	Isomerate
9/7/2002	13:00	1.46	64.04%	Isomerate
9/8/2002	20:00	1.12	25.84%	Isomerate
9/8/2002	23:00	1.01	13.48%	Isomerate
9/9/2002	7:00	1.00	12.36%	Isomerate
9/9/2002	10:00	1.08	21.35%	Isomerate
9/11/2002	3:00	1.00	12.36%	Isomerate
9/12/2002	13:00	1.21	35.96%	Isomerate
9/13/2002	5:00	1.25	40.45%	Isomerate
9/13/2002	11:00	1.12	25.84%	Isomerate
9/13/2002	12:00	1.34	50.56%	Isomerate
9/13/2002	13:00	1.23	38.20%	Isomerate
9/18/2002	11:00	1.07	20.22%	Isomerate
9/18/2002	19:00	1.10	23.60%	Isomerate
9/19/2002	11:00	1.00	12.36%	Isomerate
9/20/2002	11:00	1.52	70.79%	Isomerate
9/21/2002	8:00	1.19	33.71%	Isomerate
9/21/2002	23:00	1.10	23.60%	Isomerate
9/22/2002	8:00	1.01	13.48%	Isomerate
9/22/2002	23:00	0.95	6.74%	Isomerate
9/23/2002	12:00	1.34	50.56%	Isomerate
9/24/2002	11:00	1.11	24.72%	Isomerate
9/25/2002	15:00	1.31	47.19%	Isomerate
9/26/2002	15:00	1.19	33.71%	Isomerate
9/27/2002	10:00	1.00	12.36%	Isomerate
9/27/2002	12:00	1.28	43.82%	Isomerate
9/28/2002	7:00	1.40	57.30%	Isomerate
9/30/2002	12:00	1.48	66.29%	Isomerate
9/30/2002	22:00	1.15	29.21%	Isomerate
10/3/2002	13:00	1.09	22.47%	Isomerate
10/4/2002	15:00	1.30	46.07%	Isomerate
10/5/2002	3:00	1.36	52.81%	Isomerate
10/5/2002	9:00	1.02	14.61%	Isomerate
10/7/2002	14:00	1.11	24.72%	Isomerate
10/7/2002	15:00	1.33	49.44%	Isomerate
10/8/2002	13:00	1.11	24.72%	Isomerate
10/9/2002	11:00	1.26	41.57%	Isomerate
10/10/2002	10:00	1.06	19.10%	Isomerate
10/11/2002	20:00	1.18	32.58%	Isomerate
10/11/2002	23:00	1.15	29.21%	Isomerate
10/12/2002	8:00	1.13	26.97%	Isomerate
10/13/2002	19:00	1.02	14.61%	Isomerate
10/14/2002	13:00	1.01	13.48%	Isomerate
10/14/2002	14:00	1.28	43.82%	Isomerate
10/17/2002	3:00	0.91	2.25%	Isomerate

Giant Ciniza VRU Exceedences of MOPV of 0.89% Total Organic Carbon

Date	Time	1 hr. rolling avg., %	% exceedence	Comments
10/17/2002	12:00	0.91	2.25%	Isomerate
10/19/2002	18:00	2.07	132.58%	Isomerate
10/19/2002	23:00	0.96	7.87%	Isomerate
10/22/2002	15:00	0.93	4.49%	Isomerate
10/24/2002	6:00	1.50	68.54%	Isomerate
10/25/2002	5:00	1.04	16.85%	Isomerate
10/28/2002	13:00	1.26	41.57%	Isomerate
10/28/2002	21:00	0.91	2.25%	Isomerate
10/28/2002	22:00	0.90	1.12%	Isomerate
10/30/2002	12:00	0.94	5.62%	Isomerate
10/30/2002	14:00	1.14	28.09%	Isomerate
11/1/2002	16:00	0.94	5.62%	Isomerate
11/4/2002	21:00	1.02	14.61%	Isomerate
11/5/2002	15:00	1.16	30.34%	Isomerate
11/7/2002	22:00	0.90	1.12%	Isomerate
11/9/2002	3:00	1.09	22.47%	Isomerate
11/11/2002	7:00	0.93	4.49%	Isomerate
11/12/2002	20:00	1.01	13.48%	Isomerate
11/13/2002	7:00	1.04	16.85%	Isomerate
11/14/2002	11:00	0.92	3.37%	Isomerate
11/14/2002	14:00	1.19	33.71%	Isomerate
11/15/2002	17:00	0.97	8.99%	Isomerate
11/16/2002	15:00	1.53	71.91%	Isomerate
11/17/2002	21:00	1.27	42.70%	Isomerate
11/18/2002	13:00	1.14	28.09%	Isomerate
11/20/2002	12:00	1.25	40.45%	Isomerate
11/21/2002	13:00	0.90	1.12%	Isomerate
11/22/2002	4:00	1.09	22.47%	Isomerate
11/24/2002	4:00	1.07	20.22%	Isomerate
11/25/2002	11:00	0.95	6.74%	Isomerate
11/25/2002	19:00	0.94	5.62%	Isomerate
11/26/2002	7:00	0.98	10.11%	Isomerate
12/2/2002	13:00	1.45	62.92%	Isomerate
12/2/2002	14:00	1.07	20.22%	Isomerate
12/4/2002	13:00	1.23	38.20%	Isomerate
12/6/2002	10:00	1.07	20.22%	Isomerate
12/8/2002	16:00	1.01	13.48%	Isomerate
12/11/2002	10:00	1.06	19.10%	Isomerate
12/11/2002	22:00	0.92	3.37%	Isomerate
12/15/2002	8:00	1.06	19.10%	Isomerate
12/15/2002	15:00	1.08	21.35%	Isomerate
12/16/2002	3:00	1.32	48.31%	Isomerate
12/16/2002	6:00	1.03	15.73%	Isomerate
12/21/2002	8:00	1.14	28.09%	Isomerate
12/21/2002	12:00	0.93	4.49%	Isomerate
12/28/2002	12:00	0.93	4.49%	Isomerate
12/29/2002	21:00	0.96	7.87%	Isomerate
1/4/2003	4:00	0.90	1.12%	Isomerate
1/4/2003	21:00	1.00	12.36%	Isomerate
1/9/2003	11:00	1.05	17.98%	Isomerate
1/9/2003	12:00	1.30	46.07%	Isomerate
1/12/2002	11:00	0.92	3.37%	Isomerate
1/12/2003	19:00	0.90	1.12%	Isomerate
1/15/2003	14:00	0.93	4.49%	Isomerate
1/16/2003	5:00	0.92	3.37%	Isomerate
1/14/2003	7:00	1.01	13.48%	Isomerate
1/18/2003	16:00	0.93	4.49%	Isomerate
1/19/2003	20:00	1.02	14.61%	Isomerate
1/23/2003	4:00	0.92	3.37%	Isomerate
2/4/2003	11:00	1.08	21.35%	Isomerate
2/9/2003	3:00	1.09	22.47%	Isomerate
2/11/2003	7:00	0.96	7.87%	Isomerate
2/15/2003	15:00	0.91	2.25%	Isomerate
2/16/2003	16:00	1.01	13.48%	Isomerate
2/17/2003	12:00	0.95	6.74%	Isomerate
3/4/2003	13:00	1.01	13.48%	Isomerate
3/13/2003	8:00	0.91	2.25%	Isomerate
3/16/2003	11:00	0.96	7.87%	Isomerate
5/29/2003	21:00	1.55	74.16%	Isomerate
5/29/2003	22:00	1.57	76.40%	Isomerate
5/29/2003	23:00	1.12	25.84%	Isomerate
6/9/2003	11:00	1.07	20.22%	Isomerate
6/18/2003	12:00	0.92	3.37%	Isomerate
6/26/2003	23:00	0.92	3.37%	Isomerate
6/30/2003	11:00	1.48	66.29%	Isomerate
7/8/2003	20:00	1.06	19.10%	Isomerate
7/9/2003	12:00	0.96	7.87%	Isomerate
7/14/2003	7:00	0.94	5.62%	Isomerate
7/14/2003	14:00	1.07	20.22%	Isomerate
7/14/2003	21:00	1.51	69.66%	Isomerate
7/14/2003	22:00	0.95	6.74%	Isomerate
7/16/2003	16:00	0.92	3.37%	Isomerate
7/16/2003	17:00	1.01	13.48%	Isomerate
8/31/2003	16:00	0.93	4.49%	Isomerate
9/2/2003	9:00	1.01	13.48%	

Minimum % exceedence of MOPV	1.12%
Maximum % exceedence of MOPV	176.40%
Total number of MOPV exceedences	321
MOPV, based on one hour rolling avg., %	0.89

EXHIBIT B

STATE OF NEW MEXICO
ENVIRONMENT DEPARTMENT

IN THE MATTER OF
GIANT INDUSTRIES ARIZONA, INC.,
(Bloomfield Refinery)

No. AQCA 02-09 (CO)

AMENDED COMPLIANCE ORDER REQUIRING COMPLIANCE AND ASSESSING A CIVIL PENALTY

The Environmental Improvement Division of the New Mexico Environment Department ("Division") issues this Amended Compliance Order ("Order"), pursuant to the New Mexico Air Quality Control Act ("AQCA"), NMSA 1978 §74-2-12 (1992), to Giant Industries Arizona, Inc. ("Giant"), to require compliance with and assess civil penalties for violations of the Air Quality Control Regulations ("AQCR") and NSR Permit No. 402 ("NSR Permit") at the Bloomfield Refinery. The Secretary of the Department has delegated the authority to issue this Order to the Director of the Division.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

I. Background

1. Giant owns and operates the Bloomfield Refinery near Bloomfield, New Mexico.

2. Giant operates the Bloomfield Refinery under the NSR Permit.

3. On August 27 and 28, and September 24, 2001, the Department, by Robert Samaniego of the Air Quality Bureau, inspected the Bloomfield Refinery.

II. NSPS Subpart J

4. AQCR, 20.2.77 NMAC – *New Source Performance Standards*, incorporates by reference federal New Source Performance Standard ("NSPS") Subpart J - *Standards of Performance for Petroleum Refineries,* 40 CFR §60.100 *et seq.*

5. NSPS Subpart J applies to fuel gas combustion devices located in petroleum refineries and constructed after June 11, 1973. 40 CFR §60.100.

6. Flare 1, Heaters H-801, 802, and 901, and Boiler #5 are fuel gas combustion devices located at the Bloomfield Refinery and constructed after June 11, 1973.

7. Flare 1, Heaters H-801, 802, and 901, and Boiler #5 are subject to NSPS Subpart J.

8. NSPS Subpart J, 40 CFR §60.105(a)(3) and (4), require the owner or operator of a fuel gas combustion device to install a continuous monitoring system ("CMS") to measure and record hydrogen sulfide before combustion of fuel gas or sulfur dioxide emissions after combustion of fuel gas.

A. CMS Calibration Drift Procedure

9. NSPS Subpart A, 40 CFR §60.13(d)(1), requires the owner or operator of a CMS to maintain a written procedure for checking the zero and span calibration drifts.

10. At the time of the Department's inspection, Giant did not maintain a written procedure for checking the zero and span calibration drifts for the hydrogen sulfide CMS for Heaters H-801, 802, and 901, and Boiler #5.

11. Giant violated NSPS Subpart A, 40 CFR §60.13(d)(1), by failing to maintain a

written procedure for checking the zero and span calibration drifts for the hydrogen sulfide CMS for Heaters H-801, 802, and 901, and Boiler #5.

B. Hydrogen Sulfide Monitoring

12. Giant combusts HDS/DHT stripper off-gas, Reformer hydrogen, and fuel gas from the fuel gas drum in Flare 1.

13. Giant does not maintain a hydrogen sulfide CMS for the DHT stripper off-gas, Reformer hydrogen, and fuel gas from the fuel gas drum.

14. Giant does not maintain a sulfur dioxide CMS for Flare 1.

15. Giant violated and continues to violate NSPS Subpart J, 40 CFR §60.105(a), by failing to maintain hydrogen sulfide CMS for the DHT stripper off-gas, Reformer hydrogen, and fuel gas from the fuel gas drum, or alternatively, a sulfur dioxide CMS for Flare 1.

III. NSPS Subpart Kb

16. AQCR, 20.2.77 NMAC – *New Source Performance Standards*, incorporates by reference NSPS Subpart Kb – *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984,* 40 CFR §60.110b *et seq.*

17. NSPS Subpart Kb applies to storage vessels for volatile organic liquids with a capacity equal to or greater than 40 cubic meters and constructed after July 23, 1984. 40 CFR §60.110b(a).

18. NSPS Subpart Kb, CFR §60.115b(b)(2), requires the owner or operator of a storage vessel with an exterior floating roof and a design capacity greater than 151 cubic meters

containing a volatile organic liquid with a maximum true vapor pressure between 5.2 kPa and 76.6 kPa to submit a report to the Department within 60 days of performing a seal gap measurement.

19. Tank T-32 was constructed in 1988, has an external floating roof and a capacity of 3818.7 cubic meters, and contains unleaded gasoline with a maximum true vapor pressure of 35.85 kPa.

20. Tank T-32 is subject to NSPS Subpart Kb, CFR §60.115b(b)(2).

21. Giant failed to submit a report for the gap seal measurement of Tank T-32 for the year 2000.

22. Giant violated NSPS Subpart Kb, 40 CFR §60.115b(b)(2), by failing to submit a gap seal measurement report for Tank T-32 for the year 2000.

IV. MACT Subpart CC

A. Applicability

23. The AQCR, 20.2.82 NMAC – *Maximum Achievable Control Technology Standards for Source Categories of Hazardous Air Pollutants*, incorporates by reference the federal Maximum Achievable Control Technology Standard ("MACT") Subpart CC – *National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries*, 40 CFR §63.640 *et seq.*

24. MACT Subpart CC applies to petroleum refining process units located at a major source of hazardous air pollutants identified in Section 112(a) of the federal Clean Air Act, 42 U.S.C. §7412(a), and Table 1 of MACT Subpart CC. 40 CFR §63.640(a).

25. MACT Subpart CC, 42 U.S.C. §7412(a)(1), defines a major source of hazardous air pollutants as any stationary source with the potential to emit 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants.

26. Section 112(a) of the federal Clean Air Act, 42 U.S.C. §7412(a), and Table 1 of MACT Subpart CC identifies benzene, xylene, ethyl benzene, toluene, hexane, 2,2,4-trimethylpentane, methyl tert butyl ether, and naphthalene as hazardous air pollutants.

27. MACT Subpart CC, 40 CFR §63.641, defines a petroleum refining process unit as any process unit used in an establishment engaged primarily in petroleum refining and used primarily for separating petroleum, separating, cracking and reforming intermediate petroleum streams, and producing gasoline and diesel fuels.

28. MACT Subpart CC, 40 CFR §63.641, defines a petroleum refining process unit in organic hazardous air pollutant service as any petroleum refining process unit that contains or contacts a fluid (liquid or gas) that is at least 5 percent by weight of organic HAPs.

29. The Bloomfield Refinery was constructed before 1960.

30. The Bloomfield Refinery is primarily engaged in petroleum refining.

31. The Bloomfield Refinery emits 77.874 tons per year of benzene, xylene, ethyl benzene, toluene, hexane, 2,2,4-trimethylpentane, cumene, and naphthalene.

32. The Bloomfield Refinery is an existing major source of hazardous air pollutants.

33. The Bloomfield Refinery is subject to MACT Subpart CC.

34. The Treater, Reformer, Cat-Poly, Crude, FCC, and DHT are used primarily for

separating petroleum, separating, cracking and reforming intermediate petroleum streams, and producing gasoline and diesel fuels.

35. The Treater, Reformer, Cat-Poly, Crude, FCC, and DHT are petroleum refining process units.

36. The Treater, Reformer, Cat-Poly, Crude, FCC, and DHT contain or contact a fluid that is at least 5 percent by weight of organic HAPs.

37. The Treater, Reformer, Cat-Poly, Crude, FCC, and DHT are in organic hazardous air pollutant service.

B. NSPS Subpart VV

38. MACT Subpart CC, 40 CFR §63.648(a), requires the owner or operator of a petroleum refining process unit in organic hazardous air pollutant service to comply with the provisions of NSPS Subpart VV – *Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry*, 40 CFR §60.480 *et seq.*

39. NSPS Subpart VV, 40 CFR §60.486(f)(2), requires the owner or operator of an affected facility to record, in a readily accessible log, an explanation for the designation of difficult-to-monitor valves.

40. At the time of the Department inspection, the readily accessible log did not contain an explanation for the designation of difficult-to-monitor valves in the Treater, Reformer, Cat-Poly, Crude, FCC, and DHT.

41. Giant's failure to record, in a readily accessible log, an explanation for the designation of difficult-to-monitor valves in the Treater, Reformer, Cat-Poly, Crude, FCC, and

DHT violated and continues to violate MACT Subpart CC, 40 CFR §63.648(a), and NSPS Subpart VV, 60 CFR §60.486(f)(2).

C. MACT Subpart R

42. MACT Subpart CC, 40 CFR §63.650(a), requires the owner or operator of a gasoline loading rack classified under SIC Code 2911 and located within a contiguous area and under common control with a petroleum refinery to comply with MACT Subpart R – *National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations,* §§63.421, 422(a) through (c), 63.425(a) through (c), 63.425(e) through (h), 63.427(a) and (b), and 63.428(b), (c), (g)(1), and (h)(1) through (h)(3).

43. MACT Subpart CC, 40 CFR §63.641, defines a gasoline loading rack as the loading arms, pumps, meters, shutoff valves, relief valves, and other piping and valves used to fill gasoline cargo tanks.

44. The gasoline loading rack at the Bloomfield Refinery is classified under SIC Code 2911 and located within a contiguous area and under common control with a petroleum refinery.

1. Notification of Compliance Status

45. MACT Subpart CC, 40 CFR §63.654(f), requires the owner or operator of an affected facility to submit a Notification of Compliance Status ("NOCS") no later than January 18, 1999 (150 days after the compliance date for MACT Subpart CC).

46. MACT Subpart R, 40 CFR §63.428(c)(2)(i), requires the owner or operator of a bulk gasoline terminal to report simultaneously with the NOCS all data and calculations, engineering assessments, and manufacturer's recommendations used in determining the

monitored operating parameter value ("MOPV") under MACT Subpart R, 40 CFR §63.425(b).

47. On December 17, 1998, Giant conducted a performance test on the vapor recovery system for the gasoline loading rack. The NOCS submitted by Giant did not contain the data and calculations, engineering assessments, and manufacturer's recommendations used in determining the MOPV.

48. Giant's failure to report simultaneously with the NOCS the data and calculations, engineering assessments, and manufacturer's recommendations used in determining the MOPV violated 40 CFR §63.428(c)(2)(i).

2. MOPV Determination

49. MACT Subpart R, 40 CFR §63.425(a), requires the owner or operator subject to the emission standard in MACT Subpart R, 40 CFR §63.422(b), to conduct a performance test on the vapor recovery system.

50. MACT Subpart R, 40 CFR §63.425(b), requires the owner or operator conducting the performance test to determine a MOPV for the vapor recovery system.

51. MACT Subpart R, 40 CFR §63.425(b)(2), requires the owner or operator conducting the performance test to determine the MOPV based on the parameter data monitored during the performance test, supplemented by engineering assessments and the manufacturer's recommendations.

52. On December 17, 1998, Giant conducted a performance test on the vapor recovery system. Giant determined that this test was not adequate, and on May 4, 2000, Giant conducted a second performance test on the vapor recovery system.

53. In July 2000, Giant submitted the report for the second performance test.

54. The MOPV contained in the report was not based on parameter data monitored during the second performance test.

55. Giant violated MACT Subpart CC, 40 CFR §63.650(a), and MACT Subpart R, 40 CFR §63.425(b)(2), by failing to use parameter data monitored during the performance test to determine the MOPV.

3. MOPV Compliance

56. MACT Subpart R, 40 CFR §63.427(b), requires the owner or operator to operate the vapor processing system in a manner not to exceed the MOPV.

57. MACT Subpart R, 40 CFR §63.427(b), specifies that exceeding the MOPV shall constitute a violation of the emission standard in MACT Subpart R, 40 CFR §63.422(b).

58. Giant exceeded the MOPV on April 8, 2002, March 16, 2003, and June 30, 2003.

59. Giant exceeded the MACT Subpart R emission standard on April 8, 2002, March 16, 2003, and June 30, 2003.

60. Giant violated MACT Subpart R, 40 CFR §§63.422(b) and 427(b) on April 8, 2002, March 16, 2003, and June 30, 2003.

4. MOPV Reporting

61. MACT Subpart R, 40 CFR §63.428(h), requires the owner or operator of a vapor recovery system that exceeds the MOPV to submit an excess emission report.

62. Giant did not submit excess emission reports for the MOPV exceedances on April 8, 2002, March 16, 2003, and June 30, 2003.

63. Giant violated MACT Subpart R, 40 CFR §§63.428(h), by failing to submit excess emission reports for the MOPV exceedances on April 8, 2002, March 16, 2003, and June 30, 2003.

D. MACT Subpart CC

64. MACT Subpart CC applies to Group 1 storage vessels as defined in MACT Subpart CC, 40 CFR §63.641.

65. Tanks T-11, 13, and 23 are Group 1 storage vessels.

1. Seal Gap Exceedance

66. MACT Subpart CC, 40 CFR §63.646(a), requires the owner or operator of a Group 1 storage vessel to comply with MACT Subpart G - *National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater*, 40 CFR §§63.119 through 63.121.

67. MACT Subpart G, 40 CFR §63.120(b)(1), requires the owner or operator of a Group 1 storage vessel equipped with an external floating roof to determine the maximum gap widths between the primary seal and the wall of the storage vessel.

68. MACT Subpart G, 40 CFR §63.120(b)(3), prohibits all gaps for Group 1 storage vessels from exceeding 3.81 centimeters (1.5 inches).

69. MACT Subpart CC, 40 CFR §63.654(g)(3)(i), requires the owner or operator of a Group 1 storage vessel to submit a periodic report containing the results of each seal gap measurement which detected a gap width exceeding 3.81 centimeters.

70. On November 14, 2000, Giant measured the gap widths between the primary seal and the wall of Tank T-13 and detected a maximum gap width of 5.08 centimeters.

71. On March 11, 2001, Giant submitted a periodic report that did not contain the results of the seal gap measurement for Tank T-13.

72. Giant violated MACT Subpart CC, 40 CFR §63.646(a), and MACT Subpart G, 40 CFR §63.120(b)(3), by exceeding the maximum gap width of 3.81 centimeters at Tank T-13.

73. Giant violated MACT Subpart CC, 40 CFR §63.646(a), and MACT Subpart CC, 40 CFR §63.654(g)(3)(i), by failing to submit a periodic report containing the results of the seal gap measurement on Tank T-13.

2. Seal Gap Measurement Data

74. MACT Subpart CC, 40 CFR §63.654(i) requires the owner or operator of a Group 1 storage vessel to keep the records specified in MACT Subpart G, 40 CFR §63.123.

75. MACT Subpart G, 40 CFR §63.123(d), requires the owner or operator of a Group 1 storage vessel to keep records describing the results of each seal gap measurement made in accordance with 40 CFR §63.120(b), including the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR §63.120(b)(3) and (4).

76. Giant did not record the results of the seal gap measurement made on Tank T-13 on November 14, 2000, including the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR §63.120(b)(3) and (4).

77. Giant violated MACT Subpart CC, 40 CFR §63.646(a), and MACT Subpart CC, 40 CFR §63.654(i), by failing to keep the records specified in MACT Subpart G, 40 CFR

§63.123.

78. Giant violated MACT Subpart CC, 40 CFR §63.646(a), and MACT Subpart G, 40 CFR §63.123(d), by failing to keep records describing the results of each seal gap measurement made in accordance with 40 CFR §63.120(b), including the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR §63.120(b)(3) and (4).

3. Refilling Notice

79. MACT Subpart CC, 40 CFR §63.646(a), requires the owner or operator of a Group 1 storage vessel to comply with the requirements of MACT Subpart CC, 40 CFR §§63.654(h)(2)(i)(A).

80. MACT Subpart CC, 40 CFR §§63.654(h)(2)(i)(A), requires the owner or operator of a Group 1 storage vessel to notify the Department at least 30 calendar days prior to refilling a storage vessel with organic HAPs.

81. Giant degassed Tank T-11 on September 3, 2002, and refilled it with reformate on September 24, 2002.

82. Giant degassed Tank T-23 on July 23, 2002, and refilled it with reformate on August 29, 2002.

83. Giant did not notify the Department at least 30 calendar days prior to refilling Tanks T-11 and T-23.

84. Giant violated MACT Subpart CC, 40 CFR §63.646(a), and MACT Subpart CC, 40 CFR §§63.654(h)(2)(i)(A), by failing to notify the Department at least 30 calendar days prior

to refilling Tanks T-11 and T-23.

V. NSR Permit

85. During all times relevant hereto, the NSR Permit, Condition 2 and Table 1, established emission limits for Flare 1.

86. During all times relevant hereto, the emission limits for Flare 1 were based on the combustion of pilot gas only:

PM	0.01 lb/hr
CO	0.13 lb/hr
NOx	0.54 lb/hr
VOCs	0.01 lb/hr
SO_2	0.07 lb/hr

87. Between October 1, 2001 and December 31, 2003, Flare 1 exceeded its emission limits on multiple days:

PM	505 days
CO	503 days
NOx	502 days
VOCs	505 days
SO_2	515 days

Exhibit A.

88. Giant violated the NSR Permit by exceeding the emission limits for Flare 1 as described in Paragraph 87.

COMPLIANCE ORDER

89. AQCA §74-2-12.A authorizes the Secretary to issue a compliance order requiring compliance immediately or within a specified time period with any AQCR or permit condition.

90. No further action is required.

CIVIL PENALTY

91. AQCA §74-2-12.A authorizes the Secretary to issue a compliance order assessing a civil penalty for any violation of an AQCR or permit condition.

92. AQCA §74-2-12.B authorizes the Secretary to assess a civil penalty of fifteen thousand dollars ($15,000.00) per day of noncompliance for each violation of an AQCR or permit condition.

93. Pursuant to the Air Quality Bureau Civil Penalty Policy, the Department assesses a civil penalty of $589,052.00 for the violations described above. Exhibit B.

NOTICE OF OPPORTUNITY TO ANSWER AND REQUEST A HEARING

94. Pursuant to AQCA §74-2-12.C and the Department's Adjudicatory Procedures, 20.1.5.200 NMAC, Giant may request a hearing by filing a written request for a public hearing with the hearing clerk no later than thirty days from receipt of this Order. The request for hearing shall include an Answer:

a. Admitting or denying each alleged finding of fact. Any alleged finding of fact which is not specifically denied shall be deemed to be admitted. Giant may assert that it has insufficient knowledge of any alleged finding of fact, and such finding shall be deemed to be denied;

b. Asserting any affirmative defense upon which Giant intends to rely. Any affirmative defense not asserted in the Answer, except an affirmative defense asserting lack of subject matter jurisdiction, shall be deemed to be waived;

c. Signed under oath or affirmation that the information contained therein is

true and correct to the best of the signatory's knowledge; and

d. Attaching a copy of this Order.

95. This Order shall become final upon Giant's receipt of the Order unless Giant files a Request for Hearing and Answer as set forth above. Giant may file a Request for Hearing and Answer at the following address:

Hearing Clerk
New Mexico Environment Department
P.O. Box 261 1 0
Santa Fe, New Mexico 87502-6110

96. The public hearing shall be governed by the Department's Adjudicatory Procedures, 20.1.5 NMAC (copy attached).

SETTLEMENT CONFERENCE

97. Giant may confer with the Department regarding settlement at any time, but a settlement conference or request for a settlement conference shall not extend or waive the deadline for filing a Request for Hearing or Answer. Giant may appear at a settlement conference *pro se* or through counsel. The EPD Director shall execute any settlement as a Stipulated Final Order. A Stipulated Final Order shall resolve all issues raised in this Order, shall bind all parties to this Order, and shall not be appealable.

To confer regarding settlement, contact:

Eric Ames, Esq.
Office of General Counsel
New Mexico Environment Department
P.O. Box 26110
Santa Fe, New Mexico 87502-6110
Telephone: (505) 827-2982
Facsimile: (505) 827-2836

TERMINATION

98. This Order shall terminate upon the EPD Director's approval of a Stipulated Final Order.

BY: _____ **DATE:** 6/2/05

JIM NORTON
DIVISION DIRECTOR

CERTIFICATE OF SERVICE

I certify that on June 3, 2005, I mailed this pleading by First Class U.S. Mail to:

Louis W. Rose, Esq.
P.O. Box 2307
Santa Fe, New Mexico 87504-2307

_____
Eric Ames

	A	B	C	D	E	F	G	H	I	J	K
1	Giant Bloomfield Emissions due to Flaring of Excess Hydrogen and Fuel Gas 10/1/02 to 12/31/03										
3					PM	CO	NOx	VOC	Hydrogen SO_2	Fuel Gas SO_2	Total SO_2
4											
5		Emission Factors, lbs/MMscf (1), (2)			3	35	140	2.8	29.39	15.11	
6		Emission Limits, lbs/hr (3)			0.01	0.13	0.54	0.01			0.07
8		Gas Flow MMscf/Day			Total Emissions, lb/hr (4), (5)						
9		Hydrogen	Fuel Gas	Total Gas					Hydrogen	Fuel Gas	Total
10	DATE	to Flare	To Flare	to Flare	PM	CO	NOx	VOC	SO_2	SO_2	SO_2 lb/hr
11	10/1/2001	0.223	0.000	0.223	0.028	0.325	1.301	0.026	0.273	0.000	0.273
12	10/2/2001	0.223	0.000	0.223	0.028	0.325	1.301	0.026	0.273	0.000	0.273
13	10/3/2001	0.230	0.000	0.230	0.029	0.335	1.342	0.027	0.282	0.000	0.282
14	10/4/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	10/5/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	10/6/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	10/7/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	10/8/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	10/9/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	10/10/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21	10/11/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22	10/12/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	10/13/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	10/14/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	10/15/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26	10/16/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27	10/17/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28	10/18/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29	10/19/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	10/20/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	10/21/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	10/22/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	10/23/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	10/24/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	10/25/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	10/26/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	10/27/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	10/28/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	10/29/2001	1.419	0.000	1.419	0.177	2.069	8.278	0.166	1.738	0.000	1.738
40	10/30/2001	1.442	0.301	1.743	0.218	2.542	10.168	0.203	1.766	0.190	1.955
41	10/31/2001	0.000	0.885	0.885	0.111	1.291	5.163	0.103	0.000	0.557	0.557
42	11/1/2001	0.000	0.885	0.885	0.111	1.291	5.163	0.103	0.000	0.557	0.557
43	11/2/2001	0.000	0.885	0.885	0.111	1.291	5.163	0.103	0.000	0.557	0.557
44	11/3/2001	0.089	0.000	0.089	0.011	0.130	0.519	0.010	0.109	0.000	0.109
45	11/4/2001	0.089	0.000	0.089	0.011	0.130	0.519	0.010	0.109	0.000	0.109
46	11/5/2001	0.291	0.113	0.404	0.051	0.589	2.357	0.047	0.356	0.071	0.427
47	11/6/2001	0.000	1.280	1.280	0.160	1.867	7.467	0.149	0.000	0.806	0.806
48	11/7/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
49	11/8/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	11/9/2001	0.114	0.075	0.189	0.024	0.276	1.103	0.022	0.140	0.047	0.187
51	11/10/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52	11/11/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
53	11/12/2001	0.091	0.000	0.091	0.011	0.133	0.531	0.011	0.111	0.000	0.111
54	11/13/2001	0.000	0.151	0.151	0.019	0.220	0.881	0.018	0.000	0.095	0.095
55	11/14/2001	0.433	0.151	0.584	0.073	0.852	3.407	0.068	0.530	0.095	0.625
56	11/15/2001	0.160	0.151	0.311	0.039	0.454	1.814	0.036	0.196	0.095	0.291
57	11/16/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58	11/17/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59	11/18/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	11/19/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
61	11/20/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62	11/21/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
63	11/22/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64	11/23/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	11/24/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
66	11/25/2001	0.206	0.000	0.206	0.026	0.300	1.202	0.024	0.252	0.000	0.252
67	11/26/2001	0.664	0.000	0.664	0.083	0.968	3.873	0.077	0.813	0.000	0.813
68	11/27/2001	0.046	0.000	0.046	0.006	0.067	0.268	0.005	0.056	0.000	0.056
69	11/28/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
70	11/29/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
71	11/30/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72	12/1/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

	A	B	C	D	E	F	G	H	I	J	K
1	Giant Bloomfield Emissions due to Flaring of Excess Hydrogen and Fuel Gas 10/1/02 to 12/31/03										
3					PM	CO	NOx	VOC	Hydrogen SO_2	Fuel Gas SO_2	Total SO_2
4											
5		Emission Factors, lbs/MMscf (1), (2)			3	35	140	2.8	29.39	15.11	
6		Emission Limits, lbs/hr (3)			0.01	0.13	0.54	0.01			0.07
8		Gas Flow MMscf/Day			Total Emissions, lb/hr (4), (5)						
9		Hydrogen	Fuel Gas	Total Gas					Hydrogen	Fuel Gas	Total
10	DATE	to Flare	To Flare	to Flare	PM	CO	NOx	VOC	SO_2	SO_2	SO_2, lb/hr
73	12/2/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74	12/3/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75	12/4/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76	12/5/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
77	12/6/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
78	12/7/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
79	12/8/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80	12/9/2001	0.137	0.000	0.137	0.017	0.200	0.799	0.016	0.168	0.000	0.168
81	12/10/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
82	12/11/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
83	12/12/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84	12/13/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
85	12/14/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
86	12/15/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
87	12/16/2001	0.000	0.263	0.263	0.033	0.384	1.534	0.031	0.000	0.166	0.166
88	12/17/2001	0.000	0.433	0.433	0.054	0.631	2.526	0.051	0.000	0.273	0.273
89	12/18/2001	0.000	0.320	0.320	0.040	0.467	1.867	0.037	0.000	0.201	0.201
90	12/19/2001	0.000	0.188	0.188	0.024	0.274	1.097	0.022	0.000	0.118	0.118
91	12/20/2001	0.000	0.282	0.282	0.035	0.411	1.645	0.033	0.000	0.178	0.178
92	12/21/2001	0.000	0.282	0.282	0.035	0.411	1.645	0.033	0.000	0.178	0.178
93	12/22/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
94	12/23/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	12/24/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96	12/25/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97	12/26/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
98	12/27/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
99	12/28/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100	12/29/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
101	12/30/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
102	12/31/2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
103	1/1/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
104	1/2/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105	1/3/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
106	1/4/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
107	1/5/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
108	1/6/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
109	1/7/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110	1/8/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
111	1/9/2002	0.000	0.188	0.188	0.024	0.274	1.097	0.022	0.000	0.118	0.118
112	1/10/2002	0.000	0.263	0.263	0.033	0.384	1.534	0.031	0.000	0.166	0.166
113	1/11/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
114	1/12/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115	1/13/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
116	1/14/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
117	1/15/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
118	1/16/2002	0.000	0.113	0.113	0.014	0.165	0.659	0.013	0.000	0.071	0.071
119	1/17/2002	0.000	0.056	0.056	0.007	0.082	0.327	0.007	0.000	0.035	0.035
120	1/18/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
121	1/19/2002	0.000	0.546	0.546	0.068	0.796	3.185	0.064	0.000	0.344	0.344
122	1/20/2002	0.000	0.141	0.141	0.018	0.206	0.823	0.016	0.000	0.089	0.089
123	1/21/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
124	1/22/2002	0.285	0.376	0.661	0.083	0.964	3.856	0.077	0.349	0.237	0.586
125	1/23/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
126	1/24/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127	1/25/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
128	1/26/2002	0.784	0.000	0.784	0.098	1.143	4.573	0.091	0.960	0.000	0.960
129	1/27/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130	1/28/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
131	1/29/2002	0.000	0.038	0.038	0.005	0.055	0.222	0.004	0.000	0.024	0.024
132	1/30/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
133	1/31/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
134	2/1/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

	A	B	C	D	E	F	G	H	I	J	K
1	Giant Bloomfield Emissions due to Flaring of Excess Hydrogen and Fuel Gas 10/1/02 to 12/31/03										
3					PM	CO	NOx	VOC	Hydrogen SO_2	Fuel Gas SO_2	Total SO_2
4											
5		Emission Factors, lbs/MMscf (1), (2)			3	35	140	2.8	29.39	15.11	
6		Emission Limits, lbs/hr (3)			0.01	0.13	0.54	0.01			0.07
8		Gas Flow MMscf/Day			Total Emissions, lb/hr (4), (5)						
9		Hydrogen	Fuel Gas	Total Gas					Hydrogen	Fuel Gas	Total
10	DATE	to Flare	To Flare	to Flare	PM	CO	NOx	VOC	SO_2	SO_2	SO_2 lb/hr
135	2/2/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
136	2/3/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
137	2/4/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
138	2/5/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
139	2/6/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140	2/7/2002	0.432	0.000	0.432	0.054	0.630	2.520	0.050	0.529	0.000	0.529
141	2/8/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
142	2/9/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
143	2/10/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
144	2/11/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145	2/12/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
146	2/13/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147	2/14/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
148	2/15/2002	0.270	0.000	0.270	0.034	0.394	1.575	0.032	0.331	0.000	0.331
149	2/16/2002	0.383	0.000	0.383	0.048	0.559	2.234	0.045	0.469	0.000	0.469
150	2/17/2002	0.383	0.000	0.383	0.048	0.559	2.234	0.045	0.469	0.000	0.469
151	2/18/2002	0.135	0.000	0.135	0.017	0.197	0.788	0.016	0.165	0.000	0.165
152	2/19/2002	0.518	0.000	0.518	0.065	0.755	3.022	0.060	0.634	0.000	0.634
153	2/20/2002	0.270	0.000	0.270	0.034	0.394	1.575	0.032	0.331	0.000	0.331
154	2/21/2002	0.496	0.000	0.496	0.062	0.723	2.893	0.058	0.607	0.000	0.607
155	2/22/2002	0.315	0.000	0.315	0.039	0.459	1.838	0.037	0.386	0.000	0.386
156	2/23/2002	0.361	0.000	0.361	0.045	0.526	2.106	0.042	0.442	0.000	0.442
157	2/24/2002	0.113	0.000	0.113	0.014	0.165	0.659	0.013	0.138	0.000	0.138
158	2/25/2002	0.113	0.000	0.113	0.014	0.165	0.659	0.013	0.138	0.000	0.138
159	2/26/2002	0.135	0.000	0.135	0.017	0.197	0.788	0.016	0.165	0.000	0.165
160	2/27/2002	0.135	0.000	0.135	0.017	0.197	0.788	0.016	0.165	0.000	0.165
161	2/28/2002	0.135	0.000	0.135	0.017	0.197	0.788	0.016	0.165	0.000	0.165
162	3/1/2002	0.971	0.000	0.971	0.121	1.416	5.664	0.113	1.189	0.000	1.189
163	3/2/2002	0.929	0.000	0.929	0.116	1.355	5.419	0.108	1.138	0.000	1.138
164	3/3/2002	1.115	0.000	1.115	0.139	1.626	6.504	0.130	1.365	0.000	1.365
165	3/4/2002	1.260	0.000	1.260	0.158	1.838	7.350	0.147	1.543	0.000	1.543
166	3/5/2002	0.578	0.000	0.578	0.072	0.843	3.372	0.067	0.708	0.000	0.708
167	3/6/2002	0.064	0.000	0.064	0.008	0.093	0.373	0.007	0.078	0.000	0.078
168	3/7/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
169	3/8/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170	3/9/2002	0.473	0.000	0.473	0.059	0.690	2.759	0.055	0.579	0.000	0.579
171	3/10/2002	1.059	0.000	1.059	0.132	1.544	6.178	0.124	1.297	0.000	1.297
172	3/11/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
173	3/12/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
174	3/13/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175	3/14/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
176	3/15/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177	3/16/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
178	3/17/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
179	3/18/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180	3/19/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
181	3/20/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
182	3/21/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
183	3/22/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
184	3/23/2002	0.225	0.000	0.225	0.028	0.328	1.313	0.026	0.276	0.000	0.276
185	3/24/2002	1.351	0.000	1.351	0.169	1.970	7.881	0.158	1.654	0.000	1.654
186	3/25/2002	1.802	0.000	1.802	0.225	2.628	10.512	0.210	2.207	0.000	2.207
187	3/26/2002	1.036	0.000	1.036	0.130	1.511	6.043	0.121	1.269	0.000	1.269
188	3/27/2002	0.457	0.000	0.457	0.057	0.666	2.666	0.053	0.560	0.000	0.560
189	3/28/2002	2.252	0.414	2.666	0.333	3.888	15.552	0.311	2.758	0.261	3.018
190	3/29/2002	1.329	0.000	1.329	0.166	1.938	7.753	0.155	1.627	0.000	1.627
191	3/30/2002	0.203	0.000	0.203	0.025	0.296	1.184	0.024	0.249	0.000	0.249
192	3/31/2002	4.488	0.000	4.488	0.561	6.545	26.180	0.524	5.496	0.000	5.496
193	4/1/2002	3.663	0.169	3.832	0.479	5.588	22.353	0.447	4.486	0.106	4.592
194	4/2/2002	3.786	0.000	3.786	0.473	5.521	22.085	0.442	4.636	0.000	4.636
195	4/3/2002	1.440	0.602	2.042	0.255	2.978	11.912	0.238	1.763	0.379	2.142
196	4/4/2002	2.551	0.000	2.551	0.319	3.720	14.881	0.298	3.124	0.000	3.124

	A	B	C	D	E	F	G	H	I	J	K
1	Giant Bloomfield Emissions due to Flaring of Excess Hydrogen and Fuel Gas 10/1/02 to 12/31/03										
3					PM	CO	NOx	VOC	Hydrogen SO_2	Fuel Gas SO_2	Total SO_2
4											
5		Emission Factors, lbs/MMscf (1), (2)			3	35	140	2.8	29.39	15.11	
6		Emission Limits, lbs/hr (3)			0.01	0.13	0.54	0.01			0.07
8		Gas Flow MMscf/Day			Total Emissions, lb/hr (4), (5)						
9		Hydrogen	Fuel Gas	Total Gas					Hydrogen	Fuel Gas	Total
10	DATE	to Flare	To Flare	to Flare	PM	CO	NOx	VOC	SO_2	SO_2	SO_2 lb/hr
197	4/5/2002	2.305	0.000	2.305	0.288	3.361	13.446	0.269	2.823	0.000	2.823
198	4/6/2002	1.193	0.000	1.193	0.149	1.740	6.959	0.139	1.461	0.000	1.461
199	4/7/2002	0.741	0.000	0.741	0.093	1.081	4.323	0.086	0.907	0.000	0.907
200	4/8/2002	0.288	0.000	0.288	0.036	0.420	1.680	0.034	0.353	0.000	0.353
201	4/9/2002	1.482	0.000	1.482	0.185	2.161	8.645	0.173	1.815	0.000	1.815
202	4/10/2002	3.910	0.263	4.173	0.522	6.086	24.343	0.487	4.788	0.166	4.954
203	4/11/2002	1.887	0.000	1.887	0.236	2.752	11.008	0.220	2.311	0.000	2.311
204	4/12/2002	3.011	0.000	3.011	0.376	4.391	17.564	0.351	3.687	0.000	3.687
205	4/13/2002	3.332	0.000	3.332	0.417	4.859	19.437	0.389	4.080	0.000	4.080
206	4/14/2002	3.412	0.000	3.412	0.427	4.976	19.903	0.398	4.178	0.000	4.178
207	4/15/2002	3.853	0.062	3.915	0.489	5.709	22.838	0.457	4.718	0.039	4.757
208	4/16/2002	4.014	0.000	4.014	0.502	5.854	23.415	0.468	4.915	0.000	4.915
209	4/17/2002	3.292	0.000	3.292	0.412	4.801	19.203	0.384	4.031	0.000	4.031
210	4/18/2002	2.168	0.000	2.168	0.271	3.162	12.647	0.253	2.655	0.000	2.655
211	4/19/2002	1.525	0.000	1.525	0.191	2.224	8.896	0.178	1.867	0.000	1.867
212	4/20/2002	1.204	0.000	1.204	0.151	1.756	7.023	0.140	1.474	0.000	1.474
213	4/21/2002	1.044	0.000	1.044	0.131	1.523	6.090	0.122	1.278	0.000	1.278
214	4/22/2002	1.004	0.000	1.004	0.126	1.464	5.857	0.117	1.229	0.000	1.229
215	4/23/2002	1.525	0.000	1.525	0.191	2.224	8.896	0.178	1.867	0.000	1.867
216	4/24/2002	1.606	0.000	1.606	0.201	2.342	9.368	0.187	1.967	0.000	1.967
217	4/25/2002	1.606	0.000	1.606	0.201	2.342	9.368	0.187	1.967	0.000	1.967
218	4/26/2002	1.726	0.000	1.726	0.216	2.517	10.068	0.201	2.114	0.000	2.114
219	4/27/2002	1.124	0.000	1.124	0.141	1.639	6.557	0.131	1.376	0.000	1.376
220	4/28/2002	1.846	0.000	1.846	0.231	2.692	10.768	0.215	2.261	0.000	2.261
221	4/29/2002	1.887	0.000	1.887	0.236	2.752	11.008	0.220	2.311	0.000	2.311
222	4/30/2002	0.778	0.000	0.778	0.097	1.135	4.538	0.091	0.953	0.000	0.953
223	5/1/2002	0.237	0.000	0.237	0.030	0.346	1.383	0.028	0.290	0.000	0.290
224	5/2/2002	0.063	0.000	0.063	0.008	0.092	0.368	0.007	0.077	0.000	0.077
225	5/3/2002	0.188	0.000	0.188	0.024	0.274	1.097	0.022	0.230	0.000	0.230
226	5/4/2002	0.585	0.000	0.585	0.073	0.853	3.413	0.068	0.716	0.000	0.716
227	5/5/2002	0.919	0.000	0.919	0.115	1.340	5.361	0.107	1.125	0.000	1.125
228	5/6/2002	0.814	0.000	0.814	0.102	1.187	4.748	0.095	0.997	0.000	0.997
229	5/7/2002	0.710	1.846	2.556	0.320	3.728	14.910	0.298	0.869	1.162	2.032
230	5/8/2002	0.751	0.000	0.751	0.094	1.095	4.381	0.088	0.920	0.000	0.920
231	5/9/2002	0.612	0.000	0.612	0.077	0.893	3.570	0.071	0.749	0.000	0.749
232	5/10/2002	1.183	0.000	1.183	0.148	1.725	6.901	0.138	1.449	0.000	1.449
233	5/11/2002	1.183	0.000	1.183	0.148	1.725	6.901	0.138	1.449	0.000	1.449
234	5/12/2002	0.675	0.000	0.675	0.084	0.984	3.938	0.079	0.827	0.000	0.827
235	5/13/2002	1.162	0.000	1.162	0.145	1.695	6.778	0.136	1.423	0.000	1.423
236	5/14/2002	1.562	0.000	1.562	0.195	2.278	9.112	0.182	1.913	0.000	1.913
237	5/15/2002	1.817	0.000	1.817	0.227	2.650	10.599	0.212	2.225	0.000	2.225
238	5/16/2002	1.972	0.000	1.972	0.247	2.876	11.503	0.230	2.415	0.000	2.415
239	5/17/2002	1.928	0.000	1.928	0.241	2.812	11.247	0.225	2.361	0.000	2.361
240	5/18/2002	1.861	0.000	1.861	0.233	2.714	10.856	0.217	2.279	0.000	2.279
241	5/19/2002	1.774	0.000	1.774	0.222	2.587	10.348	0.207	2.172	0.000	2.172
242	5/20/2002	1.774	0.000	1.774	0.222	2.587	10.348	0.207	2.172	0.000	2.172
243	5/21/2002	1.774	0.000	1.774	0.222	2.587	10.348	0.207	2.172	0.000	2.172
244	5/22/2002	0.394	0.000	0.394	0.049	0.575	2.298	0.046	0.482	0.000	0.482
245	5/23/2002	1.819	0.000	1.819	0.227	2.653	10.611	0.212	2.228	0.000	2.228
246	5/24/2002	1.512	0.000	1.512	0.189	2.205	8.820	0.176	1.852	0.000	1.852
247	5/25/2002	0.898	0.000	0.898	0.112	1.310	5.238	0.105	1.100	0.000	1.100
248	5/26/2002	1.841	0.000	1.841	0.230	2.685	10.739	0.215	2.254	0.000	2.254
249	5/27/2002	1.928	0.000	1.928	0.241	2.812	11.247	0.225	2.361	0.000	2.361
250	5/28/2002	2.318	0.000	2.318	0.290	3.380	13.522	0.270	2.839	0.000	2.839
251	5/29/2002	2.318	0.000	2.318	0.290	3.380	13.522	0.270	2.839	0.000	2.839
252	5/30/2002	2.437	0.000	2.437	0.305	3.554	14.216	0.284	2.984	0.000	2.984
253	5/31/2002	2.635	0.226	2.861	0.358	4.172	16.689	0.334	3.227	0.142	3.369
254	6/1/2002	2.756	0.094	2.850	0.356	4.156	16.625	0.333	3.375	0.059	3.434
255	6/2/2002	2.737	0.000	2.737	0.342	3.991	15.966	0.319	3.352	0.000	3.352
256	6/3/2002	2.350	0.000	2.350	0.294	3.427	13.708	0.274	2.878	0.000	2.878
257	6/4/2002	2.156	0.282	2.438	0.305	3.555	14.222	0.284	2.640	0.178	2.818
258	6/5/2002	2.377	0.000	2.377	0.297	3.466	13.866	0.277	2.911	0.000	2.911

	A	B	C	D	E	F	G	H	I	J	K
1	Giant Bloomfield Emissions due to Flaring of Excess Hydrogen and Fuel Gas 10/1/02 to 12/31/03										
3					PM	CO	NOx	VOC	Hydrogen SO_2	Fuel Gas SO_2	Total SO_2
4		Emission Factors, lbs/MMscf (1), (2)			3	35	140	2.8	29.39	15.11	
5		Emission Limits, lbs/hr (3)			0.01	0.13	0.54	0.01			0.07
6											
8		Gas Flow MMscf/Day			Total Emissions, lb/hr (4), (5)						
9		Hydrogen	Fuel Gas	Total Gas					Hydrogen	Fuel Gas	Total
10	DATE	to Flare	To Flare	to Flare	PM	CO	NOx	VOC	SO_2	SO_2	SO_2 lb/hr
259	6/6/2002	2.293	0.000	2.293	0.287	3.344	13.376	0.268	2.808	0.000	2.808
260	6/7/2002	2.266	0.000	2.266	0.283	3.305	13.218	0.264	2.775	0.000	2.775
261	6/8/2002	1.858	0.000	1.858	0.232	2.710	10.838	0.217	2.275	0.000	2.275
262	6/9/2002	1.840	0.000	1.840	0.230	2.683	10.733	0.215	2.253	0.000	2.253
263	6/10/2002	1.493	0.000	1.493	0.187	2.177	8.709	0.174	1.828	0.000	1.828
264	6/11/2002	1.546	0.000	1.546	0.193	2.255	9.018	0.180	1.893	0.000	1.893
265	6/12/2002	1.680	0.000	1.680	0.210	2.450	9.800	0.196	2.057	0.000	2.057
266	6/13/2002	1.351	0.000	1.351	0.169	1.970	7.881	0.158	1.654	0.000	1.654
267	6/14/2002	1.642	0.000	1.642	0.205	2.395	9.578	0.192	2.011	0.000	2.011
268	6/15/2002	0.662	0.000	0.662	0.083	0.965	3.862	0.077	0.811	0.000	0.811
269	6/16/2002	0.715	0.000	0.715	0.089	1.043	4.171	0.083	0.876	0.000	0.876
270	6/17/2002	1.059	0.000	1.059	0.132	1.544	6.178	0.124	1.297	0.000	1.297
271	6/18/2002	1.218	0.000	1.218	0.152	1.776	7.105	0.142	1.492	0.000	1.492
272	6/19/2002	1.801	0.000	1.801	0.225	2.626	10.506	0.210	2.205	0.000	2.205
273	6/20/2002	0.830	0.000	0.830	0.104	1.210	4.842	0.097	1.016	0.000	1.016
274	6/21/2002	1.297	0.000	1.297	0.162	1.891	7.566	0.151	1.588	0.000	1.588
275	6/22/2002	0.597	0.000	0.597	0.075	0.871	3.483	0.070	0.731	0.000	0.731
276	6/23/2002	0.908	0.000	0.908	0.114	1.324	5.297	0.106	1.112	0.000	1.112
277	6/24/2002	1.323	0.000	1.323	0.165	1.929	7.718	0.154	1.620	0.000	1.620
278	6/25/2002	2.179	0.000	2.179	0.272	3.178	12.711	0.254	2.668	0.000	2.668
279	6/26/2002	0.882	0.000	0.882	0.110	1.286	5.145	0.103	1.080	0.000	1.080
280	6/27/2002	1.944	0.000	1.944	0.243	2.835	11.340	0.227	2.381	0.000	2.381
281	6/28/2002	1.944	0.000	1.944	0.243	2.835	11.340	0.227	2.381	0.000	2.381
282	6/29/2002	1.471	0.000	1.471	0.184	2.145	8.581	0.172	1.801	0.000	1.801
283	6/30/2002	1.362	0.000	1.362	0.170	1.986	7.945	0.159	1.668	0.000	1.668
284	7/1/2002	1.366	0.000	1.366	0.171	1.992	7.968	0.159	1.673	0.000	1.673
285	7/2/2002	1.261	0.000	1.261	0.158	1.839	7.356	0.147	1.544	0.000	1.544
286	7/3/2002	0.893	0.000	0.893	0.112	1.302	5.209	0.104	1.094	0.000	1.094
287	7/4/2002	0.788	0.000	0.788	0.099	1.149	4.597	0.092	0.965	0.000	0.965
288	7/5/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
289	7/6/2002	0.045	0.000	0.045	0.006	0.066	0.263	0.005	0.055	0.000	0.055
290	7/7/2002	0.683	0.000	0.683	0.085	0.996	3.984	0.080	0.836	0.000	0.836
291	7/8/2002	0.342	0.000	0.342	0.043	0.499	1.995	0.040	0.419	0.000	0.419
292	7/9/2002	0.709	0.000	0.709	0.089	1.034	4.136	0.083	0.868	0.000	0.868
293	7/10/2002	1.393	0.000	1.393	0.174	2.031	8.126	0.163	1.706	0.000	1.706
294	7/11/2002	1.311	0.000	1.311	0.164	1.912	7.648	0.153	1.605	0.000	1.605
295	7/12/2002	0.813	0.000	0.813	0.102	1.186	4.743	0.095	0.996	0.000	0.996
296	7/13/2002	0.682	0.000	0.682	0.085	0.995	3.978	0.080	0.835	0.000	0.835
297	7/14/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
298	7/15/2002	1.154	0.000	1.154	0.144	1.683	6.732	0.135	1.413	0.000	1.413
299	7/16/2002	0.524	0.000	0.524	0.066	0.764	3.057	0.061	0.642	0.000	0.642
300	7/17/2002	0.656	0.000	0.656	0.082	0.957	3.827	0.077	0.803	0.000	0.803
301	7/18/2002	0.575	0.000	0.575	0.072	0.839	3.354	0.067	0.704	0.000	0.704
302	7/19/2002	0.875	0.000	0.875	0.109	1.276	5.104	0.102	1.072	0.000	1.072
303	7/20/2002	0.950	0.000	0.950	0.119	1.385	5.542	0.111	1.163	0.000	1.163
304	7/21/2002	1.025	0.000	1.025	0.128	1.495	5.979	0.120	1.255	0.000	1.255
305	7/22/2002	1.075	0.000	1.075	0.134	1.568	6.271	0.125	1.316	0.000	1.316
306	7/23/2002	1.250	0.000	1.250	0.156	1.823	7.292	0.146	1.531	0.000	1.531
307	7/24/2002	2.050	0.000	2.050	0.256	2.990	11.958	0.239	2.510	0.000	2.510
308	7/25/2002	1.100	0.000	1.100	0.138	1.604	6.417	0.128	1.347	0.000	1.347
309	7/26/2002	0.800	0.000	0.800	0.100	1.167	4.667	0.093	0.980	0.000	0.980
310	7/27/2002	1.125	0.000	1.125	0.141	1.641	6.563	0.131	1.378	0.000	1.378
311	7/28/2002	1.300	0.000	1.300	0.163	1.896	7.583	0.152	1.592	0.000	1.592
312	7/29/2002	1.575	0.000	1.575	0.197	2.297	9.188	0.184	1.929	0.000	1.929
313	7/30/2002	1.700	0.000	1.700	0.213	2.479	9.917	0.198	2.082	0.000	2.082
314	7/31/2002	1.670	0.000	1.670	0.209	2.435	9.742	0.195	2.045	0.000	2.045
315	8/1/2002	1.841	0.000	1.841	0.230	2.685	10.739	0.215	2.254	0.000	2.254
316	8/2/2002	1.925	0.000	1.925	0.241	2.807	11.229	0.225	2.357	0.000	2.357
317	8/3/2002	1.925	0.000	1.925	0.241	2.807	11.229	0.225	2.357	0.000	2.357
318	8/4/2002	1.981	0.000	1.981	0.248	2.889	11.556	0.231	2.426	0.000	2.426
319	8/5/2002	1.897	0.000	1.897	0.237	2.766	11.066	0.221	2.323	0.000	2.323
320	8/6/2002	1.758	0.000	1.758	0.220	2.564	10.255	0.205	2.153	0.000	2.153

	A	B	C	D	E	F	G	H	I	J	K
1	Giant Bloomfield Emissions due to Flaring of Excess Hydrogen and Fuel Gas 10/1/02 to 12/31/03										
3									Hydrogen	Fuel Gas	Total
4					PM	CO	NOx	VOC	SO_2	SO_2	SO_2
5		Emission Factors, lbs/MMscf (1), (2)			3	35	140	2.8	29.39	15.11	
6		Emission Limits, lbs/hr (3)			0.01	0.13	0.54	0.01			0.07
8		Gas Flow MMscf/Day			Total Emissions, lb/hr (4), (5)						
9		Hydrogen	Fuel Gas	Total Gas					Hydrogen	Fuel Gas	Total
10	DATE	to Flare	To Flare	to Flare	PM	CO	NOx	VOC	SO_2	SO_2	SO_2 lb/hr
321	8/7/2002	1.869	0.000	1.869	0.234	2.726	10.903	0.218	2.289	0.000	2.289
322	8/8/2002	1.987	0.000	1.987	0.248	2.898	11.591	0.232	2.433	0.000	2.433
323	8/9/2002	1.932	0.000	1.932	0.242	2.818	11.270	0.225	2.366	0.000	2.366
324	8/10/2002	1.905	0.000	1.905	0.238	2.778	11.113	0.222	2.333	0.000	2.333
325	8/11/2002	1.878	0.000	1.878	0.235	2.739	10.955	0.219	2.300	0.000	2.300
326	8/12/2002	1.252	0.000	1.252	0.157	1.826	7.303	0.146	1.533	0.000	1.533
327	8/13/2002	1.660	0.000	1.660	0.208	2.421	9.683	0.194	2.033	0.000	2.033
328	8/14/2002	2.014	0.000	2.014	0.252	2.937	11.748	0.235	2.466	0.000	2.466
329	8/15/2002	1.769	0.000	1.769	0.221	2.580	10.319	0.206	2.166	0.000	2.166
330	8/16/2002	2.286	0.000	2.286	0.286	3.334	13.335	0.267	2.799	0.000	2.799
331	8/17/2002	2.286	0.000	2.286	0.286	3.334	13.335	0.267	2.799	0.000	2.799
332	8/18/2002	2.422	0.000	2.422	0.303	3.532	14.128	0.283	2.966	0.000	2.966
333	8/19/2002	2.204	0.245	2.449	0.306	3.571	14.286	0.286	2.699	0.154	2.853
334	8/20/2002	1.224	0.226	1.450	0.181	2.115	8.458	0.169	1.499	0.142	1.641
335	8/21/2002	0.517	0.000	0.517	0.065	0.754	3.016	0.060	0.633	0.000	0.633
336	8/22/2002	0.875	0.000	0.875	0.109	1.276	5.104	0.102	1.072	0.000	1.072
337	8/23/2002	0.452	0.000	0.452	0.057	0.659	2.637	0.053	0.554	0.000	0.554
338	8/24/2002	1.864	0.000	1.864	0.233	2.718	10.873	0.217	2.283	0.000	2.283
339	8/25/2002	1.779	0.000	1.779	0.222	2.594	10.378	0.208	2.179	0.000	2.179
340	8/26/2002	2.245	0.088	2.333	0.292	3.402	13.609	0.272	2.749	0.055	2.805
341	8/27/2002	2.654	0.077	2.731	0.341	3.983	15.931	0.319	3.250	0.048	3.299
342	8/28/2002	2.174	0.000	2.174	0.272	3.170	12.682	0.254	2.662	0.000	2.662
343	8/29/2002	1.371	0.000	1.371	0.171	1.999	7.998	0.160	1.679	0.000	1.679
344	8/30/2002	1.263	0.000	1.263	0.158	1.842	7.368	0.147	1.547	0.000	1.547
345	8/31/2002	0.906	0.000	0.906	0.113	1.321	5.285	0.106	1.109	0.000	1.109
346	9/1/2002	1.048	0.000	1.048	0.131	1.528	6.113	0.122	1.283	0.000	1.283
347	9/2/2002	0.833	0.000	0.833	0.104	1.215	4.859	0.097	1.020	0.000	1.020
348	9/3/2002	1.102	0.000	1.102	0.138	1.607	6.428	0.129	1.349	0.000	1.349
349	9/4/2002	1.048	0.000	1.048	0.131	1.528	6.113	0.122	1.283	0.000	1.283
350	9/5/2002	1.105	0.000	1.105	0.138	1.611	6.446	0.129	1.353	0.000	1.353
351	9/6/2002	1.052	0.000	1.052	0.132	1.534	6.137	0.123	1.288	0.000	1.288
352	9/7/2002	0.710	0.000	0.710	0.089	1.035	4.142	0.083	0.869	0.000	0.869
353	9/8/2002	0.921	0.000	0.921	0.115	1.343	5.373	0.107	1.128	0.000	1.128
354	9/9/2002	0.447	0.000	0.447	0.056	0.652	2.608	0.052	0.547	0.000	0.547
355	9/10/2002	0.658	0.000	0.658	0.082	0.960	3.838	0.077	0.806	0.000	0.806
356	9/11/2002	0.736	0.000	0.736	0.092	1.073	4.293	0.086	0.901	0.000	0.901
357	9/12/2002	0.425	0.000	0.425	0.053	0.620	2.479	0.050	0.520	0.000	0.520
358	9/13/2002	0.585	0.000	0.585	0.073	0.853	3.413	0.068	0.716	0.000	0.716
359	9/14/2002	0.691	0.000	0.691	0.086	1.008	4.031	0.081	0.846	0.000	0.846
360	9/15/2002	0.824	0.000	0.824	0.103	1.202	4.807	0.096	1.009	0.000	1.009
361	9/16/2002	0.931	0.000	0.931	0.116	1.358	5.431	0.109	1.140	0.000	1.140
362	9/17/2002	1.250	0.000	1.250	0.156	1.823	7.292	0.146	1.531	0.000	1.531
363	9/18/2002	0.798	0.000	0.798	0.100	1.164	4.655	0.093	0.977	0.000	0.977
364	9/19/2002	1.101	0.000	1.101	0.138	1.606	6.423	0.128	1.348	0.000	1.348
365	9/20/2002	0.813	0.000	0.813	0.102	1.186	4.743	0.095	0.996	0.000	0.996
366	9/21/2002	0.865	0.000	0.865	0.108	1.261	5.046	0.101	1.059	0.000	1.059
367	9/22/2002	0.839	0.000	0.839	0.105	1.224	4.894	0.098	1.027	0.000	1.027
368	9/23/2002	0.786	0.000	0.786	0.098	1.146	4.585	0.092	0.963	0.000	0.963
369	9/24/2002	0.839	0.000	0.839	0.105	1.224	4.894	0.098	1.027	0.000	1.027
370	9/25/2002	0.891	0.000	0.891	0.111	1.299	5.198	0.104	1.091	0.000	1.091
371	9/26/2002	1.047	0.000	1.047	0.131	1.527	6.108	0.122	1.282	0.000	1.282
372	9/27/2002	0.733	0.000	0.733	0.092	1.069	4.276	0.086	0.898	0.000	0.898
373	9/28/2002	0.707	0.000	0.707	0.088	1.031	4.124	0.082	0.866	0.000	0.866
374	9/29/2002	0.811	0.000	0.811	0.101	1.183	4.731	0.095	0.993	0.000	0.993
375	9/30/2002	0.731	0.000	0.731	0.091	1.066	4.264	0.085	0.895	0.000	0.895
376	10/1/2002	0.735	0.000	0.735	0.092	1.072	4.288	0.086	0.900	0.000	0.900
377	10/2/2002	0.735	0.000	0.735	0.092	1.072	4.288	0.086	0.900	0.000	0.900
378	10/3/2002	0.695	0.000	0.695	0.087	1.014	4.054	0.081	0.851	0.000	0.851
379	10/4/2002	0.695	0.000	0.695	0.087	1.014	4.054	0.081	0.851	0.000	0.851
380	10/5/2002	0.819	0.000	0.819	0.102	1.194	4.778	0.096	1.003	0.000	1.003
381	10/6/2002	0.844	0.000	0.844	0.106	1.231	4.923	0.098	1.034	0.000	1.034
382	10/7/2002	0.844	0.000	0.844	0.106	1.231	4.923	0.098	1.034	0.000	1.034

	A	B	C	D	E	F	G	H	I	J	K
1	Giant Bloomfield Emissions due to Flaring of Excess Hydrogen and Fuel Gas 10/1/02 to 12/31/03										
3					PM	CO	NOx	VOC	Hydrogen SO_2	Fuel Gas SO_2	Total SO_2
4		Emission Factors, lbs/MMscf (1), (2)			3	35	140	2.8	29.39	15.11	
5		Emission Limits, lbs/hr (3)			0.01	0.13	0.54	0.01			0.07
6											
8		Gas Flow MMscf/Day			Total Emissions, lb/hr (4), (5)						
9		Hydrogen	Fuel Gas	Total Gas					Hydrogen	Fuel Gas	Total
10	DATE	to Flare	To Flare	to Flare	PM	CO	NOx	VOC	SO_2	SO_2	SO_2 lb/hr
383	10/8/2002	0.695	0.000	0.695	0.087	1.014	4.054	0.081	0.851	0.000	0.851
384	10/9/2002	0.695	0.000	0.695	0.087	1.014	4.054	0.081	0.851	0.000	0.851
385	10/10/2002	0.655	0.000	0.655	0.082	0.955	3.821	0.076	0.802	0.000	0.802
386	10/11/2002	0.608	0.000	0.608	0.076	0.887	3.547	0.071	0.745	0.000	0.745
387	10/12/2002	0.655	0.000	0.655	0.082	0.955	3.821	0.076	0.802	0.000	0.802
388	10/13/2002	0.655	0.000	0.655	0.082	0.955	3.821	0.076	0.802	0.000	0.802
389	10/14/2002	0.983	0.000	0.983	0.123	1.434	5.734	0.115	1.204	0.000	1.204
390	10/15/2002	0.632	0.000	0.632	0.079	0.922	3.687	0.074	0.774	0.000	0.774
391	10/16/2002	0.374	0.000	0.374	0.047	0.545	2.182	0.044	0.458	0.000	0.458
392	10/17/2002	0.182	0.000	0.182	0.023	0.265	1.062	0.021	0.223	0.000	0.223
393	10/18/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
394	10/19/2002	0.260	0.000	0.260	0.033	0.379	1.517	0.030	0.318	0.000	0.318
395	10/20/2002	0.239	0.000	0.239	0.030	0.349	1.394	0.028	0.293	0.000	0.293
396	10/21/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
397	10/22/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
398	10/23/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
399	10/24/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
400	10/25/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
401	10/26/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
402	10/27/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
403	10/28/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
404	10/29/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
405	10/30/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
406	10/31/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
407	11/1/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
408	11/2/2002	0.000	1.562	1.562	0.195	2.278	9.112	0.182	0.000	0.983	0.983
409	11/3/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
410	11/4/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
411	11/5/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
412	11/6/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
413	11/7/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
414	11/8/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
415	11/9/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
416	11/10/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
417	11/11/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
418	11/12/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
419	11/13/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
420	11/14/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
421	11/15/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
422	11/16/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
423	11/17/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
424	11/18/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
425	11/19/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
426	11/20/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
427	11/21/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
428	11/22/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
429	11/23/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
430	11/24/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
431	11/25/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
432	11/26/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
433	11/27/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
434	11/28/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
435	11/29/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
436	11/30/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
437	12/1/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
438	12/2/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
439	12/3/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
440	12/4/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
441	12/5/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
442	12/6/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
443	12/7/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
444	12/8/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

	A	B	C	D	E	F	G	H	I	J	K
1	Giant Bloomfield Emissions due to Flaring of Excess Hydrogen and Fuel Gas 10/1/02 to 12/31/03										
3					PM	CO	NOx	VOC	Hydrogen SO_2	Fuel Gas SO_2	Total SO_2
4		Emission Factors, lbs/MMscf (1), (2)			3	35	140	2.8	29.39	15.11	
5		Emission Limits, lbs/hr (3)			0.01	0.13	0.54	0.01			0.07
6											
8		Gas Flow MMscf/Day			Total Emissions, lb/hr (4), (5)						
9		Hydrogen	Fuel Gas	Total Gas					Hydrogen	Fuel Gas	Total
10	DATE	to Flare	To Flare	to Flare	PM	CO	NOx	VOC	SO_2	SO_2	SO_2 lb/hr
445	12/9/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
446	12/10/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
447	12/11/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
448	12/12/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
449	12/13/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
450	12/14/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
451	12/15/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
452	12/16/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
453	12/17/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
454	12/18/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
455	12/19/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
456	12/20/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
457	12/21/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
458	12/22/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
459	12/23/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
460	12/24/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
461	12/25/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
462	12/26/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
463	12/27/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
464	12/28/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
465	12/29/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
466	12/30/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
467	12/31/2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
468	1/1/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
469	1/2/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
470	1/3/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
471	1/4/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
472	1/5/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
473	1/6/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
474	1/7/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
475	1/8/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
476	1/9/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
477	1/10/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
478	1/11/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
479	1/12/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
480	1/13/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
481	1/14/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
482	1/15/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
483	1/16/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
484	1/17/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
485	1/18/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
486	1/19/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
487	1/20/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
488	1/21/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
489	1/22/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
490	1/23/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
491	1/24/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
492	1/25/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
493	1/26/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
494	1/27/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
495	1/28/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
496	1/29/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
497	1/30/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
498	1/31/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
499	2/1/2003	0.205	0.000	0.205	0.026	0.299	1.196	0.024	0.251	0.000	0.251
500	2/2/2003	0.947	0.000	0.947	0.118	1.381	5.524	0.110	1.160	0.000	1.160
501	2/3/2003	0.179	0.000	0.179	0.022	0.261	1.044	0.021	0.219	0.000	0.219
502	2/4/2003	0.358	0.000	0.358	0.045	0.522	2.088	0.042	0.438	0.000	0.438
503	2/5/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
504	2/6/2003	1.839	0.000	1.839	0.230	2.682	10.728	0.215	2.252	0.000	2.252
505	2/7/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
506	2/8/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

	A	B	C	D	E	F	G	H	I	J	K
1	Giant Bloomfield Emissions due to Flaring of Excess Hydrogen and Fuel Gas 10/1/02 to 12/31/03										
3					PM	CO	NOx	VOC	Hydrogen SO_2	Fuel Gas SO_2	Total SO_2
4				Emission Factors, lbs/MMscf (1), (2)	3	35	140	2.8	29.39	15.11	
5				Emission Limits, lbs/hr (3)	0.01	0.13	0.54	0.01			0.07
6											
8		Gas Flow MMscf/Day			Total Emissions, lb/hr (4), (5)						
9		Hydrogen	Fuel Gas	Total Gas					Hydrogen	Fuel Gas	Total
10	DATE	to Flare	To Flare	to Flare	PM	CO	NOx	VOC	SO_2	SO_2	SO_2 lb/hr
507	2/9/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
508	2/10/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
509	2/11/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
510	2/12/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
511	2/13/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
512	2/14/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
513	2/15/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
514	2/16/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
515	2/17/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
516	2/18/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
517	2/19/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
518	2/20/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
519	2/21/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
520	2/22/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
521	2/23/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
522	2/24/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
523	2/25/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
524	2/26/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
525	2/27/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
526	2/28/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
527	3/1/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
528	3/2/2003	0.751	0.000	0.751	0.094	1.095	4.381	0.088	0.920	0.000	0.920
529	3/3/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
530	3/4/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
531	3/5/2003	0.440	0.000	0.440	0.055	0.642	2.567	0.051	0.539	0.000	0.539
532	3/6/2003	0.079	0.000	0.079	0.010	0.115	0.461	0.009	0.097	0.000	0.097
533	3/7/2003	0.263	0.000	0.263	0.033	0.384	1.534	0.031	0.322	0.000	0.322
534	3/8/2003	0.105	0.000	0.105	0.013	0.153	0.613	0.012	0.129	0.000	0.129
535	3/9/2003	0.105	0.000	0.105	0.013	0.153	0.613	0.012	0.129	0.000	0.129
536	3/10/2003	0.604	0.000	0.604	0.076	0.881	3.523	0.070	0.740	0.000	0.740
537	3/11/2003	0.420	0.000	0.420	0.053	0.613	2.450	0.049	0.514	0.000	0.514
538	3/12/2003	0.210	0.000	0.210	0.026	0.306	1.225	0.025	0.257	0.000	0.257
539	3/13/2003	0.079	0.000	0.079	0.010	0.115	0.461	0.009	0.097	0.000	0.097
540	3/14/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
541	3/15/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
542	3/16/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
543	3/17/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
544	3/18/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
545	3/19/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
546	3/20/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
547	3/21/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
548	3/22/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
549	3/23/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
550	3/24/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
551	3/25/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
552	3/26/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
553	3/27/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
554	3/28/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
555	3/29/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
556	3/30/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
557	3/31/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
558	4/1/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
559	4/2/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
560	4/3/2003	0.447	0.000	0.447	0.056	0.652	2.608	0.052	0.547	0.000	0.547
561	4/4/2003	0.420	0.000	0.420	0.053	0.613	2.450	0.049	0.514	0.000	0.514
562	4/5/2003	0.499	0.000	0.499	0.062	0.728	2.911	0.058	0.611	0.000	0.611
563	4/6/2003	0.210	0.000	0.210	0.026	0.306	1.225	0.025	0.257	0.000	0.257
564	4/7/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
565	4/8/2003	0.735	0.000	0.735	0.092	1.072	4.288	0.086	0.900	0.000	0.900
566	4/9/2003	0.630	0.000	0.630	0.079	0.919	3.675	0.074	0.771	0.000	0.771
567	4/10/2003	0.709	0.000	0.709	0.089	1.034	4.136	0.083	0.868	0.000	0.868
568	4/11/2003	0.657	0.000	0.657	0.082	0.958	3.833	0.077	0.805	0.000	0.805

	A	B	C	D	E	F	G	H	I	J	K
1	Giant Bloomfield Emissions due to Flaring of Excess Hydrogen and Fuel Gas 10/1/02 to 12/31/03										
3									Hydrogen	Fuel Gas	Total
4					PM	CO	NOx	VOC	SO_2	SO_2	SO_2
5		Emission Factors, lbs/MMscf (1), (2)			3	35	140	2.8	29.39	15.11	
6		Emission Limits, lbs/hr (3)			0.01	0.13	0.54	0.01			0.07
8		Gas Flow MMscf/Day			Total Emissions, lb/hr (4), (5)						
9		Hydrogen	Fuel Gas	Total Gas					Hydrogen	Fuel Gas	Total
10	DATE	to Flare	To Flare	to Flare	PM	CO	NOx	VOC	SO_2	SO_2	SO_2 lb/hr
569	4/12/2003	0.420	0.000	0.420	0.053	0.613	2.450	0.049	0.514	0.000	0.514
570	4/13/2003	0.552	0.000	0.552	0.069	0.805	3.220	0.064	0.676	0.000	0.676
571	4/14/2003	0.788	0.000	0.788	0.099	1.149	4.597	0.092	0.965	0.000	0.965
572	4/15/2003	0.131	0.000	0.131	0.016	0.191	0.764	0.015	0.160	0.000	0.160
573	4/16/2003	0.184	0.000	0.184	0.023	0.268	1.073	0.021	0.225	0.000	0.225
574	4/17/2003	0.552	0.000	0.552	0.069	0.805	3.220	0.064	0.676	0.000	0.676
575	4/18/2003	0.289	0.000	0.289	0.036	0.421	1.686	0.034	0.354	0.000	0.354
576	4/19/2003	0.368	0.000	0.368	0.046	0.537	2.147	0.043	0.451	0.000	0.451
577	4/20/2003	1.077	0.000	1.077	0.135	1.571	6.283	0.126	1.319	0.000	1.319
578	4/21/2003	1.313	0.000	1.313	0.164	1.915	7.659	0.153	1.608	0.000	1.608
579	4/22/2003	1.707	0.000	1.707	0.213	2.489	9.958	0.199	2.090	0.000	2.090
580	4/23/2003	0.341	0.000	0.341	0.043	0.497	1.989	0.040	0.418	0.000	0.418
581	4/24/2003	0.315	0.000	0.315	0.039	0.459	1.838	0.037	0.386	0.000	0.386
582	4/25/2003	0.184	0.000	0.184	0.023	0.268	1.073	0.021	0.225	0.000	0.225
583	4/26/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
584	4/27/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
585	4/28/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
586	4/29/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
587	4/30/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
588	5/1/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
589	5/2/2003	0.131	0.000	0.131	0.016	0.191	0.764	0.015	0.160	0.000	0.160
590	5/3/2003	0.158	0.000	0.158	0.020	0.230	0.922	0.018	0.193	0.000	0.193
591	5/4/2003	0.026	0.000	0.026	0.003	0.038	0.152	0.003	0.032	0.000	0.032
592	5/5/2003	0.210	0.000	0.210	0.026	0.306	1.225	0.025	0.257	0.000	0.257
593	5/6/2003	0.236	0.000	0.236	0.030	0.344	1.377	0.028	0.289	0.000	0.289
594	5/7/2003	0.131	0.000	0.131	0.016	0.191	0.764	0.015	0.160	0.000	0.160
595	5/8/2003	0.289	0.000	0.289	0.036	0.421	1.686	0.034	0.354	0.000	0.354
596	5/9/2003	0.630	0.000	0.630	0.079	0.919	3.675	0.074	0.771	0.000	0.771
597	5/10/2003	0.525	0.000	0.525	0.066	0.766	3.063	0.061	0.643	0.000	0.643
598	5/11/2003	0.814	0.000	0.814	0.102	1.187	4.748	0.095	0.997	0.000	0.997
599	5/12/2003	0.762	0.000	0.762	0.095	1.111	4.445	0.089	0.933	0.000	0.933
600	5/13/2003	0.208	0.000	0.208	0.026	0.303	1.213	0.024	0.255	0.000	0.255
601	5/14/2003	0.814	0.000	0.814	0.102	1.187	4.748	0.095	0.997	0.000	0.997
602	5/15/2003	0.499	0.000	0.499	0.062	0.728	2.911	0.058	0.611	0.000	0.611
603	5/16/2003	0.394	0.000	0.394	0.049	0.575	2.298	0.046	0.482	0.000	0.482
604	5/17/2003	0.210	0.000	0.210	0.026	0.306	1.225	0.025	0.257	0.000	0.257
605	5/18/2003	0.867	0.000	0.867	0.108	1.264	5.058	0.101	1.062	0.000	1.062
606	5/19/2003	0.473	0.000	0.473	0.059	0.690	2.759	0.055	0.579	0.000	0.579
607	5/20/2003	0.105	0.000	0.105	0.013	0.153	0.613	0.012	0.129	0.000	0.129
608	5/21/2003	0.499	0.000	0.499	0.062	0.728	2.911	0.058	0.611	0.000	0.611
609	5/22/2003	1.759	0.000	1.759	0.220	2.565	10.261	0.205	2.154	0.000	2.154
610	5/23/2003	0.543	0.000	0.543	0.068	0.792	3.168	0.063	0.665	0.000	0.665
611	5/24/2003	0.285	0.000	0.285	0.036	0.416	1.663	0.033	0.349	0.000	0.349
612	5/25/2003	0.076	0.000	0.076	0.010	0.111	0.443	0.009	0.093	0.000	0.093
613	5/26/2003	0.285	0.000	0.285	0.036	0.416	1.663	0.033	0.349	0.000	0.349
614	5/27/2003	0.647	0.000	0.647	0.081	0.944	3.774	0.075	0.792	0.000	0.792
615	5/28/2003	1.087	0.000	1.087	0.136	1.585	6.341	0.127	1.331	0.000	1.331
616	5/29/2003	0.946	0.000	0.946	0.118	1.380	5.518	0.110	1.158	0.000	1.158
617	5/30/2003	0.788	0.000	0.788	0.099	1.149	4.597	0.092	0.965	0.000	0.965
618	5/31/2003	0.368	0.000	0.368	0.046	0.537	2.147	0.043	0.451	0.000	0.451
619	6/1/2003	1.395	0.000	1.395	0.174	2.034	8.138	0.163	1.708	0.000	1.708
620	6/2/2003	0.721	0.000	0.721	0.090	1.051	4.206	0.084	0.883	0.000	0.883
621	6/3/2003	0.108	0.000	0.108	0.014	0.158	0.630	0.013	0.132	0.000	0.132
622	6/4/2003	0.243	0.000	0.243	0.030	0.354	1.418	0.028	0.298	0.000	0.298
623	6/5/2003	0.625	0.000	0.625	0.078	0.911	3.646	0.073	0.765	0.000	0.765
624	6/6/2003	0.339	0.000	0.339	0.042	0.494	1.978	0.040	0.415	0.000	0.415
625	6/7/2003	0.287	0.000	0.287	0.036	0.419	1.674	0.033	0.351	0.000	0.351
626	6/8/2003	0.344	0.000	0.344	0.043	0.502	2.007	0.040	0.421	0.000	0.421
627	6/9/2003	0.344	0.000	0.344	0.043	0.502	2.007	0.040	0.421	0.000	0.421
628	6/10/2003	0.614	0.000	0.614	0.077	0.895	3.582	0.072	0.752	0.000	0.752
629	6/11/2003	0.638	0.000	0.638	0.080	0.930	3.722	0.074	0.781	0.000	0.781
630	6/12/2003	0.487	0.000	0.487	0.061	0.710	2.841	0.057	0.596	0.000	0.596

	A	B	C	D	E	F	G	H	I	J	K
1	Giant Bloomfield Emissions due to Flaring of Excess Hydrogen and Fuel Gas 10/1/02 to 12/31/03										
3					PM	CO	NOx	VOC	Hydrogen SO_2	Fuel Gas SO_2	Total SO_2
4											
5		Emission Factors, lbs/MMscf (1), (2)			3	35	140	2.8	29.39	15.11	
6		Emission Limits, lbs/hr (3)			0.01	0.13	0.54	0.01			0.07
8		Gas Flow MMscf/Day			Total Emissions, lb/hr (4), (5)						
9		Hydrogen	Fuel Gas	Total Gas					Hydrogen	Fuel Gas	Total
10	DATE	to Flare	To Flare	to Flare	PM	CO	NOx	VOC	SO_2	SO_2	SO_2 lb/hr
631	6/13/2003	0.326	0.000	0.326	0.041	0.475	1.902	0.038	0.399	0.000	0.399
632	6/14/2003	0.535	0.000	0.535	0.067	0.780	3.121	0.062	0.655	0.000	0.655
633	6/15/2003	0.605	0.000	0.605	0.076	0.882	3.529	0.071	0.741	0.000	0.741
634	6/16/2003	1.622	0.000	1.622	0.203	2.365	9.462	0.189	1.986	0.000	1.986
635	6/17/2003	1.865	0.000	1.865	0.233	2.720	10.879	0.218	2.284	0.000	2.284
636	6/18/2003	1.647	0.000	1.647	0.206	2.402	9.608	0.192	2.017	0.000	2.017
637	6/19/2003	1.010	0.000	1.010	0.126	1.473	5.892	0.118	1.237	0.000	1.237
638	6/20/2003	0.466	0.000	0.466	0.058	0.680	2.718	0.054	0.571	0.000	0.571
639	6/21/2003	0.984	0.000	0.984	0.123	1.435	5.740	0.115	1.205	0.000	1.205
640	6/22/2003	0.710	0.000	0.710	0.089	1.035	4.142	0.083	0.869	0.000	0.869
641	6/23/2003	0.868	0.000	0.868	0.109	1.266	5.063	0.101	1.063	0.000	1.063
642	6/24/2003	0.473	0.000	0.473	0.059	0.690	2.759	0.055	0.579	0.000	0.579
643	6/25/2003	0.368	0.000	0.368	0.046	0.537	2.147	0.043	0.451	0.000	0.451
644	6/26/2003	1.222	0.000	1.222	0.153	1.782	7.128	0.143	1.496	0.000	1.496
645	6/27/2003	1.425	0.000	1.425	0.178	2.078	8.313	0.166	1.745	0.000	1.745
646	6/28/2003	1.552	0.000	1.552	0.194	2.263	9.053	0.181	1.901	0.000	1.901
647	6/29/2003	1.354	0.000	1.354	0.169	1.975	7.898	0.158	1.658	0.000	1.658
648	6/30/2003	1.533	0.000	1.533	0.192	2.236	8.943	0.179	1.877	0.000	1.877
649	7/1/2003	1.374	0.000	1.374	0.172	2.004	8.015	0.160	1.683	0.000	1.683
650	7/2/2003	1.205	0.000	1.205	0.151	1.757	7.029	0.141	1.476	0.000	1.476
651	7/3/2003	1.367	0.000	1.367	0.171	1.994	7.974	0.159	1.674	0.000	1.674
652	7/4/2003	1.055	0.000	1.055	0.132	1.539	6.154	0.123	1.292	0.000	1.292
653	7/5/2003	0.719	0.000	0.719	0.090	1.049	4.194	0.084	0.880	0.000	0.880
654	7/6/2003	0.839	0.000	0.839	0.105	1.224	4.894	0.098	1.027	0.000	1.027
655	7/7/2003	0.240	0.000	0.240	0.030	0.350	1.400	0.028	0.294	0.000	0.294
656	7/8/2003	1.156	0.000	1.156	0.145	1.686	6.743	0.135	1.416	0.000	1.416
657	7/9/2003	0.963	0.000	0.963	0.120	1.404	5.618	0.112	1.179	0.000	1.179
658	7/10/2003	0.856	0.000	0.856	0.107	1.248	4.993	0.100	1.048	0.000	1.048
659	7/11/2003	1.100	0.000	1.100	0.138	1.604	6.417	0.128	1.347	0.000	1.347
660	7/12/2003	1.291	0.000	1.291	0.161	1.883	7.531	0.151	1.581	0.000	1.581
661	7/13/2003	1.195	0.000	1.195	0.149	1.743	6.971	0.139	1.463	0.000	1.463
662	7/14/2003	1.100	0.000	1.100	0.138	1.604	6.417	0.128	1.347	0.000	1.347
663	7/15/2003	1.444	0.000	1.444	0.181	2.106	8.423	0.168	1.768	0.000	1.768
664	7/16/2003	1.344	0.000	1.344	0.168	1.960	7.840	0.157	1.646	0.000	1.646
665	7/17/2003	1.395	0.000	1.395	0.174	2.034	8.138	0.163	1.708	0.000	1.708
666	7/18/2003	1.348	0.000	1.348	0.169	1.966	7.863	0.157	1.651	0.000	1.651
667	7/19/2003	1.534	0.000	1.534	0.192	2.237	8.948	0.179	1.879	0.000	1.879
668	7/20/2003	1.232	0.000	1.232	0.154	1.797	7.187	0.144	1.509	0.000	1.509
669	7/21/2003	1.371	0.000	1.371	0.171	1.999	7.998	0.160	1.679	0.000	1.679
670	7/22/2003	1.534	0.000	1.534	0.192	2.237	8.948	0.179	1.879	0.000	1.879
671	7/23/2003	1.392	0.000	1.392	0.174	2.030	8.120	0.162	1.705	0.000	1.705
672	7/24/2003	1.125	0.000	1.125	0.141	1.641	6.563	0.131	1.378	0.000	1.378
673	7/25/2003	1.150	0.000	1.150	0.144	1.677	6.708	0.134	1.408	0.000	1.408
674	7/26/2003	2.151	0.000	2.151	0.269	3.137	12.548	0.251	2.634	0.000	2.634
675	7/27/2003	1.751	0.000	1.751	0.219	2.554	10.214	0.204	2.144	0.000	2.144
676	7/28/2003	1.326	0.000	1.326	0.166	1.934	7.735	0.155	1.624	0.000	1.624
677	7/29/2003	1.180	0.000	1.180	0.148	1.721	6.883	0.138	1.445	0.000	1.445
678	7/30/2003	1.481	0.000	1.481	0.185	2.160	8.639	0.173	1.814	0.000	1.814
679	7/31/2003	1.249	0.000	1.249	0.156	1.821	7.286	0.146	1.530	0.000	1.530
680	8/1/2003	1.378	0.000	1.378	0.172	2.010	8.038	0.161	1.687	0.000	1.687
681	8/2/2003	1.611	0.000	1.611	0.201	2.349	9.398	0.188	1.973	0.000	1.973
682	8/3/2003	1.187	0.000	1.187	0.148	1.731	6.924	0.138	1.454	0.000	1.454
683	8/4/2003	1.314	0.000	1.314	0.164	1.916	7.665	0.153	1.609	0.000	1.609
684	8/5/2003	2.390	0.000	2.390	0.299	3.485	13.942	0.279	2.927	0.000	2.927
685	8/6/2003	1.786	0.000	1.786	0.223	2.605	10.418	0.208	2.187	0.000	2.187
686	8/7/2003	1.707	0.000	1.707	0.213	2.489	9.958	0.199	2.090	0.000	2.090
687	8/8/2003	1.707	0.000	1.707	0.213	2.489	9.958	0.199	2.090	0.000	2.090
688	8/9/2003	1.707	0.000	1.707	0.213	2.489	9.958	0.199	2.090	0.000	2.090
689	8/10/2003	0.578	0.000	0.578	0.072	0.843	3.372	0.067	0.708	0.000	0.708
690	8/11/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
691	8/12/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
692	8/13/2003	0.000	0.188	0.188	0.024	0.274	1.097	0.022	0.000	0.118	0.118

	A	B	C	D	E	F	G	H	I	J	K
1	Giant Bloomfield Emissions due to Flaring of Excess Hydrogen and Fuel Gas 10/1/02 to 12/31/03										
3					PM	CO	NOx	VOC	Hydrogen SO_2	Fuel Gas SO_2	Total SO_2
4											
5		Emission Factors, lbs/MMscf (1), (2)			3	35	140	2.8	29.39	15.11	
6		Emission Limits, lbs/hr (3)			0.01	0.13	0.54	0.01			0.07
8		Gas Flow MMscf/Day			Total Emissions, lb/hr (4), (5)						
9		Hydrogen	Fuel Gas	Total Gas					Hydrogen	Fuel Gas	Total
10	DATE	to Flare	To Flare	to Flare	PM	CO	NOx	VOC	SO_2	SO_2	SO_2, lb/hr
693	8/14/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
694	8/15/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
695	8/16/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
696	8/17/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
697	8/18/2003	0.131	0.000	0.131	0.016	0.191	0.764	0.015	0.160	0.000	0.160
698	8/19/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
699	8/20/2003	0.341	0.000	0.341	0.043	0.497	1.989	0.040	0.418	0.000	0.418
700	8/21/2003	0.420	0.000	0.420	0.053	0.613	2.450	0.049	0.514	0.000	0.514
701	8/22/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
702	8/23/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
703	8/24/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
704	8/25/2003	0.709	0.000	0.709	0.089	1.034	4.136	0.083	0.868	0.000	0.868
705	8/26/2003	1.445	0.000	1.445	0.181	2.107	8.429	0.169	1.770	0.000	1.770
706	8/27/2003	0.234	0.000	0.234	0.029	0.341	1.365	0.027	0.287	0.000	0.287
707	8/28/2003	0.630	0.000	0.630	0.079	0.919	3.675	0.074	0.771	0.000	0.771
708	8/29/2003	0.657	0.000	0.657	0.082	0.958	3.833	0.077	0.805	0.000	0.805
709	8/30/2003	1.103	0.000	1.103	0.138	1.609	6.434	0.129	1.351	0.000	1.351
710	8/31/2003	0.473	0.000	0.473	0.059	0.690	2.759	0.055	0.579	0.000	0.579
711	9/1/2003	0.797	0.000	0.797	0.100	1.162	4.649	0.093	0.976	0.000	0.976
712	9/2/2003	0.930	0.000	0.930	0.116	1.356	5.425	0.109	1.139	0.000	1.139
713	9/3/2003	0.531	0.000	0.531	0.066	0.774	3.098	0.062	0.650	0.000	0.650
714	9/4/2003	0.105	0.000	0.105	0.013	0.153	0.613	0.012	0.129	0.000	0.129
715	9/5/2003	0.000	0.226	0.226	0.028	0.330	1.318	0.026	0.000	0.142	0.142
716	9/6/2003	0.289	0.000	0.289	0.036	0.421	1.686	0.034	0.354	0.000	0.354
717	9/7/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
718	9/8/2003	0.079	0.000	0.079	0.010	0.115	0.461	0.009	0.097	0.000	0.097
719	9/9/2003	0.315	0.000	0.315	0.039	0.459	1.838	0.037	0.386	0.000	0.386
720	9/10/2003	0.840	0.000	0.840	0.105	1.225	4.900	0.098	1.029	0.000	1.029
721	9/11/2003	0.473	0.000	0.473	0.059	0.690	2.759	0.055	0.579	0.000	0.579
722	9/12/2003	0.024	0.000	0.024	0.003	0.035	0.140	0.003	0.029	0.000	0.029
723	9/13/2003	0.525	0.000	0.525	0.066	0.766	3.063	0.061	0.643	0.000	0.643
724	9/14/2003	0.079	0.000	0.079	0.010	0.115	0.461	0.009	0.097	0.000	0.097
725	9/15/2003	0.158	0.000	0.158	0.020	0.230	0.922	0.018	0.193	0.000	0.193
726	9/16/2003	0.420	0.019	0.439	0.055	0.640	2.561	0.051	0.514	0.012	0.526
727	9/17/2003	0.867	0.000	0.867	0.108	1.264	5.058	0.101	1.062	0.000	1.062
728	9/18/2003	0.079	0.000	0.079	0.010	0.115	0.461	0.009	0.097	0.000	0.097
729	9/19/2003	0.158	0.000	0.158	0.020	0.230	0.922	0.018	0.193	0.000	0.193
730	9/20/2003	0.053	0.000	0.053	0.007	0.077	0.309	0.006	0.065	0.000	0.065
731	9/21/2003	0.368	0.000	0.368	0.046	0.537	2.147	0.043	0.451	0.000	0.451
732	9/22/2003	1.077	0.000	1.077	0.135	1.571	6.283	0.126	1.319	0.000	1.319
733	9/23/2003	1.024	0.000	1.024	0.128	1.493	5.973	0.119	1.254	0.000	1.254
734	9/24/2003	1.156	0.000	1.156	0.145	1.686	6.743	0.135	1.416	0.000	1.416
735	9/25/2003	1.313	0.000	1.313	0.164	1.915	7.659	0.153	1.608	0.000	1.608
736	9/26/2003	1.418	0.000	1.418	0.177	2.068	8.272	0.165	1.736	0.000	1.736
737	9/27/2003	0.000	0.301	0.301	0.038	0.439	1.756	0.035	0.000	0.190	0.190
738	9/28/2003	1.707	0.056	1.763	0.220	2.571	10.284	0.206	2.090	0.035	2.126
739	9/29/2003	1.077	0.000	1.077	0.135	1.571	6.283	0.126	1.319	0.000	1.319
740	9/30/2003	0.341	0.000	0.341	0.043	0.497	1.989	0.040	0.418	0.000	0.418
741	10/1/2003	0.578	0.000	0.578	0.072	0.843	3.372	0.067	0.708	0.000	0.708
742	10/2/2003	1.129	0.508	1.637	0.205	2.387	9.549	0.191	1.383	0.320	1.702
743	10/3/2003	1.681	0.000	1.681	0.210	2.451	9.806	0.196	2.059	0.000	2.059
744	10/4/2003	1.471	0.000	1.471	0.184	2.145	8.581	0.172	1.801	0.000	1.801
745	10/5/2003	0.630	0.000	0.630	0.079	0.919	3.675	0.074	0.771	0.000	0.771
746	10/6/2003	0.893	0.000	0.893	0.112	1.302	5.209	0.104	1.094	0.000	1.094
747	10/7/2003	0.315	0.000	0.315	0.039	0.459	1.838	0.037	0.386	0.000	0.386
748	10/8/2003	0.578	0.000	0.578	0.072	0.843	3.372	0.067	0.708	0.000	0.708
749	10/9/2003	2.443	0.000	2.443	0.305	3.563	14.251	0.285	2.992	0.000	2.992
750	10/10/2003	0.079	0.000	0.079	0.010	0.115	0.461	0.009	0.097	0.000	0.097
751	10/11/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
752	10/12/2003	0.341	0.000	0.341	0.043	0.497	1.989	0.040	0.418	0.000	0.418
753	10/13/2003	0.788	0.000	0.788	0.099	1.149	4.597	0.092	0.965	0.000	0.965
754	10/14/2003	0.218	0.000	0.218	0.027	0.318	1.272	0.025	0.267	0.000	0.267

	A	B	C	D	E	F	G	H	I	J	K
1	Giant Bloomfield Emissions due to Flaring of Excess Hydrogen and Fuel Gas 10/1/02 to 12/31/03										
3									Hydrogen	Fuel Gas	Total
4					PM	CO	NOx	VOC	SO_2	SO_2	SO_2
5		Emission Factors, lbs/MMscf (1), (2)			3	35	140	2.8	29.39	15.11	
6		Emission Limits, lbs/hr (3)			0.01	0.13	0.54	0.01			0.07
8		Gas Flow MMscf/Day			Total Emissions, lb/hr (4), (5)						
9		Hydrogen	Fuel Gas	Total Gas					Hydrogen	Fuel Gas	Total
10	DATE	to Flare	To Flare	to Flare	PM	CO	NOx	VOC	SO_2	SO_2	SO_2 lb/hr
755	10/15/2003	0.447	0.000	0.447	0.056	0.652	2.608	0.052	0.547	0.000	0.547
756	10/16/2003	0.368	0.000	0.368	0.046	0.537	2.147	0.043	0.451	0.000	0.451
757	10/17/2003	0.447	0.000	0.447	0.056	0.652	2.608	0.052	0.547	0.000	0.547
758	10/18/2003	0.131	0.000	0.131	0.016	0.191	0.764	0.015	0.160	0.000	0.160
759	10/19/2003	0.105	0.000	0.105	0.013	0.153	0.613	0.012	0.129	0.000	0.129
760	10/20/2003	0.263	0.000	0.263	0.033	0.384	1.534	0.031	0.322	0.000	0.322
761	10/21/2003	0.814	0.062	0.876	0.110	1.278	5.110	0.102	0.997	0.039	1.036
762	10/22/2003	1.445	0.414	1.859	0.232	2.711	10.844	0.217	1.770	0.261	2.030
763	10/23/2003			0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
764	10/24/2003			0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
765	10/25/2003			0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
766	10/26/2003			0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
767	10/27/2003			0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
768	10/28/2003			0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
769	10/29/2003			0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
770	10/30/2003			0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
771	10/31/2003			0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
772	11/1/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
773	11/2/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
774	11/3/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
775	11/4/2003	0.630	0.000	0.630	0.079	0.919	3.675	0.074	0.771	0.000	0.771
776	11/5/2003	0.814	0.207	1.021	0.128	1.489	5.956	0.119	0.997	0.130	1.127
777	11/6/2003	1.313	0.452	1.765	0.221	2.574	10.296	0.206	1.608	0.285	1.892
778	11/7/2003	1.839	0.376	2.215	0.277	3.230	12.921	0.258	2.252	0.237	2.489
779	11/8/2003	1.734	0.000	1.734	0.217	2.529	10.115	0.202	2.123	0.000	2.123
780	11/9/2003	0.893	0.056	0.949	0.119	1.384	5.536	0.111	1.094	0.035	1.129
781	11/10/2003	1.156	0.056	1.212	0.152	1.768	7.070	0.141	1.416	0.035	1.451
782	11/11/2003	1.129	0.000	1.129	0.141	1.646	6.586	0.132	1.383	0.000	1.383
783	11/12/2003	0.368	0.000	0.368	0.046	0.537	2.147	0.043	0.451	0.000	0.451
784	11/13/2003	0.552	0.000	0.552	0.069	0.805	3.220	0.064	0.676	0.000	0.676
785	11/14/2003	0.394	0.000	0.394	0.049	0.575	2.298	0.046	0.482	0.000	0.482
786	11/15/2003	1.182	0.000	1.182	0.148	1.724	6.895	0.138	1.447	0.000	1.447
787	11/16/2003	0.210	0.000	0.210	0.026	0.306	1.225	0.025	0.257	0.000	0.257
788	11/17/2003	0.131	0.000	0.131	0.016	0.191	0.764	0.015	0.160	0.000	0.160
789	11/18/2003	0.079	0.000	0.079	0.010	0.115	0.461	0.009	0.097	0.000	0.097
790	11/19/2003	0.473	0.000	0.473	0.059	0.690	2.759	0.055	0.579	0.000	0.579
791	11/20/2003	0.184	0.000	0.184	0.023	0.268	1.073	0.021	0.225	0.000	0.225
792	11/21/2003	0.788	0.000	0.788	0.099	1.149	4.597	0.092	0.965	0.000	0.965
793	11/22/2003	0.788	0.000	0.788	0.099	1.149	4.597	0.092	0.965	0.000	0.965
794	11/23/2003	0.053	0.000	0.053	0.007	0.077	0.309	0.006	0.065	0.000	0.065
795	11/24/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
796	11/25/2003	0.394	0.000	0.394	0.049	0.575	2.298	0.046	0.482	0.000	0.482
797	11/26/2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
798	11/27/2003	0.552	0.000	0.552	0.069	0.805	3.220	0.064	0.676	0.000	0.676
799	11/28/2003	0.341	0.000	0.341	0.043	0.497	1.989	0.040	0.418	0.000	0.418
800	11/29/2003	0.289	0.000	0.289	0.036	0.421	1.686	0.034	0.354	0.000	0.354
801	11/30/2003	0.735	0.000	0.735	0.092	1.072	4.288	0.086	0.900	0.000	0.900
802	12/1/2003	0.578	0.000	0.578	0.072	0.843	3.372	0.067	0.708	0.000	0.708
803	12/2/2003	1.024	0.000	1.024	0.128	1.493	5.973	0.119	1.254	0.000	1.254
804	12/3/2003	1.024	0.000	1.024	0.128	1.493	5.973	0.119	1.254	0.000	1.254
805	12/4/2003	0.236	0.000	0.236	0.030	0.344	1.377	0.028	0.289	0.000	0.289
806	12/5/2003	0.525	0.000	0.525	0.066	0.766	3.063	0.061	0.643	0.000	0.643
807	12/6/2003	0.893	0.000	0.893	0.112	1.302	5.209	0.104	1.094	0.000	1.094
808	12/7/2003	2.180	0.000	2.180	0.273	3.179	12.717	0.254	2.670	0.000	2.670
809	12/8/2003	1.734	0.000	1.734	0.217	2.529	10.115	0.202	2.123	0.000	2.123
810	12/9/2003	1.261	0.000	1.261	0.158	1.839	7.356	0.147	1.544	0.000	1.544
811	12/10/2003	1.550	0.000	1.550	0.194	2.260	9.042	0.181	1.898	0.000	1.898
812	12/11/2003	1.261	0.000	1.261	0.158	1.839	7.356	0.147	1.544	0.000	1.544
813	12/12/2003	0.946	0.000	0.946	0.118	1.380	5.518	0.110	1.158	0.000	1.158
814	12/13/2003	0.762	0.000	0.762	0.095	1.111	4.445	0.089	0.933	0.000	0.933
815	12/14/2003	0.840	0.000	0.840	0.105	1.225	4.900	0.098	1.029	0.000	1.029
816	12/15/2003	0.840	0.000	0.840	0.105	1.225	4.900	0.098	1.029	0.000	1.029

	A	B	C	D	E	F	G	H	I	J	K
1	Giant Bloomfield Emissions due to Flaring of Excess Hydrogen and Fuel Gas 10/1/02 to 12/31/03										
3					PM	CO	NOx	VOC	Hydrogen SO_2	Fuel Gas SO_2	Total SO_2
4		Emission Factors, lbs/MMscf (1), (2)			3	35	140	2.8	29.39	15.11	
5		Emission Limits, lbs/hr (3)			0.01	0.13	0.54	0.01			0.07
6											
8		Gas Flow MMscf/Day			Total Emissions, lb/hr (4), (5)						
9		Hydrogen	Fuel Gas	Total Gas					Hydrogen	Fuel Gas	Total
10	DATE	to Flare	To Flare	to Flare	PM	CO	NOx	VOC	SO_2	SO_2	SO_2, lb/hr
817	12/16/2003	0.683	0.000	0.683	0.085	0.996	3.984	0.080	0.836	0.000	0.836
818	12/17/2003	1.182	0.000	1.182	0.148	1.724	6.895	0.138	1.447	0.000	1.447
819	12/18/2003	1.234	0.000	1.234	0.154	1.800	7.198	0.144	1.511	0.000	1.511
820	12/19/2003	0.552	0.000	0.552	0.069	0.805	3.220	0.064	0.676	0.000	0.676
821	12/20/2003	0.499	0.000	0.499	0.062	0.728	2.911	0.058	0.611	0.000	0.611
822	12/21/2003	0.657	0.000	0.657	0.082	0.958	3.833	0.077	0.805	0.000	0.805
823	12/22/2003	0.315	0.000	0.315	0.039	0.459	1.838	0.037	0.386	0.000	0.386
824	12/23/2003	0.176	0.000	0.176	0.022	0.257	1.027	0.021	0.216	0.000	0.216
825	12/24/2003	0.473	0.000	0.473	0.059	0.690	2.759	0.055	0.579	0.000	0.579
826	12/25/2003	0.683	0.000	0.683	0.085	0.996	3.984	0.080	0.836	0.000	0.836
827	12/26/2003	0.499	0.000	0.499	0.062	0.728	2.911	0.058	0.611	0.000	0.611
828	12/27/2003	0.263	0.000	0.263	0.033	0.384	1.534	0.031	0.322	0.000	0.322
829	12/28/2003	0.131	0.000	0.131	0.016	0.191	0.764	0.015	0.160	0.000	0.160
830	12/29/2003	0.236	0.000	0.236	0.030	0.344	1.377	0.028	0.289	0.000	0.289
831	12/30/2003	0.263	0.000	0.263	0.033	0.384	1.534	0.031	0.322	0.000	0.322
832	12/31/2003	0.026	0.000	0.026	0.003	0.038	0.152	0.003	0.032	0.000	0.032
833	Total Number of Emission Limit Exceedences				505	503	502	505			515
834											

835 (1) Emission factors for PM, CO, NOx and VOC from permit application for permit number 402-M4, dated January 29, 1993,
836 (source, AP-42, Table 1.4-1).
837 (2) Emission factors for Hydrogen SO_2 and Fuel Gas SO_2 from submittal by Giant to the Department dated March 13, 2003, Exhibit B.
838 (3) From NSR Permit Number 402-M8.
839 (4) Total Emisions (PM, CO, NOx, VOC, Hydrogen SO_2, Fuel Gas SO_2), lb/hr = (Total Gas to Flare * Emission Factor)/24
840 (5) Total Emissions (SO_2), lb/hr = Hydrogen SO_2 + Fuel Gas SO_2

Company:	Giant Industries	Calculations by:	John Volkerding
Facility:	Bloomfield Refinery	Reviewed by:	Robert Samaniego
NOV #:	AQCA 02-09	Date of Calculation:	3-Jun-05
Permit #:	402-M8	Source Class:	Major

VIOLATION 1

NSPS Subpart J, 40 CFR 60.105(a)(3), H2S Monitoring

A. Gravity Component

Potential for Harm	Extent of Deviation	Quantity	Penalty
Significant	Major	1	$4,000.00

Basis: The Potential for Harm is Significant and the Exent of Deviation is Major, as detailed in the Bureau's Civil Penalty Policy Sections C.1.a, C.1.b, and Appendix F.

B. Multi-Day Component

Number of Days	Multiplier	Quantity	Penalty
60	480.00	1	$28,800.00

Basis: The violation continued between January 01, 1977 and January 21, 2004 for a total of 9881 days. At the Bureau's discretion, 60 days were used for calculating the multi-day component of the penalty.

C. Adjustment Factors

I. Effort to Comply — Some Cooperation — 0.0

Basis:

II. Negligence/Willfulness — Negligent — 0.2

Basis: The company violated a clear condition of the New Mexico Administrative Code (NMAC) and/or Permit 402-M8. The Department considers such a violation to be negligent in that the company is reasonably presumed to have knowledge of these conditions.

III. History of Non-Compliance — History of Non-Compliance w/ Different Regulations — 0.2

Basis: Giant has past violations; however, none involve this issue.

IV. Financial Condition — Gross Sales Between than $10,000,000-$50,000,000 — 0.4

Basis: This is the value previously used in settlement negotiations.

V. Unique Factor — 1.0

Basis: N/A

Factor Total = (1+ I+II+III+IV) * V — 1.8

D. Economic Benefit

$142,741.00

Basis: Based on non-compliance beginning July 1, 1987 and $50K capital expenditure, $50K labor and other one time expenditures, and $2500 annual O&M, the benefit as calculated using EPA's BEN Model is $142,741.

Company:	Giant Industries	Calculations by:	John Volkerding
Facility:	Bloomfield Refinery	Reviewed by:	Robert Samaniego
NOV #:	AQCA 02-09	Date of Calculation:	3-Jun-05
Permit #:	402-M8	Source Class:	Major

VIOLATION 2

NSPS Subpart A, 40 CFR 60.13(d)(1), CMS Calibration Procedure

A. Gravity Component

Potential for Harm	Extent of Deviation	Quantity	Penalty
Significant	Moderate	1	$3,000.00

Basis: The Potential for Harm is Significant and the Exent of Deviation is Moderate, as detailed in the Bureau's Civil Penalty Policy Sections C.1.a, C.1.b, and Appendix F.

B. Multi-Day Component

Number of Days	Multiplier	Quantity	Penalty
0	400.00	1	$0.00

Basis: The number of days is zero as this is a one-day violation and that one day has been accounted for in the gravity component.

C. Adjustment Factors

I. Effort to Comply — Some Cooperation — 0.0

Basis:

II. Negligence/Willfulness — Negligent — 0.2

Basis: The company violated a clear condition of the New Mexico Administrative Code (NMAC) and/or Permit 402-M8. The Department considers such a violation to be negligent in that the company is reasonably presumed to have knowledge of these conditions.

III. History of Non-Compliance — History of Non-Compliance w/ Different Regulations — 0.2

Basis: Giant has past violations; however, none involve this issue.

IV. Financial Condition — Gross Sales Between than $10,000,000-$50,000,000 — 0.4

Basis: This is the value previously used in settlement negotiations.

V. Unique Factor — 1.0

Basis: N/A

Factor Total = (1+ I+II+III+IV) * V — 1.8

D. Economic Benefit

$0.00

Basis: The Bureau reserves the right to assess an economic benefit if one is found to exist.

Company:	Giant Industries	Calculations by:	John Volkerding
Facility:	Bloomfield Refinery	Reviewed by:	Robert Samaniego
NOV #:	AQCA 02-09	Date of Calculation:	3-Jun-05
Permit #:	402-M8	Source Class:	Major

VIOLATION 3

NSPS Subpart Kb, 40 CFR 60.115b(b)(2), Report of Seal Gap Measurements

A. Gravity Component

Potential for Harm	Extent of Deviation	Quantity	Penalty
Significant	Moderate	1	$3,000.00

Basis: The Potential for Harm is Significant and the Exent of Deviation is Moderate, as detailed in the Bureau's Civil Penalty Policy Sections C.1.a, C.1.b, and Appendix F.

B. Multi-Day Component

Number of Days	Multiplier	Quantity	Penalty
0	400.00	1	$0.00

Basis: The number of days is zero as this is a one-day violation and that one day has been accounted for in the gravity component.

C. Adjustment Factors

I. Effort to Comply — Some Cooperation — 0.0

Basis:

II. Negligence/Willfulness — Negligent — 0.2

Basis: The company violated a clear condition of the New Mexico Administrative Code (NMAC) and/or Permit 402-M8. The Department considers such a violation to be negligent in that the company is reasonably presumed to have knowledge of these conditions.

III. History of Non-Compliance — History of Non-Compliance w/ Different Regulations — 0.2

Basis: Giant has past violations; however, none involve this issue

IV. Financial Condition — Gross Sales Between than $10,000,000-$50,000,000 — 0.4

Basis: This is the value previously used in settlement negotiations.

V. Unique Factor — 1.0

Basis: N/A

Factor Total = (1+ I+II+III+IV) * V — 1.8

D. Economic Benefit

$0.00

Basis: The Bureau reserves the right to assess an economic benefit if one is found to exist.

Company:	Giant Industries	Calculations by:	John Volkerding
Facility:	Bloomfield Refinery	Reviewed by:	Robert Samaniego
NOV #:	AQCA 02-09	Date of Calculation:	3-Jun-05
Permit #:	402-M8	Source Class:	Major

VIOLATION 4

MACT Subpart CC 40 CFR 63.648(a) & NSPS Subpart VV 40 CFR 60.486(f)(2), Rec

A. Gravity Component

Potential for Harm	Extent of Deviation	Quantity	Penalty
Significant	Major	6	$24,000.00

Basis: The Potential for Harm is Significant and the Exent of Deviation is Major, as detailed in the Bureau's Civil Penalty Policy Sections C.1.a, C.1.b, and Appendix F.

B. Multi-Day Component

Number of Days	Multiplier	Quantity	Penalty
0	480.00	6	$0.00

Basis: The number of days is zero as this is a one-day violation and that one day has been accounted for in the gravity component.

C. Adjustment Factors

I. Effort to Comply — Some Cooperation — 0.0

Basis:

II. Negligence/Willfulness — Negligent — 0.2

Basis: The company violated a clear condition of the New Mexico Administrative Code (NMAC) and/or Permit 402-M8. The Department considers such a violation to be negligent in that the company is reasonably presumed to have knowledge of these conditions.

III. History of Non-Compliance — History of Non-Compliance w/ Different Regulations — 0.2

Basis: Giant has past violations; however, none involve this issue.

IV. Financial Condition — Gross Sales Between than $10,000,000-$50,000,000 — 0.4

Basis: This is the value previously used in settlement negotiations.

V. Unique Factor — 1.0

Basis: N/A

Factor Total = (1+ I+II+III+IV) * V — 1.8

D. Economic Benefit

$0.00

Basis: The Bureau reserves the right to assess an economic benefit if one is found to exist.

Company:	Giant Industries	Calculations by:	John Volkerding
Facility:	Bloomfield Refinery	Reviewed by:	Robert Samaniego
NOV #:	AQCA 02-09	Date of Calculation:	3-Jun-05
Permit #:	402-M8	Source Class:	Major

VIOLATION 5

MACT Subpart R, 40 CFR 63.428(c)(2)(1), Notification of Compliance Status

A. Gravity Component

Potential for Harm	Extent of Deviation	Quantity	Penalty
Significant	Moderate	1	$3,000.00

Basis: The Potential for Harm is Significant and the Exent of Deviation is Moderate, as detailed in the Bureau's Civil Penalty Policy Sections C.1.a, C.1.b, and Appendix F.

B. Multi-Day Component

Number of Days	Multiplier	Quantity	Penalty
0	400.00	1	$0.00

Basis: The number of days is zero as this is a one-day violation and that one day has been accounted for in the gravity component.

C. Adjustment Factors

I. Effort to Comply — Some Cooperation — 0.0

Basis:

II. Negligence/Willfulness — Negligent — 0.2

Basis: The company violated a clear condition of the New Mexico Administrative Code (NMAC) and/or Permit 402-M8. The Department considers such a violation to be negligent in that the company is reasonably presumed to have knowledge of these conditions.

III. History of Non-Compliance — History of Non-Compliance w/ Different Regulations — 0.2

Basis: Giant has past violations; however, none involve this issue.

IV. Financial Condition — Gross Sales Between than $10,000,000-$50,000,000 — 0.4

Basis: This is the value previously used in settlement negotiations.

V. Unique Factor — 1.0

Basis: N/A

Factor Total = (1+ I+II+III+IV) * V — 1.8

D. Economic Benefit

$0.00

Basis: The Bureau reserves the right to assess an economic benefit if one is found to exist.

Company:	Giant Industries	Calculations by:	John Volkerding
Facility:	Bloomfield Refinery	Reviewed by:	Robert Samaniego
NOV #:	AQCA 02-09	Date of Calculation:	3-Jun-05
Permit #:	402-M8	Source Class:	Major

VIOLATION 6

MACT Subpart CC 40 CFR 63.650(a) & MACT Subpart R 40 CFR 63.425(b)(2), MOI

A. Gravity Component

Potential for Harm	Extent of Deviation	Quantity	Penalty
Significant	Moderate	1	$3,000.00

Basis: The Potential for Harm is Significant and the Exent of Deviation is Moderate, as detailed in the Bureau's Civil Penalty Policy Sections C.1.a, C.1.b, and Appendix F.

B. Multi-Day Component

Number of Days	Multiplier	Quantity	Penalty
0	400.00	1	$0.00

Basis: The number of days is zero as this is a one-day violation and that one day has been accounted for in the gravity component.

C. Adjustment Factors

I. Effort to Comply — Some Cooperation — 0.0

Basis:

II. Negligence/Willfulness — Negligent — 0.2

Basis: The company violated a clear condition of the New Mexico Administrative Code (NMAC) and/or Permit 402-M8. The Department considers such a violation to be negligent in that the company is reasonably presumed to have knowledge of these conditions.

III. History of Non-Compliance — History of Non-Compliance w/ Different Regulations — 0.2

Basis: Giant has past violations; however, none involve this issue.

IV. Financial Condition — Gross Sales Between than $10,000,000-$50,000,000 — 0.4

Basis: This is the value previously used in settlement negotiations.

V. Unique Factor — 1.0

Basis: N/A

Factor Total = (1+ I+II+III+IV) * V — 1.8

D. Economic Benefit

$0.00

Basis: The Bureau reserves the right to assess an economic benefit if one is found to exist.

Company:	Giant Industries	Calculations by:	John Volkerding
Facility:	Bloomfield Refinery	Reviewed by:	Robert Samaniego
NOV #:	AQCA 02-09	Date of Calculation:	3-Jun-05
Permit #:	402-M8	Source Class:	Major

VIOLATION 7

MACT Subpart R, 40 CFR 63.422(b) & 427(b), MOPV Compliance

A. Gravity Component

Potential for Harm	Extent of Deviation	Quantity	Penalty
Severe	Major	3	$18,000.00

Basis: The Potential for Harm is Severe and the Exent of Deviation is Major, as detailed in the Bureau's Civil Penalty Policy Sections C.1.a, C.1.b, and Appendix F.

B. Multi-Day Component

Number of Days	Multiplier	Quantity	Penalty
0	800.00	3	$0.00

Basis: The number of days is zero as this is a one-day violation and that one day has been accounted for in the gravity component.

C. Adjustment Factors

I. Effort to Comply — Some Cooperation — 0.0

Basis:

II. Negligence/Willfulness — Negligent — 0.2

Basis: The company violated a clear condition of the New Mexico Administrative Code (NMAC) and/or Permit 402-M8. The Department considers such a violation to be negligent in that the company is reasonably presumed to have knowledge of these conditions.

III. History of Non-Compliance — History of Non-Compliance w/ Different Regulations — 0.2

Basis: Giant has past violations; however, none involve this issue.

IV. Financial Condition — Gross Sales Between than $10,000,000-$50,000,000 — 0.4

Basis: This is the value previously used in settlement negotiations.

V. Unique Factor — 1.0

Basis: N/A

Factor Total = (1+ I+II+III+IV) * V — 1.8

D. Economic Benefit

$0.00

Basis: The Bureau reserves the right to assess an economic benefit if one is found to exist.

Company:	Giant Industries	Calculations by:	John Volkerding
Facility:	Bloomfield Refinery	Reviewed by:	Robert Samaniego
NOV #:	AQCA 02-09	Date of Calculation:	3-Jun-05
Permit #:	402-M8	Source Class:	Major

VIOLATION 8 MACT Subpart R 40 CFR 63.428(h), Excess Emission Report

A. Gravity Component

Potential for Harm	Extent of Deviation	Quantity	Penalty
Severe	Moderate	3	$15,000.00

Basis: The Potential for Harm is Severe and the Exent of Deviation is Moderate, as detailed in the Bureau's Civil Penalty Policy Sections C.1.a, C.1.b, and Appendix F.

B. Multi-Day Component

Number of Days	Multiplier	Quantity	Penalty
0	640.00	3	$0.00

Basis: The number of days is zero as this is a one-day violation and that one day has been accounted for in the gravity component.

C. Adjustment Factors

I. Effort to Comply — Some Cooperation — 0.0

Basis:

II. Negligence/Willfulness — Negligent — 0.2

Basis: The company violated a clear condition of the New Mexico Administrative Code (NMAC) and/or Permit 402-M8. The Department considers such a violation to be negligent in that the company is reasonably presumed to have knowledge of these conditions.

III. History of Non-Compliance — History of Non-Compliance w/ Different Regulations — 0.2

Basis: Giant has past violations; however, none involve this issue.

IV. Financial Condition — Gross Sales Between than $10,000,000-$50,000,000 — 0.4

Basis: This is the value previously used in settlement negotiations.

V. Unique Factor — 1.0

Basis: N/A

Factor Total = (1+ I+II+III+IV) * V — 1.8

D. Economic Benefit

$0.00

Basis: The Bureau reserves the right to assess an economic benefit if one is found to exist.

Company:	Giant Industries	Calculations by:	John Volkerding
Facility:	Bloomfield Refinery	Reviewed by:	Robert Samaniego
NOV #:	AQCA 02-09	Date of Calculation:	3-Jun-05
Permit #:	402-M8	Source Class:	Major

VIOLATION 9

MACT Subpart CC 40 CFR 63.646(a) & 63.654(g)(3)(I), Report of Seal Gap Exceedar

A. Gravity Component

Potential for Harm	Extent of Deviation	Quantity	Penalty
Significant	Moderate	1	$3,000.00

Basis: The Potential for Harm is Significant and the Exent of Deviation is Moderate, as detailed in the Bureau's Civil Penalty Policy Sections C.1.a, C.1.b, and Appendix F.

B. Multi-Day Component

Number of Days	Multiplier	Quantity	Penalty
0	400.00	1	$0.00

Basis: The number of days is zero as this is a one-day violation and that one day has been accounted for in the gravity component.

C. Adjustment Factors

I. Effort to Comply — Some Cooperation — 0.0

Basis:

II. Negligence/Willfulness — Negligent — 0.2

Basis: The company violated a clear condition of the New Mexico Administrative Code (NMAC) and/or Permit 402-M8. The Department considers such a violation to be negligent in that the company is reasonably presumed to have knowledge of these conditions.

III. History of Non-Compliance — History of Non-Compliance w/ Different Regulations — 0.2

Basis: Giant has past violations; however, none involve this issue.

IV. Financial Condition — Gross Sales Between than $10,000,000-$50,000,000 — 0.4

Basis: This is the value previously used in settlement negotiations.

V. Unique Factor — 1.0

Basis: N/A

Factor Total = (1+ I+II+III+IV) * V — 1.8

D. Economic Benefit

$0.00

Basis: The Bureau reserves the right to assess an economic benefit if one is found to exist.

Company:	Giant Industries	Calculations by:	John Volkerding
Facility:	Bloomfield Refinery	Reviewed by:	Robert Samaniego
NOV #:	AQCA 02-09	Date of Calculation:	3-Jun-05
Permit #:	402-M8	Source Class:	Major

VIOLATION 10

MACT Subpart CC 40 CFR 63.646(a) & 63.654(i) & 63.123(d), Seal Gap Measuremer

A. Gravity Component

Potential for Harm	Extent of Deviation	Quantity	Penalty
Significant	Moderate	1	$3,000.00

Basis: The Potential for Harm is Significant and the Exent of Deviation is Moderate, as detailed in the Bureau's Civil Penalty Policy Sections C.1.a, C.1.b, and Appendix F.

B. Multi-Day Component

Number of Days	Multiplier	Quantity	Penalty
0	400.00	1	$0.00

Basis: The number of days is zero as this is a one-day violation and that one day has been accounted for in the gravity component.

C. Adjustment Factors

I. Effort to Comply — Some Cooperation — 0.0

Basis:

II. Negligence/Willfulness — Negligent — 0.2

Basis:

III. History of Non-Compliance — History of Non-Compliance w/ Different Regulations — 0.2

Basis: Giant has past violations; however, none involve this issue.

IV. Financial Condition — Gross Sales Between than $10,000,000-$50,000,000 — 0.4

Basis: This is the value previously used in settlement negotiations.

V. Unique Factor — 1.0

Basis: N/A

Factor Total = (1+ I+II+III+IV) * V — 1.8

D. Economic Benefit

$0.00

Basis: The Bureau reserves the right to assess an economic benefit if one is found to exist.

Company:	Giant Industries	Calculations by:	John Volkerding
Facility:	Bloomfield Refinery	Reviewed by:	Robert Samaniego
NOV #:	AQCA 02-09	Date of Calculation:	3-Jun-05
Permit #:	402-M8	Source Class:	Major

VIOLATION 11

MACT Subpart CC 40 CFR 63.646(a) & 63.654(h)(2)(i)(A), Refilling Notice

A. Gravity Component

Potential for Harm	Extent of Deviation	Quantity	Penalty
Significant	Moderate	2	$6,000.00

Basis: The Potential for Harm is Significant and the Exent of Deviation is Moderate, as detailed in the Bureau's Civil Penalty Policy Sections C.1.a, C.1.b, and Appendix F.

B. Multi-Day Component

Number of Days	Multiplier	Quantity	Penalty
0	400.00	2	$0.00

Basis: The number of days is zero as this is a one-day violation and that one day has been accounted for in the gravity component.

C. Adjustment Factors

I. Effort to Comply — Some Cooperation — 0.0

Basis:

II. Negligence/Willfulness — Negligent — 0.2

Basis: The company violated a clear condition of the New Mexico Administrative Code (NMAC) and/or Permit 402-M8. The Department considers such a violation to be negligent in that the company is reasonably presumed to have knowledge of these conditions.

III. History of Non-Compliance — History of Non-Compliance w/ Different Regulations — 0.2

Basis: Giant has past violations; however, none involve this issue.

IV. Financial Condition — Gross Sales Between than $10,000,000-$50,000,000 — 0.4

Basis: This is the value previously used in settlement negotiations.

V. Unique Factor — 1.0

Basis: N/A

Factor Total = (1+ I+II+III+IV) * V — 1.8

D. Economic Benefit

$0.00

Basis: The Bureau reserves the right to assess an economic benefit if one is found to exist.

Company:	Giant Industries	Calculations by:	John Volkerding
Facility:	Bloomfield Refinery	Reviewed by:	Robert Samaniego
NOV #:	AQCA 02-09	Date of Calculation:	3-Jun-05
Permit #:	402-M8	Source Class:	Major

VIOLATION 12

Permit 402-M8, Condition 2, Flare Emission Limits

A. Gravity Component

Potential for Harm	Extent of Deviation	Quantity	Penalty
Minimal	Major	1	$2,500.00

Basis: The Potential for Harm is Minimal and the Exent of Deviation is Major, as detailed in the Bureau's Civil Penalty Policy Sections C.1.a, C.1.b, and Appendix F.

The emissions from the flaring was less than 25 tpy over a period of 1.25 years.

B. Multi-Day Component

Number of Days	Multiplier	Quantity	Penalty
515	240.00	1	$123,600.00

Basis: Based on documents provided by Giant, Flare 1 emission limits were exceeded on 515 days between October 1, 2001 and December 31, 2003.

C. Adjustment Factors

I. Effort to Comply — Some Cooperation — 0.0

Basis:

II. Negligence/Willfulness — Negligent — 0.2

Basis: The company violated a clear condition of the New Mexico Administrative Code (NMAC) and/or Permit 402-M8. The Department considers such a violation to be negligent in that the company is reasonably presumed to have knowledge of these conditions.

III. History of Non-Compliance — History of Non-Compliance w/ Different Regulations — 0.2

Basis: Giant has past violations; however, none involve this issue.

IV. Financial Condition — Gross Sales Between than $10,000,000-$50,000,000 — 0.4

Basis: This is the value previously used in settlement negotiations.

V. Unique Factor — 1.0

Basis: N/A

Factor Total = (1+ I+II+III+IV) * V — 1.8

D. Economic Benefit

$9,091.00

Basis: Using a permit fee of $10,000, the delayed benefit from 1/29/03 (date of issuance of permit number 402-M4, with incorrect emission limits) to 10/28/03 (date of issuance of permit number 402-M9, with revised emission limits) using EPA's BEN model is calculated to be $9,091

Company:	Giant Industries	Calculations by:	John Volkerding
Facility:	Bloomfield Refinery	Reviewed by:	Robert Samaniego
NOV #:	AQCA 02-09	Date of Calculation:	3-Jun-05
Permit #:	402-M8	Source Class:	Major

VIOLATION 13

MACT Subpart CC 40 CFR 63.646(a) & 63.120(b)(3), Seal Gap Exceedance

A. Gravity Component

Potential for Harm	Extent of Deviation	Quantity	Penalty
Significant	Moderate	1	$3,000.00

Basis: The Potential for Harm is Significant and the Exent of Deviation is Moderate, as detailed in the Bureau's Civil Penalty Policy Sections C.1.a, C.1.b, and Appendix F.

B. Multi-Day Component

Number of Days	Multiplier	Quantity	Penalty
0	400.00	1	$0.00

Basis: The number of days is zero as this is a one-day violation and that one day has been accounted for in the gravity component.

C. Adjustment Factors

I. Effort to Comply — Some Cooperation — 0.0

Basis:

II. Negligence/Willfulness — Negligent — 0.2

Basis: The company violated a clear condition of the New Mexico Administrative Code (NMAC) and/or Permit 402-M8. The Department considers such a violation to be negligent in that the company is reasonably presumed to have knowledge of these conditions.

III. History of Non-Compliance — History of Non-Compliance w/ Different Regulations — 0.2

Basis: Giant has past violations; however, none involve this issue.

IV. Financial Condition — Gross Sales Between than $10,000,000-$50,000,000 — 0.4

Basis: This is the value previously used in settlement negotiations.

V. Unique Factor — 1.0

Basis: Enter basis

Factor Total = (1+ I+II+III+IV) * V — 1.8

D. Economic Benefit

$0.00

Basis: The Bureau reserves the right to assess an economic benefit if one is found to exist.

Company:	Giant Industries	Calculations by:	John Volkerding
Facility:	Bloomfield Refinery	Reviewed by:	Robert Samaniego
NOV #:	AQCA 02-09	Date of Calculation:	3-Jun-05
Permit #:	402-M8	Source Class:	Major

TOTAL CALCULATED PENALTY

Violation 1 — NSPS Subpart J, 40 CFR 60.105(a)(3), H2S Monitoring

A. Gravity Component	$4,000.00
B. Multi-Day Component	$28,800.00
Adjustments (Gravity + Multiday) x Factors	$59,040.00
C. Economic Benefit	$142,741.00
D. Total Penalty	**$201,781.00**

Violation 2 — NSPS Subpart A, 40 CFR 60.13(d)(1), CMS Calibration Procedure

A. Gravity Component	$3,000.00
B. Multi-Day Component	$0.00
Adjustments (Gravity + Multiday) x Factors	$5,400.00
C. Economic Benefit	$0.00
D. Total Penalty	**$5,400.00**

Violation 3 — NSPS Subpart Kb, 40 CFR 60.115b(b)(2), Report of Seal Gap Measurements

A. Gravity Component	$3,000.00
B. Multi-Day Component	$0.00
Adjustments (Gravity + Multiday) x Factors	$5,400.00
C. Economic Benefit	$0.00
D. Total Penalty	**$5,400.00**

Violation 4 — MACT Subpart CC 40 CFR 63.648(a) & NSPS Subpart VV 40 CFR 60.486(f)(2), Recordkeepin

A. Gravity Component	$24,000.00
B. Multi-Day Component	$0.00
Adjustments (Gravity + Multiday) x Factors	$43,200.00
C. Economic Benefit	$0.00
D. Total Penalty	**$43,200.00**

Violation 5 — MACT Subpart R, 40 CFR 63.428(c)(2)(1), Notification of Compliance Status

A. Gravity Component	$3,000.00
B. Multi-Day Component	$0.00
Adjustments (Gravity + Multiday) x Factors	$5,400.00
C. Economic Benefit	$0.00
D. Total Penalty	**$5,400.00**

Company:	Giant Industries	Calculations by:	John Volkerding
Facility:	Bloomfield Refinery	Reviewed by:	Robert Samaniego
NOV #:	AQCA 02-09	Date of Calculation:	3-Jun-05
Permit #:	402-M8	Source Class:	Major

Violation 6 — MACT Subpart CC 40 CFR 63.650(a) & MACT Subpart R 40 CFR 63.425(b)(2), MOPV Deter

A. Gravity Component	$3,000.00
B. Multi-Day Component	$0.00
Adjustments (Gravity + Multiday) x Factors	$5,400.00
C. Economic Benefit	$0.00
D. Total Penalty	**$5,400.00**

Violation 7 — MACT Subpart R, 40 CFR 63.422(b) & 427(b), MOPV Compliance

A. Gravity Component	$18,000.00
B. Multi-Day Component	$0.00
Adjustments (Gravity + Multiday) x Factors	$32,400.00
C. Economic Benefit	$0.00
D. Total Penalty	**$32,400.00**

Violation 8 — MACT Subpart R 40 CFR 63.428(h), Excess Emission Report

A. Gravity Component	$15,000.00
B. Multi-Day Component	$0.00
Adjustments (Gravity + Multiday) x Factors	$27,000.00
C. Economic Benefit	$0.00
D. Total Penalty	**$27,000.00**

Violation 9 — MACT Subpart CC 40 CFR 63.646(a) & 63.654(g)(3)(I), Report of Seal Gap Exceedance

A. Gravity Component	$3,000.00
B. Multi-Day Component	$0.00
Adjustments (Gravity + Multiday) x Factors	$5,400.00
C. Economic Benefit	$0.00
D. Total Penalty	**$5,400.00**

Violation 10 — MACT Subpart CC 40 CFR 63.646(a) & 63.654(i) & 63.123(d), Seal Gap Measurement Data

A. Gravity Component	$3,000.00
B. Multi-Day Component	$0.00
Adjustments (Gravity + Multiday) x Factors	$5,400.00
C. Economic Benefit	$0.00
D. Total Penalty	**$5,400.00**

Company:	Giant Industries	Calculations by:	John Volkerding
Facility:	Bloomfield Refinery	Reviewed by:	Robert Samaniego
NOV #:	AQCA 02-09	Date of Calculation:	3-Jun-05
Permit #:	402-M8	Source Class:	Major

Violation 11 — MACT Subpart CC 40 CFR 63.646(a) & 63.654(h)(2)(i)(A), Refilling Notice

A. Gravity Component	$6,000.00
B. Multi-Day Component	$0.00
Adjustments (Gravity + Multiday) x Factors	$10,800.00
C. Economic Benefit	$0.00
D. Total Penalty	**$10,800.00**

Violation 12 — Permit 402-M8, Condition 2, Flare Emission Limits

A. Gravity Component	$2,500.00
B. Multi-Day Component	$123,600.00
Adjustments (Gravity + Multiday) x Factors	$226,980.00
C. Economic Benefit	$9,091.00
D. Total Penalty	**$236,071.00**

Violation 13 — MACT Subpart CC 40 CFR 63.646(a) & 63.120(b)(3), Seal Gap Exceedance

A. Gravity Component	$3,000.00
B. Multi-Day Component	$0.00
Adjustments (Gravity + Multiday) x Factors	$5,400.00
C. Economic Benefit	$0.00
D. Total Penalty	**$5,400.00**

Combined Total	**$589,052.00**

Company:	Giant Industries	Calculations by:	John Volkerding
Facility:	Bloomfield Refinery	Reviewed by:	Robert Samaniego
NOV #:	AQCA 02-09	Date of Calculation:	3-Jun-05
Permit #:	402-M8	Source Class:	Major

MAXIMUM ALLOWABLE PENALTY

Maximum allowable penalty is for comparison purposes only. $15,000 per violation per day my be assessed as per New Mexico Air Quality Control Act Section 74-2-12.B.

	Maximum Daily Penalty	Number of Days	Quantity	Max Penalty
Violation 1	$15,000	9881	1	$148,215,000.00
Violation 2	$15,000	1	1	$15,000.00
Violation 3	$15,000	1	1	$15,000.00
Violation 4	$15,000	1	6	$90,000.00
Violation 5	$15,000	1	1	$15,000.00
Violation 6	$15,000	1	1	$15,000.00
Violation 7	$15,000	1	3	$45,000.00
Violation 8	$15,000	1	3	$45,000.00
Violation 9	$15,000	1	1	$15,000.00
Violation 10	$15,000	1	1	$15,000.00
Violation 11	$15,000	1	2	$30,000.00
Violation 12	$15,000	1	1	$15,000.00
Violation 13	$15,000	1	1	$15,000.00
			Maximum Total	$148,545,000.00