

Cause No. _____

STATE OF TEXAS,	§	IN THE DISTRICT COURT OF
	§	
Plaintiff,	§	
	§	
v.	§	
	§	TRAVIS COUNTY, TEXAS
GULF CHEMICAL &	§	
METALLURGICAL	§	
CORPORATION,	§	
	§	_____ JUDICIAL DISTRICT
Defendant.		

**PLAINTIFF'S ORIGINAL PETITION AND APPLICATION
FOR TEMPORARY AND PERMANENT INJUNCTIVE RELIEF**

TO THE HONORABLE JUDGE OF SAID COURT:

The State of Texas ("State"), by and through its Attorney General, on behalf of the people of Texas and the Texas Commission on Environmental Quality ("TCEQ"), files this Original Petition and Application for Temporary and Permanent Injunctive Relief, and for cause of action would respectfully show the Court the following:

I. DISCOVERY

1.1 The State will conduct discovery under a Level 2 Discovery Control Plan. Tex. R. Civ. P. 190.

II. NATURE OF THE CASE

2.1 This is a civil enforcement case against a polluter and convicted felon. The State seeks civil penalties, attorney's fees, and injunctive relief.

2.2 Defendant and its former environmental manager have each pleaded guilty to felony environmental crimes relating to the operations at the Defendant's Freeport, Texas Facility.

2.3 Defendant's operations result in the emission of air pollutants, including toxic and hazardous metals and sulfur dioxide, a chemical that is a precursor to the formation of particulate matter and acid rain. Defendant's operations also result in the discharge of storm water and wastewater effluents containing toxic and hazardous metals, including arsenic, cobalt, nickel, molybdenum, and vanadium.

2.4 The State has documented that the pollutants discharged by the Defendant have fouled air and soils outside of the Defendant's Facility often at levels that may be hazardous to human health or the environment.

2.5 Defendant runs a "band-aid" operation. State investigations revealed that pollution control equipment is not properly operated or

maintained. In some instances, Defendant has literally used duct tape to hold together parts of its Facility pollution control equipment.

III. PARTIES

3.1 Plaintiff, the State of Texas, through its Attorney General, is authorized to bring this suit at the request of the TCEQ. Tex. Water Code § 7.032(d).

3.2 The State is not required to pay a filing fee or other security for costs and is not required to pay a bond prior to the Court granting an injunction. Tex. Civ. Prac. & Rem. Code § 6.001.

3.3 Defendant, Gulf Chemical & Metallurgical Corporation (“GCMC”), is a Texas corporation authorized to conduct business in the State of Texas. Defendant may be served with process by serving its registered agent for process, Kevin H. Jones at 302 Midway Rd., Freeport, Texas 77541, or wherever he may be found.

IV. JURISDICTION AND VENUE

4.1 This Court has jurisdiction. Tex. Water Code § 7.105(a).

4.2 Venue for this suit is proper in Travis County, Texas. Tex. Water Code § 7.105(c).

V. BACKGROUND

5.1 GCMC owns and operates a non-ferrous secondary metal recovery facility located at 302 Midway Road, Freeport, Brazoria County, Texas (“Facility”).

5.2 The Facility recovers metals from spent refinery hydro-treating and hydro-refining catalysts, and includes the operation of two multiple hearth furnaces.

5.3 On May 28, 2010, Defendant GCMC pleaded guilty in Travis County, Texas District Court to eleven felony violations of the Texas Water Code.¹ The criminal violations occurred at the Facility during the same general time as the civil violations at issue in this case. Defendant paid a \$2.75 million fine for its criminal conduct. In September 2010, Defendant’s former environmental manager, Rajani Vadlamudi, pleaded guilty to felony unauthorized discharge of waste from the Facility for which he received deferred

¹The violations at issue in the criminal case are not alleged in this petition as civil violations.

adjudication and a criminal fine of \$5,000.

5.4 Air emissions from the Facility are regulated under permits issued by the TCEQ, including the following: New Source Review Permit 9803 (“Permit 9803”); New Source Review Permit 1157C (“Permit 1157C”); New Source Review Permit 19793 (“Permit 19793”); Title V Federal Operating Permit O1337 (“Permit O1337”); and Standard Permit 86946.

5.5 The air emission permits issued to GCMC regulate the emissions from various emission points. An emission point regulated under GCMC’s permits is identified as an “EPN.”

5.6 Wastes discharged from the Facility into or adjacent to waters of the State are regulated under TPDES Permit No. WQ0001861000 (“TPDES Permit”). The TPDES Permit includes effluent points identified as Outfall 001 and Outfall 002.

5.7 The TCEQ has recently invested substantial resources in responding to complaints relating to the Facility and conducting compliance investigations. These investigations have included the following:

A. The TCEQ conducted a compliance file review investigation related

to a compliance certification test report or stack test submitted to the TCEQ by GCMC. The investigation is documented as investigation no. 616941 dated March 17 – 31, 2008.

- B. The TCEQ conducted a compliance file review investigation related to a compliance certification test report or stack test submitted to the TCEQ by GCMC. The investigation is documented as investigation no. 702236 dated September 5, 2008.
- C. The TCEQ conducted a compliance file review investigation related to a compliance certification test report or stack test submitted to the TCEQ by GCMC. The investigation is documented as investigation no. 737976 dated March 12 – 26, 2009.
- D. The TCEQ conducted a compliance file review investigation related to a compliance certification test report or stack test submitted to the TCEQ by GCMC. The investigation is documented as investigation no. 740890 dated March 19 – 31, 2009.
- E. The TCEQ conducted an on-site compliance investigation related to wastewater permits and effluents at the GCMC Facility. The

investigation is documented as investigation no. 763722 dated April 24, 2009 – July 15, 2009.

- F. The TCEQ conducted an on-site compliance investigation related to air permits and emissions at the GCMC Facility. The investigation is documented as investigation no. 747448 dated July 22 – 28, 2009.
- G. The TCEQ conducted an on-site compliance investigation related to wastewater permits and effluents at the GCMC Facility. The investigation is documented as investigation no. 767077 dated August 25, 2009 – September 9, 2009.
- H. The TCEQ conducted an on-site investigation of nineteen complaints regarding air emissions from the GCMC Facility. The investigation is documented as investigation no. 762631 dated July 15, 2009 – September 29, 2009.
- I. The TCEQ conducted an on-site investigation of ten complaints regarding air emissions from the GCMC Facility. The investigation is documented as investigation no. 782844 dated November 12, 2009 – December 15, 2009.

- J. The TCEQ conducted a compliance file review investigation related to wastewater permits and effluents at the GCMC Facility. The investigation is documented as investigation no. 784606 dated December 4 – 7, 2009.
- K. The TCEQ conducted an on-site investigation of five complaints regarding air emissions from the GCMC Facility. The investigation is documented as investigation no. 791388 dated January 26, 2010.
- L. The TCEQ conducted a compliance file review investigation related to air permits and emissions at the GCMC Facility. The investigation is documented as investigation no. 795256 dated February 16, 2010 – March 1, 2010.
- M. The TCEQ conducted an on-site investigation of nine complaints regarding air emissions from the GCMC Facility. The investigation is documented as investigation no. 799457 dated April 13, 2010 – May 10, 2010.
- N. The TCEQ conducted a compliance file review investigation related to air permits and emissions at the GCMC Facility. The

investigation is documented as investigation no. 802131 dated May 7 – 10, 2010.

- O. The TCEQ conducted an on-site investigation of five complaints regarding air emissions from the GCMC Facility. The investigation is documented as investigation no. 803693 dated May 17, 2010.
- P. The TCEQ conducted an on-site investigation of five complaints regarding air emissions from the GCMC Facility. The investigation is documented as investigation no. 850098 dated July 13, 2010.
- Q. The TCEQ conducted an on-site emissions event investigation related to air emissions from the GCMC Facility. The investigation is documented as investigation no. 872669 dated September 24, 2010.
- R. The TCEQ conducted an in-house emissions event investigation related to air emissions from the GCMC Facility. The investigation is documented as investigation no. 872667 dated November 3, 2010.
- S. In October 2010, the TCEQ was on-site to witness a compliance stack test at the GCMC Facility, but had to evacuate for safety reasons.

- T. The TCEQ conducted off-site mobile air monitoring during November 2005, July 2007, March 2009, October 2010, and January 2011.
- U. The TCEQ conducted off-site soil sampling during July 2007 and December 2010.
- V. In addition to the above, during the course of the investigations the TCEQ has on multiple occasions (1) visited the Facility, (2) reviewed documents, and/or (3) obtained information from Defendant's agents regarding on-going compliance issues at the Facility.

5.8 Defendant violated, and continues to violate, scores of environmental regulations, statutes, and permit conditions. Collectively, the violations resulted, and continue to result, in the unauthorized emission and discharge of metal particulates and other air pollutants.

5.9 Air emissions from Defendant's Facility have included ammonia ("NH₃"), carbon monoxide ("CO"), nitrous oxides ("NO_x"), particulate matter ("PM"), sulfur dioxide ("SO₂"), volatile organic compounds ("VOCs"), and metals, including arsenic, cobalt, molybdenum, nickel, and vanadium.

5.10 Wastewater discharges from the Defendant's Facility have included ammonia as nitrogen, total suspended solids ("TSS"), high pH wastewater (basic), untreated process wastewater, and metals, including arsenic, molybdenum, nickel, and vanadium.

5.11 Metals have also been identified above background levels in soils on properties adjacent to or in the vicinity of the Defendant's Facility, including, aluminum, antimony, arsenic, barium, beryllium, chromium, cobalt, copper, lead, manganese, nickel, selenium, strontium, tin, vanadium, and zinc.

5.12 The above pollutants have potential health and environmental effects, including the following:

- A. Aluminum is a metal, exposure to which may occur through food, breathing, and skin contact. Chronic uptakes of large amounts of aluminum can lead to serious health effects, including damage to the central nervous system, dementia, loss of memory, listlessness, and severe trembling. Breathing fine aluminum and aluminum oxide powder may be a cause of pulmonary fibrosis and lung damage, an

effect known as Shaver's Disease. Aluminum may also be implicated in Alzheimer's disease.

B. Antimony is a metal, exposure to which may take place through breathing air, drinking water, and skin contact. Breathing in antimony bonded to hydrogen in the gaseous phase is the main cause of health effects. Exposure to high concentrations of antimony for a long duration may cause irritation of the eyes, skin, and lungs. Longer exposure may result in more serious health effects, such as lung diseases, heart problems, diarrhea, severe vomiting, and stomach ulcers. The EPA lists antimony as a hazardous air pollutant under the federal Clean Air Act.

C. Arsenic is a metal and one of the most toxic elements. Arsenic cannot be destroyed once it enters the environment, so it can spread and cause health effects to humans and animals on a widespread basis. Exposure to inorganic arsenic may cause irritation of the stomach and intestines, decreased production of blood cells, skin changes, lung irritation, and intensify the chances of cancer

development, especially the chances of development of skin cancer, lung cancer, liver cancer, and lymphatic cancer. At high exposures to inorganic arsenic infertility and miscarriages in women may result as well as skin disturbances, declined resistance to infections, heart disruptions, and brain damage with both men and women. Finally, inorganic arsenic can damage DNA. Exposure to high levels of organic arsenic may cause nerve injury and stomachaches. The EPA lists arsenic as a hazardous air pollutant under the federal Clean Air Act.

- D. Barium is a metal, small amounts of which may cause breathing difficulties; increased blood pressure; heart rhythm changes; stomach irritation; muscle weakness; changes in nerve reflexes; swelling of the brain; and liver, kidney, and heart damage.
- E. Beryllium is a metal that is one of the most toxic chemicals identified. Beryllium may be very harmful when inhaled because it may cause lung damage and pneumonia. The most commonly known effect of beryllium is called berylliosis, a lung disorder with a

fatality rate of about twenty percent. Berylliosis is a persistent lung disorder that may damage other organs, including the heart. People with weakened immune systems are most susceptible to berylliosis. Beryllium may also cause allergic reactions with people that are hypersensitive to this chemical and may even result in a serious and sometimes fatal condition known as Chronic Beryllium Disease. Symptoms of Chronic Beryllium Disease include weakness, tiredness, and breathing difficulties. Some people exposed to beryllium may develop anorexia and blueness of their hands and feet. Beryllium may also increase the likelihood of cancer development and DNA damage. The EPA lists beryllium and beryllium compounds as hazardous air pollutants under the federal Clean Air Act.

- F. Chromium is a metal, the hexavalent form of which is toxic. Exposure to chromium may occur through breathing, eating or drinking, and through skin contact. Hexavalent chromium may cause skin rashes, upset stomachs and ulcers, respiratory problems,

weakened immune systems, kidney and liver damage, alteration of genetic material, lung cancer, and death. The EPA lists chromium and chromium compounds as hazardous air pollutants under the federal Clean Air Act.

G. Cobalt is a metal that may cause the following health effects at higher concentrations of exposure: lung effects, such as asthma and pneumonia; vomiting and nausea; vision problems; heart problems; and thyroid damage. The EPA lists cobalt and cobalt compounds as hazardous air pollutants under the federal Clean Air Act.

H. Copper is a metal, the long-term exposure to which may cause irritation of the nose, mouth, and eyes; headaches; stomachaches; dizziness; vomiting; and diarrhea. Very large ingestions of copper may cause liver and kidney damage and even death. In an industrial setting, exposure to copper fumes, dusts, or mists may result in metal fume fever characterized by atrophic changes in nasal mucous membranes. Chronic copper poisoning may result in Wilson's Disease, effects of which include hepatic cirrhosis, brain

damage, demyelination, renal disease, and copper deposition in the cornea.

- I. Lead is one of the four metals with the most harmful effects on human health. Lead serves no known essential function in the human body and can only do harm after ingestion. Lead may cause disruption of the biosynthesis of hemoglobin and anemia, a rise in blood pressure, kidney damage, miscarriages and subtle abortions, disruption of nervous systems, brain damage, reduced fertility of men, diminished learning abilities of children, and behavioral disruptions of children, such as aggression, impulsive behavior and hyperactivity. Lead may cause damage to the nervous system and the brains of unborn children. The EPA lists lead and lead compounds as hazardous air pollutants under the federal Clean Air Act. Lead is subject to regulation under an EPA health-based national ambient air quality standard.
- J. Manganese is a metal that is necessary for humans to survive in small quantities, but is toxic in larger concentrations. The primary

effects of manganese occur in the respiratory tract and in the brains and include hallucinations, forgetfulness, and nerve damage. Manganese may also cause Parkinson's disease, lung embolism, and bronchitis. Exposure to excessive manganese may result in a syndrome symptomized by schizophrenia, dullness, weak muscles, headaches, and insomnia. The EPA lists manganese and manganese compounds as hazardous air pollutants under the federal Clean Air Act.

- K. Nickel, like manganese, is a metal that is necessary for humans in small quantities but is toxic in higher concentrations. Exposure to large quantities of nickel may result in increased possibility of lung cancer, nose cancer, larynx cancer, and prostate cancer; sickness and dizziness after exposure to nickel gas; lung embolism; respiratory failure; birth defects; asthma and chronic bronchitis; allergic reactions such as skin rashes; and heart disorders. The EPA lists nickel and nickel compounds as hazardous air pollutants under the federal Clean Air Act.

L. Selenium may cause dizziness, fatigue, and irritations of the mucous membranes. With high exposures, selenium may cause build-up of fluid in the lungs and bronchitis. When ingested orally in food, selenium at higher exposures may cause brittle hair and deformed nails, rashes, swelling of the skin, and severe pains. Severe selenium poisoning may cause death. Overexposure of selenium fumes may cause a build-up of fluid in the lungs, bronchitis, pneumonitis, bronchial asthma, nausea, chills, fever, headache, sore throat, shortness of breath, conjunctivitis, vomiting, abdominal pain, diarrhea, and enlarged liver. Selenium is an eye and upper respiratory irritant and a sensitizer. The EPA lists selenium and selenium compounds as hazardous air pollutants under the federal Clean Air Act.

M. Tin is a metal with acute health effects that may include eye and skin irritations, headaches, stomachaches, sickness and dizziness, severe sweating, breathlessness, and urination problems. The long term or

chronic health effects of tin may include depression, liver damage, malfunctioning of immune systems, chromosomal damage, shortage of red blood cells, and brain damage (causing anger, sleeping disorders, forgetfulness and headaches).

N. Vanadium is a metal that is not considered to be a serious health risk, but at higher exposures may cause health effects including severe eye, nose, and throat irritation; cardiac and vascular disease; inflammation of stomach and intestines; damage to the nervous system; bleeding of the liver and kidney; skin rashes; severe trembling and paralysis; nose bleeds and throat pain; headaches; dizziness; and behavioral changes.

O. Zinc is a metal that is essential for human health, but at higher exposures may result in stomach cramps, skin irritations, vomiting, nausea, and anemia. At very high exposure levels, zinc may damage the pancreas, disturb protein metabolism, cause arteriosclerosis, and cause respiratory disorders.

P. Ammonia is a colorless, highly irritating gas with a sharp suffocating odor. Ammonia is ingested as a result of breathing, swallowing, or skin contact and it reacts with water to produce ammonium hydroxide. This chemical is very corrosive and damages cells in the body on contact. The severity of health effects of ammonia depend on the route of exposure, the dose, and the duration of exposure. Exposure to high concentrations of ammonia in air may cause immediate burning of the eyes, nose, throat, and respiratory tract and may result in blindness, lung damage, or death. Inhalation of lower concentrations may cause coughing and nose and throat irritation. Swallowing ammonia can cause burns to the mouth, throat, and stomach. Skin or eye contact with concentrated ammonia can also cause irritation and burns.

Q. Carbon monoxide is an odorless gas. When CO enters the bloodstream, it reduces oxygen delivery to the body's organs and tissues. The health threat from exposure to CO is most serious for those who suffer from cardiovascular disease. Healthy individuals

are also affected, but only at higher levels of exposure. Exposure to elevated CO levels is associated with visual impairment, reduced work capacity, reduced manual dexterity, poor learning ability, and difficulty in performing complex tasks. CO is subject to regulation under an EPA health-based national ambient air quality standard.

R. Nitrous oxides are various compounds containing nitrogen and oxygen. NO_x is subject to regulation under an EPA health-based national ambient air quality standard and is also a precursor chemical to the formation of ground level ozone in the Houston-Galveston-Brazoria ozone nonattainment area.

S. Particulate matter consists of small particles of material suspended in air, including dust, smoke, soot, and similar materials. Particulate matter may lodge in the lungs of those who inhale it and may cause increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; decreased lung function; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people

with heart or lung disease. PM is subject to regulation under an EPA health-based national ambient air quality standard.

- T. Sulfur dioxide is a precursor to acid rain and particulate matter. High concentrations of SO₂ may result in breathing problems with asthmatic children and adults who are active outdoors. Short-term exposure to SO₂ has been linked to wheezing, chest tightness, and shortness of breath. SO₂ is subject to regulation under an EPA health-based national ambient air quality standard.
- U. Volatile organic compounds is a generic name to describe a category of reactive hydrocarbons that generally evaporate easily in air at normal temperature. Health effects depend both on the specific VOC and the concentrations, but VOCs may be carcinogens (*e.g.* benzene and 1, 3 butadiene). In the Houston-Galveston-Brazoria ozone nonattainment area, VOCs react with NO_x in the presence of heat and sunlight to produce ground level ozone.
- V. Ammonia as nitrogen in wastewater harms the aquatic environment in several ways. It is directly toxic to fish and aquatic organisms,

even at relatively low levels. High temperatures and high pH levels will increase the toxic effects of ammonia. Ammonia also removes oxygen from the water, which is needed by the aquatic life, and ammonia adds nutrients to the water, which can cause excess algae growth or blooms that can deplete the oxygen further.

- W. Total suspended solids in wastewater increase the turbidity of waters and decrease visibility and water clarity.
- X. A high basic pH level in wastewater (above 9.0 standard units) can be toxic to many fish and aquatic organisms. In addition, high pH levels can increase the toxicity of other contaminants, *e.g.* ammonia.

VI. AUTHORITY

6.1 The TCAA provides that unless authorized by the TCEQ, no person may “cause, suffer, allow, or permit the emission of any air contaminant or the performance of any activity that causes or contributes to, or that will cause or contribute to, air pollution.” Tex. Health & Safety Code § 382.085(a).

6.2 A person may not cause, suffer, allow, or permit the emission of any air contaminant or the performance of any activity in violation of the TCAA or of

any TCEQ rule or order. Tex. Health & Safety Code § 382.085(b).

6.3 The Texas Water Quality Control Act (“TWQCA”) provides that unless authorized by the TCEQ, no person may discharge industrial waste into or adjacent to any water in the state or commit any other act or engage in any other activity which in itself or in conjunction with any other discharge or activity causes, continues to cause, or will cause pollution of any of the water in the State. Tex. Water Code § 26.121(a).

6.4 No person may cause, suffer, allow, or permit any activity in violation of the TWQCA or any TCEQ permit, rule, or order. Tex. Water Code § 7.101.

6.5 The Attorney General, at the request of the TCEQ, may bring an action for injunctive relief and civil penalties if it appears that a violation or threat of violation of a statute within the TCEQ’s jurisdiction or a rule adopted or an order or a permit issued under such a statute has occurred or is about occur. Tex. Water Code §§ 7.032, 7.105.

VII. PERMITS AND APPLICABLE REGULATIONS

Permit 9803

7.1 Permit 9803, Special Condition 1, “authorizes emissions only from those points listed in the attached table ‘Emission Sources – Maximum Allowable Emission Rates’” called the MAERT.

7.2 Permit 9803, Special Condition 4, requires that “[t]he maximum catalyst feed rate to Roasters R-3 and R-4 combined shall be limited to 17,700 pounds per hour (lbs/hr). . . .”

7.3 Permit 9803, Special Condition 7, requires that “[t]he combined spent catalyst feed rate to Roasters R-4 and R-3 shall be limited to 8,850 lbs/hr in the event that only one ESP [Electrostatic Precipitator] is in good working order and operating during roaster operations.”

7.4 Permit 9803, Special Condition 8, requires that the “Fabric Filter Baghouse (EPN 003) shall meet .00042 grain/scf [standard cubic feet] outlet grain loading for particulate matter (PM).”

7.5 Permit 9803, Special Condition 8(C), requires that GCMC perform annual preventative maintenance on the Fabric Filter Baghouse (EPN-003).

7.6 Permit 9803, Special Condition 9, requires that GCMC “shall measure and record on a daily basis the primary voltage, primary current, and spark rate of ESPs 001 and 002 during normal operations.” ESPs 001 and 002 are the pollution control devices for Roasters R-3 and R-4.

7.7 Permit 9803, Special Condition 10, requires GCMC to perform stack testing of ESP stacks no. 1 and no. 2 (ESP-001 and ESP-002). The stack test is the compliance determination for the MAERT table.

7.8 Permit 9803, Special Condition 11C, requires GCMC to perform high volume air sampling for net ground level concentrations of total PM, which must be analyzed for arsenic, aluminum, vanadium, nickel, molybdenum, and lead. The concentrations of these metals are limited to two times or less of the effects screening level at the time of the sampling event.

7.9 Permit 9803, Special Condition 12, requires that “[r]ecords of the time the ESPs are in service shall be maintained at the plant site and made available to the TCEQ upon request.”

7.10 Permit 9803, Special Condition 14, provides that records required in Special Condition 14(A) “shall be maintained on-site for a rolling five-year

period and made available upon request by representatives of the TCEQ. . . .”

7.11 Permit 9803, Special Condition 14(A), provides that “[r]ecords shall be kept and maintained which reflect the following: Daily and annual amounts of materials processed including hourly feed rates in tons/hour.”

7.12 Permit 9803, General Condition 8 requires that the air emissions from the sources permitted by Permit 9803 must not exceed the listed limits in the permit section “Emission Sources – Maximum Allowable Emission Rates” table or MAERT table.

7.13 Permit 9803, General Condition 9, requires that “[t]he permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations.”

7.14 Permit 9803, MAERT table, authorizes GCMC to emit 2.04 pounds per hour of NO_x from EPN-001 and EPN-002.

7.15 Permit 9803, MAERT table, authorizes GCMC to emit 2.16 pounds per hour of CO from EPN-001 and EPN-002.

7.16 Permit 9803, MAERT table, authorizes GCMC to emit 0.08 pounds

per hour of nickel oxide from EPN-001 and EPN-002.

7.17 Permit 9803, MAERT table, authorizes GCMC to emit 0.30 pounds per hour of vanadium pentoxide from EPN-001 and EPN-002.

7.18 The Facility's 9803 Permit does not authorize any PM emissions from the ESP Dust Collector System.

Permit 1157C

7.19 Permit 1157C, Special Condition 1, authorizes emissions only from those points listed in the attached table entitled "Emission Sources – Maximum Allowable Emission Rates." Permit 1157C authorizes emissions from EPN-008. The Maximum Allowable Emission Rate for sulfur dioxide from EPN-008 is 0.21 pounds per hour. Permit 1157C does not authorize the emission of particulate matter from EPN-F-Area 8 (fugitive emissions).

7.20 Permit 1157C, Special Condition 4, requires that "[t]he pH level of the sulfuric acid scrubbing solution in the ammonia (NH₃) Scrubber, Emission Point No. (EPN) 006, shall be maintained below 5.0. The pH level of the NH₃ Scrubber shall be continuously monitored by a pH monitor. . . . Records of the pH readings shall be maintained for a period of two years."

7.21 Permit 1157C, Special Condition 5, requires that “[t]he pH level in Scrubber 35-01, EPN 007, shall be maintained above 8.0 and shall be continuously monitored by a pH monitor. . . . Records of the pH readings shall be maintained for a period of two years.”

7.22 Permit 1157C, Special Condition 8(A), requires that “[a]udio, olfactory, and visual checks for NH₃ [ammonia] leaks within the operating area shall be made at least once per day.”

7.23 Permit 1157C, Special Condition 8(B), requires that the “[d]ate and time of each inspection [for ammonia leaks] shall be noted in the operator’s log or equivalent.”

Permit 19793

7.24 Permit 19793, Special Condition 4, requires that “[t]he alumina concentrate feed for the Electric Arc Furnace (EAF) shall be stored in containment building CB-1W and shall not contain less than 20% moisture content. Composite samples of the alumina concentrate feed stored in building CB-1W shall be obtained and analyzed daily for moisture content.”

7.25 Permit 19793, Special Condition 6, requires that “[a]ll scrubber

solutions shall be maintained at a pH above 8.0. . . .”

7.26 Permit 19793, Special Condition 6, requires that “[a]ll scrubber solutions shall be maintained . . . with a flow rate between 10 and 20 [gallons] per 1,000 standard cubic feet of off-gas.”

7.27 Permit 19793, Special Condition 9(B), requires that “[t]he baghouse pressure drop shall be continuously monitored and recorded daily for Baghouses 65.18-BH and 68.29-BH. The pressure drop across baghouse 65.18-BH shall be at least 1.5 [inches] H₂O and shall not exceed 6.0 [inches] H₂O.”

7.28 Permit 19793, Special Condition 9(B), requires that “[t]he baghouse pressure drop shall be continuously monitored and recorded daily for Baghouses 65.18-BH and 68.29-BH. . . . [T]he pressure drop across baghouse 68.29-BH shall be at least 6.0 [inches] H₂O and shall not exceed 10 [inches] H₂O.”

7.29 Permit 19793, Special Condition 9(D), requires that “[a]ll baghouses shall undergo a preventative maintenance inspection on an annual basis.”

7.30 Permit 19793, Special Condition 13(F), requires that GCMC keep records of malfunctions and repairs of any air pollution abatement devices, including baghouse maintenance and bag replacements at the Facility for a

rolling two-year period.

Permit O1337

7.31 Permit O1337, General Terms and Conditions provide that a “permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by [Permit O1337].”

7.32 Permit O1337, General Terms and Conditions, requires GCMC to “comply with all terms and conditions contained in . . . 30 TAC § 122.144 (Recordkeeping Terms and Conditions). . . .”

7.33 Permit O1337, Special Terms and Conditions 2(F), requires GCMC to comply with 30 Tex. Admin. Code § 101.201.

7.34 Permit O1337, Special Terms and Conditions 2(H), requires GCMC to comply with 30 Tex. Admin. Code §101.221.

7.35 Permit O1337, Special Terms and Conditions 3(A)(i), requires that “[f]or stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972, the permit holder shall comply with . . . 30 TAC 111.111(a)(1)(B) (Relating to Requirements for Specified

Sources).”

7.36 Permit O1337, Special Terms and Conditions 3(A)(iv)(3)-(4), requires that visible emission observations of emissions units operated during daylight hours shall be conducted and records of all observations shall be maintained.

7.37 Permit O1337, Special Terms and Conditions 8, requires GCMC to comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted areas.

7.38 Permit O1337, General Terms and Conditions, requires GCMC to “comply with all terms and conditions contained in . . . 30 TAC 122.145 (Reporting Terms and Conditions). . . .”

7.39 Permit O1337 requires GCMC to operate in accordance with 30 Tex. Admin. Code, Chapter 122.

Standard Permit 86946

7.40 Standard Permit 86946 Maximum Emission Rates Table sets the maximum emission rate for the Molybdenum Precipitation SYS Tanks Vent at the Molybdenum SO₂ Scrubber (EPN-008) at 0.03 pounds per hour of hydrogen chloride and 0.21 pounds per hour of SO₂.

TPDES Permit

7.41 TPDES Permit Condition 2(e) provides that “[a]uthorization from the [TCEQ] is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.”

7.42 TPDES Permit Condition 2(g) provides that “there shall be no unauthorized discharge of wastewater or any other waste. For the purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Other Requirements section of this permit.”

7.43 TPDES Permit, Effluent Limitations and Monitoring Requirements 1, includes the following requirements: 1) in a single grab sample of effluent from Outfall 001, total arsenic shall not exceed 2.0 milligrams per liter (“mg/l”); 2) the daily average discharge of total arsenic from Outfall 001 shall not exceed 2.12 pounds per day; and 3) the daily maximum discharge of total arsenic from Outfall 001 shall not exceed 4.76 pounds per day.

7.44 TPDES Permit, Effluent Limitations and Monitoring Requirements 1, requires that the daily average flow of effluent “shall not exceed 0.350 million

gallons per day.”

7.45 TPDES Permit, Effluent Limitations and Monitoring Requirements 1, includes the following requirements: 1) in a single grab sample of effluent from Outfall 001, total suspended solids shall not exceed 90 mg/l; 2) the daily average discharge of total suspended solids from Outfall 001 shall not exceed 67 pounds per day; and 3) the daily maximum discharge of total suspended solids from Outfall 001 shall not exceed 140 pounds per day.

7.46 TPDES Permit, Effluent Limitations and Monitoring Requirements 1, includes the following requirements: 1) the daily average discharge of total nickel from Outfall 001 shall not exceed 1.27 pounds per day; and 2) the daily maximum discharge of total nickel from Outfall 001 shall not exceed 1.88 pounds per day.

7.47 TPDES Permit, Effluent Limitations and Monitoring Requirements 1, includes the following requirements: 1) in a single grab sample of effluent from Outfall 001, total ammonia as nitrogen shall not exceed 614 mg/l; 2) the daily average discharge of total ammonia as nitrogen from Outfall 001 shall not exceed 615 pounds per day; and 3) the daily maximum discharge of total ammonia as

nitrogen from Outfall 001 shall not exceed 1419 pounds per day.

7.48 TPDES Permit, Effluent Limitations and Monitoring Requirements 1, includes the following requirement: the daily maximum discharge of total vanadium from Outfall 001 shall not exceed 230 mg/l.

7.49 TPDES Permit, Effluent Limitations and Monitoring Requirements 2, requires that the pH for effluent discharges from Outfall 002 shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per day by grab sample.

7.50 TPDES Permit, Effluent Limitations and Monitoring Requirements 1, requires that GCMC perform grab samples for oil and grease from Outfall 002 once per day. TPDES Permit, Monitoring and Reporting Requirements 1, requires that “the permittee shall conduct effluent sampling and reporting in accordance with 30 TAC §§ 319.4 - 319.12.”

7.51 TPDES Permit, Effluent Limitations and Monitoring Requirements 1, sets an effluent limit for Outfall 001 for molybdenum of 160 mg/l for a single grab sample. TPDES Permit, Monitoring and Reporting Requirements 1, requires that “the permittee shall conduct effluent sampling and reporting in accordance with

30 TAC §§ 319.4 - 319.12.”

7.52 TPDES Permit, Effluent Limitations and Monitoring Requirements 1, sets an effluent limit for Outfall 001 for molybdenum of 81.1 pounds per day as the daily average. TPDES Permit, Monitoring and Reporting Requirements 1, requires that “the permittee shall conduct effluent sampling and reporting in accordance with 30 TAC §§ 319.4 - 319.12.”

7.53 TPDES Permit, Effluent Limitations and Monitoring Requirements 1, sets an effluent limit for Outfall 001 for molybdenum of 181.3 pounds per day as the daily maximum limit. TPDES Permit, Monitoring and Reporting Requirements 1, requires that “the permittee shall conduct effluent sampling and reporting in accordance with 30 TAC §§ 319.4 - 319.12.”

7.54 TPDES Permit, Effluent Limitations and Monitoring Requirements 1, sets an effluent limit for Outfall 002 for molybdenum of 30 mg/l as the daily maximum limit. TPDES Permit, Monitoring and Reporting Requirements 1, requires that “the permittee shall conduct effluent sampling and reporting in accordance with 30 TAC §§ 319.4 - 319.12.”

7.55 TPDES Permit, Monitoring and Reporting Requirements 1, requires

that “[a] monthly effluent report shall be submitted each month, to the [TCEQ] Enforcement Division (MC 224), by the 20th day of the following month for each discharge.”

7.56 TPDES Permit, Monitoring and Reporting Requirements 3(a), requires that “[m]onitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.”

7.57 TPDES Permit, Monitoring and Reporting Requirements 3(c), requires that records of monitoring activities shall include the identity of the individual who collected the sample.

7.58 TPDES Permit, Monitoring and Reporting Requirements 7(a), requires that “any noncompliance which may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Report of such information shall be provided orally or by facsimile transmission (FAX) to the [TCEQ] Region Office within 24 hours of becoming aware of the noncompliance.”

7.59 TPDES Permit, Monitoring and Reporting Requirements 7(c), requires that “any effluent violation which deviates from the permitted effluent

limitation by more than 40% shall be reported by the permittee in writing to the [TCEQ] Region Office and the Enforcement Division (MC 224) within 5 working days of becoming aware of the noncompliance.”

7.60 TPDES Permit, Definitions and Standard Permit Conditions 3(a), specifies that “a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9(b)[sic].”

Applicable Regulations

7.61 A “reportable emission event” is any emission event that in any 24-hour period, results in an unauthorized emission from any emission point equal to or in excess of the reportable quantity (“RQ”). 30 Tex. Admin. Code § 101.1(87).

7.62 The RQ for anhydrous ammonia is 100 pounds as listed in 40 CFR, Part 302, Table 302.4. 30 Tex. Admin. Code § 101.1(88)(A)(i)(I).

7.63 “No person shall discharge from any source whatsoever one or more air contaminants or combinations thereof, in such concentration and of such

duration as are or may tend to be injurious to or to adversely affect human health or welfare, animal life, vegetation, or property, or as to interfere with the normal use and enjoyment of animal life, vegetation, or property.” 30 Tex. Admin. Code § 101.4.

7.64 “As soon as practicable, but not later than 24 hours after the discovery of an emission event, the owner or operator of a regulated entity shall notify the TCEQ of an emission event if the emission event is reportable.” 30 Tex. Admin. Code § 101.201(a)(1).

7.65 “[A]ll pollution emission capture equipment and abatement equipment must be maintained in good working order and operated properly during facility operations. Emission capture and abatement equipment must be considered to be in good working order and operated properly when operated in a manner such that each facility is operating within authorized emission limitations.” 30 Tex. Admin. Code § 101.221(a).

7.66 Visible emissions from any vent shall not exceed 20% averaged over a six-minute period for any source on which construction was begun after January 31, 1972. 30 Tex. Admin. Code § 111.111(a)(1)(B).

7.67 TCEQ rules require that in the Houston-Galveston-Brazoria nonattainment area, “no person shall use any single or multiple compartment [VOC] water separator which separates materials containing VOC obtained from any equipment which is processing, refining, treating, storing, or handling VOC, unless each compartment is controlled in one of the following ways: (1) the compartment totally encloses the liquid contents and has all openings (such as roof seals and access doors) sealed such that the separator can hold a vacuum or pressure without emissions to the atmosphere, except through a pressure relief valve.” 30 Tex. Admin. Code § 115.132(a)(1).

7.68 Any person who operates a single or multiple compartment VOC water separator without the controls specified in 30 Tex. Admin. Code § 115.132(a) of this title (relating to Control Requirements) shall maintain complete and up-to-date records sufficient to demonstrate continuous compliance with the applicable exemption criteria including, but not limited to, the names and true vapor pressures of all such materials stored, processed, or handled at the affected property, and any other necessary operational information. 30 Tex. Admin. Code § 115.136(a)(1).

7.69 Any single or multiple compartment VOC water separator which separates materials having a true vapor pressure of VOC less than 0.5 pounds per square inch absolute (“psia”) (3.4 kPa) obtained from any equipment is exempt from 30 Tex. Admin. Code § 115.132(a). 30 Tex. Admin. Code § 115.137(a)(2).

7.70 “Before any actual work is begun, any person who plans to construct any new facility or to engage in the modification of any existing facility which may emit air contaminants into the air of this state shall: 1) obtain a permit under [30 Tex. Admin. Code § 116.111]; 2) satisfy the conditions for a standard permit . . . ; 3) satisfy the conditions for a flexible permit . . . ; 4) satisfy the conditions for facilities permitted by rule . . . ; or 5) satisfy the criteria for a de minimis facility. . . .” 30 Tex. Admin. Code § 116.110(a).

7.71 “Modifications to existing permitted facilities may be handled through the amendment of an existing permit.” 30 Tex. Admin. Code § 116.110(b).

7.72 Holders of permits issued by the TCEQ after August 16, 1994 shall comply with the general conditions contained in the permit document.

30 Tex. Admin. Code § 116.115(b)(1).

7.73 “[P]ermitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations.” 30 Tex. Admin. Code § 116.115(b)(2)(g).

7.74 The holders of permits issued by the TCEQ shall comply with all special conditions in the permit. 30 Tex. Admin. Code § 116.115(c).

7.75 The TCEQ may issue standard permits in limited circumstances. 30 Tex. Admin. Code §§ 116.601, .602, .603.

7.76 “All representations with regard to construction plans, operating procedures, and maximum emission rates in any registration for a standard permit become conditions upon which the facility or changes thereto, must be constructed and operated. It is unlawful for any person to vary from such representations if the change will affect that person’s right to claim a standard permit under this section. Any change in condition such that a person is no longer eligible to claim a standard permit under this section requires proper authorization under §116.110 of this title (relating to Applicability).” 30 Tex.

Admin. Code § 116.615(2).

7.77 Any facility in the Houston-Galveston-Brazoria ozone non-attainment area that emits or has the potential to emit at least twenty-five tons of NO_x per year shall be considered a major source of NO_x. 30 Tex. Admin. Code § 117.10(29)(C).

7.78 An application for a Title V Federal Operating Permit shall include, for each emission unit, information regarding the general applicability determinations, including the general identification of each potentially applicable requirement and potentially applicable state-only requirement. 30 Tex. Admin. Code § 122.132(e)(2)(A).

7.79 Holders of Title V Federal Operating Permits shall comply with all terms and conditions codified in the permit and any provisional terms and conditions required to be included with the permit. A violation of the permit or a provisional term or condition constitutes a violation of the TCAA. 30 Tex. Admin. Code § 122.143(4).

7.80 "The permit holder shall maintain records of all required monitoring data and support information for a period of at least five years from the date of

the monitoring sample, measurement, report, or application.” 30 Tex. Admin. Code § 122.144(1).

7.81 GCMC “shall report, in writing, to the [TCEQ] all instances of deviations, the probable cause of the deviations, and any corrective actions or preventative measures taken for each emission unit addressed in the permit.” 30 Tex. Admin. Code § 122.145(2)(A). “[D]eviation reports shall be submitted no later than 30 days after the end of each reporting period.” 30 Tex. Admin. Code § 122.145(2)(C).

7.82 Deviation reports submitted by a corporation must be signed by the “president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit.” 30 Tex. Admin. Code § 122.165(c)(1).

7.83 A Title V permit holder shall submit an application to the TCEQ for a revision to a permit for those activities at a site which change, add, or remove

one or more permit terms or conditions. 30 Tex. Admin. Code § 122.210(a).

7.84 “Authorization from the [TCEQ] is required before beginning any change in the permitted facility or activity that would result in noncompliance with other permit requirements.” 30 Tex. Admin. Code § 305.125(8).

7.85 Each permittee is required to monitor, on a regular basis, each parameter included in its permit and report excursions above permitted limits to the TCEQ in a monthly effluent report form (“DMR Report”). 30 Tex. Admin. Code § 319.4.

7.86 “All sample collection shall be conducted according to recommendations found in the latest edition of *Standard Methods for the Examination of Water and Wastewater* (prepared and published jointly by the American Public Health Association, the American Waterworks Association, and the Water Pollution Control Federation), or the Environmental Protection Agency manual entitled *Methods for Chemical Analysis of Water and Wastes* (1979), or the Environmental Protection Agency manual entitled *Biological Field and Laboratory Methods for Measuring the Quality of Surface Waters and Effluents* (1973).” 30 Tex. Admin. Code § 319.11(a). The *Standard Methods for the*

Examination of Water and Wastewater, 20th Ed., Part 5520A, Section 3, states that a grab sample should be collected “in a wide-mouth glass bottle.”

7.87 “Industrial solid waste” means “[s]olid waste resulting from or incidental to any process of industry or manufacturing, or mining or agricultural operations.” 30 Tex. Admin. Code §§ 330.3(66), 335.1(79).

7.88 “[N]o person may cause, suffer, allow, or permit any activity of storage, processing, removal, or disposal of any solid waste unless such activity is authorized by a permit or other authorization from the [TCEQ]. . . .” 30 Tex. Admin. Code § 330.7(a).

7.89 “[N]o person may cause, suffer, allow, or permit any activity of storage, processing, or disposal of any industrial solid waste or municipal hazardous waste unless such activity is authorized by a permit, amended permit, or other authorization from the [TCEQ]. . . .” 30 Tex. Admin. Code § 335.2(a).

VIII. VIOLATIONS

Claim 1: Failure to maintain annual and hourly records of feed rates to Roasters R-3 and R-4.

8.1 During the July 2009 investigation no. 747448, the TCEQ investigator requested records related to daily and annual amounts of materials processed

and hourly feed rates in tons/hour to Roasters R-3 and R-4 at the Facility. GCMC provided raw data showing the change in weight of one of the three feed hoppers for Roasters R-3 and R-4. The rate of change of the feed hopper weight can be used to theoretically determine the amount of material fed in any given time period. This data does not account for two additional hoppers which operate intermittently. Therefore, GCMC failed to calculate the hourly feed rates based on this data from July 19, 2005 – July 28, 2009.

8.2 On September 29, 2009, during investigation no. 762631, the TCEQ determined that GCMC continued to lack sufficient information to determine the hourly feed rates in tons/hour to Roasters R-3 and R-4 at the Facility.

8.3 On November 12, 2009 during investigation no. 782844, the TCEQ determined that GCMC continued to lack sufficient information to determine the hourly feed rates in tons/hour to Roasters R-3 and R-4 at the Facility.

8.4 On January 26, 2010 during investigation no. 791388, the TCEQ determined that GCMC continued to lack sufficient information to determine the hourly feed rates in tons/hour to Roasters R-3 and R-4 at the Facility. In 2010, GCMC implemented a system to track the weight of material minute-by-minute

for the main feed hopper and calculate the hourly feed rate based on these numbers. However, the numbers still do not include two additional hoppers which operate intermittently thus making the calculations and collected data insufficient to document the feed rates.

8.5 On April 13, 2010 during investigation no. 799457, the TCEQ determined that GCMC continued to lack sufficient information to determine the hourly feed rates in tons/hour to Roasters R-3 and R-4 at the Facility and had not made changes since the January 2010 investigation.

8.6 On May 17, 2010 during investigation no. 803693, the TCEQ determined that GCMC continued to lack sufficient information to determine the hourly feed rates in tons/hour to Roasters R-3 and R-4 at the Facility and had not made changes since the January 2010 investigation.

8.7 On July 13, 2010 during investigation no. 850098, the TCEQ determined that GCMC continued to lack sufficient information to determine the hourly feed rates in tons/hour to Roasters R-3 and R-4 at the Facility and had not made changes since the January 2010 investigation.

8.8 By failing to provide, on a readily accessible basis, records for hourly

feed rates from July 19, 2005 – July 13, 2010 that account for all feed material from all hoppers, , GCMC violated Permit 9803, Special Condition 14(A); Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; 30 Tex. Admin. Code §§ 116.115(c), 122.143(4). This constitutes at least 1,821 days of violations and continues until resolved.

8.9 In addition, on information and belief, the violation began prior to July 19, 2005 and continued after July 13, 2010 for an unknown additional number of days of violations.

Claim 2: Failure to limit maximum catalyst feed rates to Roasters R-3 and R-4.

8.10 During the July 2009 investigation no. 747448, the TCEQ investigator requested records related to daily and monthly catalyst throughput for Roasters R-3 and R-4. GCMC records indicated that on December 8, 2007, GCMC manufactured a total of 213,081 pounds in one twelve-hour period, which resulted in an average rate of 17,756.75 pounds per hour (“lbs./hr.”).

8.11 On May 17, 2010 during investigation no. 803693, the TCEQ investigator reviewed documents that reflected that the catalyst feed rate significantly exceeded the permitted limits for approximately 4.5 hours on May

4, 2010. The average catalyst feed rate during this time period was 18,589.51 lbs./hr and the maximum catalyst feed rate was 19,356.41 lbs./hr.

8.12 GCMC violated Permit 9803, Special Condition 4; Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; 30 Tex. Admin. Code §§ 116.115(c), 122.143(4) on December 8, 2007 and May 4, 2010, for a total of at least two days of violation.

Claim 3: Failure to limit feed rate to Roasters when one Electrostatic Precipitator is not operational.

8.13 During the July 2009 investigation no. 747448, the TCEQ investigator requested daily and monthly catalyst throughput records for Roasters R-3 and R-4. GCMC records indicated that on July 23, 2009, for a six-hour period between 12:00 a.m. and 7:00 a.m., only one of the Electrostatic Precipitators ("ESP") was operating. During six hours of the seven hour period, GCMC records indicated that the Facility fed an average rate of 10,112 lbs./hr. of spent catalyst from Roasters R-3 and R-4.

8.14 During investigation no. 799457, the TCEQ investigator reviewed additional documents reflecting that on March 24, 2010, for period of about four hours, GCMC fed an average rate of 10,357 lbs./hr. of spent catalyst from

Roasters R-3 and R-4 when only one ESP operated.

8.15 GCMC violated Permit 9803, Special Condition 7; Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; 30 Tex. Admin. Code §§ 116.115(c), 122.143(4) on July 23, 2009 and on March 24, 2010, for a total of at least two days of violation.

Claim 4: Failure to maintain records for ESP-001 related to primary voltage, primary current, and spark rate.

8.16 During the July 2009 investigation no. 747448, the TCEQ investigator requested records of ESP No. 1 (ESP-001) primary voltage, primary current, and spark rate from January 1, 2008 – July 17, 2009. GCMC representatives provided the investigator with records of ESP-001 operating data for 207 days during the requested time period, but did not maintain the required records for the other 357 days of the requested period. GCMC records indicated that during this time period, GCMC was in continual operation except for a period between September 11 – 16, 2008. For the remainder of the requested time period, Defendant failed to maintain the required records.

8.17 During investigation no. 762631, the investigator requested additional documents for the ESP-001 operating parameters. GCMC could not

produce the required documents for August 30, 2009 and September 5, 2009.

8.18 GCMC violated Permit 9803, Special Condition 9; Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; 30 Tex. Admin. Code §§ 116.115(c), 122.143(4) for a total of at least 353 days of violation.

Claim 5: Failure to maintain records for ESP-002 related to primary voltage, primary current, and spark rate.

8.19 During the July 2009 investigation no. 747448, the TCEQ investigator requested records of ESP No. 2 (ESP-002) primary voltage, primary current, and spark rate from January 1, 2008 – July 17, 2009. GCMC representatives provided the investigator with records of ESP-002 operating data for 207 days during the requested time period, but did not maintain the required records for the other 357 days of the requested period. GCMC records indicated that during this time period, GCMC was in continual operation except for a period between September 11 – 16, 2008. For the remainder of the requested time period, Defendant failed to maintain the required records.

8.20 During investigation no. 762631, the investigator requested additional documents for the ESP-002 operating parameters. GCMC could not

produce the required documents for August 30, 2009 and September 5, 2009.

8.21 GCMC violated Permit 9803, Special Condition 9; Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; 30 Tex. Admin. Code §§ 116.115(c), 122.143(4) for a total of at least 353 days of violation.

Claim 6: Failure to properly operate and maintain ESP-001 in good working order.

8.22 During the July 2009 investigation no. 747448, the TCEQ investigator requested records of primary voltage, primary current, and spark rate for ESP No. 1 (ESP-001) from January 1, 2008 – July 17, 2009. GCMC provided records of ESP-001 primary voltage, primary current, and spark rate for 207 days of operation. On each of the 207 reported days of operation, one or more parameter recorded under primary voltage, primary current, or spark rate was outside the proper operating ranges established by the METCO performance test performed for ESP-001.

8.23 During investigation no. 762631, the TCEQ requested the same records for the period August 1 – 29, 2009; August 31, 2009 – September 4, 2009; and September 6 – 29, 2009. On each of the reported days of operation, one or

more parameter recorded under primary voltage, primary current, or spark rate was outside the proper operating ranges established by the METCO performance test performed for ESP-001.

8.24 During investigation no. 782844, the TCEQ requested the same records for the period September 30, 2009 – November 11, 2009. On each of the reported days of operation, one or more parameter recorded under primary voltage, primary current, or spark rate was outside the proper operating ranges established by the METCO performance test performed for ESP-001.

8.25 During investigation no. 791388, the TCEQ requested the same records for the period from November 11, 2009 – January 25, 2010. On each of the reported days of operation, one or more parameter recorded under primary voltage, primary current, or spark rate was outside the proper operating ranges established by the METCO performance test performed for ESP-001.

8.26 During investigation no. 799457, the TCEQ requested the same records for the period from January 25, 2010 – April 12, 2010. On each of the reported days of operation, one or more parameter recorded under primary voltage, primary current, or spark rate was outside the proper operating ranges

established by the METCO performance test performed for ESP-001.

8.27 During investigation no. 803693, the TCEQ requested the same records for the period from April 13, 2010 – May 16, 2010. On each of the reported days of operation, one or more parameter recorded under primary voltage, primary current, or spark rate was outside the proper operating ranges established by the METCO performance test performed for ESP-001.

8.28 During investigation no. 850098, the TCEQ requested the same records for the period from May 17, 2010 – July 12, 2010. On each of the reported days of operation, one or more parameter recorded under primary voltage, primary current, or spark rate was outside the proper operating ranges established by the METCO performance test performed for ESP-001.

8.29 GCMC violated Permit 9803, General Condition 9; Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; 30 Tex. Admin. Code §§ 116.115(b)(2)(G), 122.143(4) for a total of at least 551 days of violation.

8.30 In addition, on information and belief, the violation began prior to January 1, 2008 and continued after July 12, 2010 for an unknown additional

number of days of violations.

Claim 7: Failure to properly operate and maintain ESP-002 in good working order.

8.31 During the July 2009 investigation no. 747448, the TCEQ investigator requested records of primary voltage, primary current, and spark rate for ESP No. 2 (ESP-002) from January 1, 2008 – July 17, 2009. GCMC provided records of ESP-002 primary voltage, primary current, and spark rate for 207 days of operation. On each of the 207 reported days of operation, one or more parameter recorded under primary voltage, primary current, or spark rate was outside the proper operating ranges established by the METCO performance test performed for ESP-002.

8.32 During investigation no. 762631, the TCEQ requested the same records for the period August 1 – 29, 2009; August 31, 2009 – September 4, 2009; and September 6 – 29, 2009. On each of the reported days of operation, one or more parameter recorded under primary voltage, primary current, or spark rate was outside the proper operating ranges established by the METCO performance test performed for ESP-002.

8.33 During investigation no. 782844, the TCEQ requested the same

records for the period September 30, 2009 – November 11, 2009. On each of the reported days of operation, one or more parameter recorded under primary voltage, primary current, or spark rate was outside the proper operating ranges established by the METCO performance test performed for ESP-002.

8.34 During investigation no. 791388, the TCEQ requested the same records for the period from November 11, 2009 – January 25, 2010. On each of the reported days of operation, one or more parameter recorded under primary voltage, primary current, or spark rate was outside the proper operating ranges established by the METCO performance test performed for ESP-002.

8.35 During investigation no. 799457, the TCEQ requested the same records for the period from January 25, 2010 – April 12, 2010. On each of the reported days of operation, one or more parameter recorded under primary voltage, primary current, or spark rate was outside the proper operating ranges established by the METCO performance test performed for ESP-002.

8.36 During investigation no. 803693, the TCEQ requested the same records for the period from April 13, 2010 – May 16, 2010. On each of the reported days of operation, one or more parameter recorded under primary

voltage, primary current, or spark rate was outside the proper operating ranges established by the METCO performance test performed for ESP-002.

8.37 During investigation no. 850098, the TCEQ requested the same records for the period from May 17, 2010 – July 12, 2010. On each of the reported days of operation, one or more parameter recorded under primary voltage, primary current, or spark rate was outside the proper operating ranges established by the METCO performance test performed for ESP-002.

8.38 GCMC violated Permit 9803, General Condition 9; Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; 30 Tex. Admin. Code §§ 116.115(b)(2)(G), 122.143(4) for a total of at least 551 days of violation.

8.39 In addition, on information and belief, the violation began prior to January 1, 2008 and continued after July 12, 2010 for an unknown additional number of days of violations.

Claim 8: Failure to maintain records for the time ESP-001 is in service.

8.40 During the July 2009 investigation no. 747448, the TCEQ investigator requested records related to the times and dates ESP No. 1 (ESP-001)

operated. A representative of GCMC provided hourly temperature records from January 1, 2009 – July 26, 2009 for ESP-001 and asserted that the record of operation for the ESP unit could be determined by observing the time periods in which the units were recorded at operating temperature. The GCMC representative also explained that the above records represent GCMC's record keeping under the permits. However, the temperature records provided did not distinguish between periods of actual operation of the ESP unit and periods in which heated gas was flowing through the ESP unit without the ESP unit in operation.

8.41 During investigation no. 762631, the TCEQ investigator confirmed that GCMC continued to record only temperature information and did not distinguish between periods of actual operation of the ESP unit and periods in which heated gas was flowing through the ESP unit without the ESP unit in operation.

8.42 During investigation no. 782844, the TCEQ investigator confirmed that GCMC continued to record only temperature information and did not distinguish between periods of actual operation of the ESP unit and periods in

which heated gas was flowing through the ESP unit without the ESP unit in operation.

8.43 During investigation no. 791388, the TCEQ investigator confirmed that GCMC continued to record only temperature information and did not distinguish between periods of actual operation of the ESP unit and periods in which heated gas was flowing through the ESP unit without the ESP unit in operation.

8.44 During investigation no. 799457, the TCEQ investigator confirmed that GCMC continued to record only temperature information and did not distinguish between periods of actual operation of the ESP unit and periods in which heated gas was flowing through the ESP unit without the ESP unit in operation.

8.45 During investigation no. 803693, the TCEQ investigator confirmed that GCMC continued to record only temperature information and did not distinguish between periods of actual operation of the ESP unit and periods in which heated gas was flowing through the ESP unit without the ESP unit in operation.

8.46 During investigation no. 850098, the TCEQ investigator confirmed that GCMC continued to record only temperature information and did not distinguish between periods of actual operation of the ESP unit and periods in which heated gas was flowing through the ESP unit without the ESP unit in operation.

8.47 GCMC violated Permit 9803, Special Condition 12; Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; 30 Tex. Admin. Code §§ 116.115(c), 122.143(4) from at least July 27, 2004 – July 13, 2010. This constitutes at least 2,179 days of violations, and will continue until resolved.

8.48 In addition, on information and belief, the violation continued after July 13, 2010 for an unknown additional number of days of violations.

Claim 9: Failure to maintain records for the time ESP-002 is in service.

8.49 During the July 2009 investigation no. 747448, the TCEQ investigator requested records related to the times and dates ESP No. 2 (ESP-002) operated. A representative of GCMC provided hourly temperature records from January 1, 2009 – July 26, 2009 for ESP-002 and asserted that the record of operation for the

ESP unit could be determined by observing the time periods in which the units were recorded at operating temperature. The GCMC representative also explained that the above records represent GCMC's record keeping under the permits. However, the temperature records provided did not distinguish between periods of actual operation of the ESP unit and periods in which heated gas was flowing through the ESP unit without the ESP unit in operation.

8.50 During investigation no. 762631, the TCEQ investigator confirmed that GCMC continued to record only temperature information and did not distinguish between periods of actual operation of the ESP unit and periods in which heated gas was flowing through the ESP unit without the ESP unit in operation.

8.51 During investigation no. 782844, the TCEQ investigator confirmed that GCMC continued to record only temperature information and did not distinguish between periods of actual operation of the ESP unit and periods in which heated gas was flowing through the ESP unit without the ESP unit in operation.

8.52 During investigation no. 791388, the TCEQ investigator confirmed

that GCMC continued to record only temperature information and did not distinguish between periods of actual operation of the ESP unit and periods in which heated gas was flowing through the ESP unit without the ESP unit in operation.

8.53 During investigation no. 799457, the TCEQ investigator confirmed that GCMC continued to record only temperature information and did not distinguish between periods of actual operation of the ESP unit and periods in which heated gas was flowing through the ESP unit without the ESP unit in operation.

8.54 During investigation no. 803693, the TCEQ investigator confirmed that GCMC continued to record only temperature information and did not distinguish between periods of actual operation of the ESP unit and periods in which heated gas was flowing through the ESP unit without the ESP unit in operation.

8.55 During investigation no. 850098, the TCEQ investigator confirmed that GCMC continued to record only temperature information and did not distinguish between periods of actual operation of the ESP unit and periods in

which heated gas was flowing through the ESP unit without the ESP unit in operation.

8.56 GCMC violated Permit 9803, Special Condition 12; Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; 30 Tex. Admin. Code §§ 116.115(c), 122.143(4) from at least July 26, 2004 – July 13, 2010. This constitutes at least 2,179 days of violations, and will continue until resolved.

8.57 In addition, on information and belief, the violation continued after July 13, 2010 for an unknown additional number of days of violations.

Claim 10: Failure to maintain records of daily audio, visual, and olfactory checks for ammonia leaks.

8.58 During the July 2009 investigation no. 747448, the TCEQ investigator requested records related to daily auditory, visual, and olfactory checks for ammonia leaks from anhydrous ammonia storage systems and piping from January 1, 2009 – July 22, 2009. GCMC failed to produce records of daily auditory, visual, and olfactory checks on January 1 and 13; February 18; March 30 and 31; May 5, 6, and 23; June 22 and 30; and July 4, 2009. Additionally, GCMC produced records related to ammonia stripper maintenance but the

records did not include the data for daily auditory, visual, and olfactory checks on March 25 and April 2, 2009.

8.59 On January 26, 2010 during investigation no. 791388, the TCEQ investigator requested records documenting checks for ammonia leaks from ammonia storage systems and piping on January 6, 2010. GCMC failed to produce records of daily auditory, visual, and olfactory checks on January 6, 2010.

8.60 GCMC violated Permit 1157C, Special Condition 8(A); Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; 30 Tex. Admin. Code §§ 116.115(c), 122.143(4) for a total of at least fourteen days of violations.

Claim 11: Failure to conduct daily moisture analysis for alumina concentrate.

8.61 During the July 2009 investigation no. 747448, the TCEQ investigator requested records related to testing the moisture content of the alumina concentrate performed from January 1, 2005 – July 26, 2009. Records provided by GCMC indicate that during this time period, alumina moisture samples were not taken on thirty-seven days.

8.62 GCMC violated Permit 19793, Special Condition 4; Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; 30 Tex. Admin. Code §§ 116.115(c), 122.143(4) for a total of at least thirty-seven days of violations.

Claim 12: Failure to maintain adequate moisture in the alumina concentrate.

8.63 During the July 2009 investigation no. 747448, the TCEQ investigator requested records related to testing of the moisture content of the alumina concentrate performed from January 1, 2005 – July 26, 2009. GCMC records indicated that on five days, alumina moisture samples taken showed moisture content of less than twenty percent.

8.64 GCMC violated Permit 19793, Special Condition 4; Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; 30 Tex. Admin. Code §§ 116.115(c), 122.143(4) for a total of at least five days of violations.

Claim 13: Failure to obtain authorization to emit air contaminants from Molybdenum Kiln Building.

8.65 During the July 2009 investigation no. 747448, the TCEQ investigator observed PM emissions from the Molybdenum Kiln Building escaping through a

hole in the building roof. The PM emissions, released as molybdenum oxide powder generated from the kiln operation, fell from the Molybdenum Kiln Mill into drums below the mill and onto horizontal surfaces throughout the building. In addition, the investigator observed accumulations of dust below the mill, which became airborne and escaped the building when wind gusts entered the building from the outside environment. The Molybdenum Kiln Building and surrounding area are permitted for VOC emissions under Fugitive Area 8 under Permit 1157C, but is not permitted for PM emissions. The TCEQ investigator first observed the PM emissions from the Molybdenum Kiln unit on July 23, 2009.

8.66 GCMC violated Permit 1157C, Special Condition 1; Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; 30 Tex. Admin. Code §§ 116.110(a), 122.143(4) on July 23, 2009 for a total of at least one day of violation.

8.67 In addition, on information and belief, the violation began prior to July 23, 2009 and continued after July 23, 2009 for an unknown additional number of days of violations, and continues until resolved.

Claim 14: Failure to obtain authorization to emit air contaminants from ESP Dust Collector System.

8.68 On January 11, 2010, a TCEQ investigator observed spent catalyst dust escaping from the ESP Dust Collector System attached to ESP Nos. 1 and 2 (ESP-001 and ESP-002). The Dust Collector System collects spent catalyst that is discharged from the ESP units into an open tote approximately two feet below the units. The ESP Units are located in an unenclosed area of the Facility. The TCEQ investigator observed that as spent catalyst was dropped into the tote, PM emissions were carried by wind gusts into the atmosphere.

8.69 On April 13, 2010, during investigation no. 799457, the investigator documented that the problem of dust emissions from the ESP units continued.

8.70 On May 17, 2010, during investigation no. 803693, the investigator documented that the problem of dust emissions from the ESP units continued.

8.71 On July 13, 2010, during investigation 850098, the investigator documented that the problem of dust emissions from the ESP units continued.

8.72 GCMC violated Permit 9803 General Conditions 8 and 9 and Special Condition 1; Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; 30 Tex. Admin. Code §§ 116.110(a),

122.143(4) from at least January 11, 2010 – July 13, 2010, for a total of at least 184 days of violations.

8.73 In addition, on information and belief, the violation began prior to January 11, 2010 and continued after July 13, 2010 for an unknown additional number of days of violations, and continues until resolved.

Claim 15: Failure to maintain EPN-OWS-3-T in compliance with TCEQ rules.

8.74 The GCMC Facility is equipped with two oil-water separators. One of the oil-water separators is identified in Permit 1157C as EPN-OWS-3-T, which consists of three tanks and is used for processing residual crude oil which seeps off of the used catalyst. The oil-water separators are required to be equipped with sealed access doors to ensure that the units are totally enclosed and are able to hold a vacuum or pressure without releasing emissions to the atmosphere. During the July 2009 investigation no. 747448, a representative of GCMC told the TCEQ investigator that oil-water separators store crude oil that seeps off of the catalyst. GCMC provided the investigator a Materials Safety Data Sheet (“MSDS”) for one of the sources of the crude oil stored in oil-water separator tanks, which indicated that the vapor pressure may range anywhere from zero to

13.99 psia. Also during the July 2009 investigation, the TCEQ investigator found the tanks were not properly sealed. Specifically, the investigator observed that two of the tanks had cracked hatches and did not have gaskets. One of the hatches for the third tank was left open and the gasket sealing the hatch was missing. The TCEQ investigator first observed the unsealed oil-water separator tanks on July 23, 2009.

8.75 On April 13, 2010, during investigation no. 799457, the TCEQ investigator found that all three tank hatches continued to lack a gasket.

8.76 On May 17, 2010, during investigation no. 803693, the TCEQ investigator found that the two tanks with cracked hatches had been repaired, but that all three tank hatches continued to lack a gasket. The investigator also detected a strong VOC odor in the area.

8.77 On July 13, 2010, during investigation no. 850098, the TCEQ investigator found that the two tanks with cracked hatches had been repaired, but that all three tank hatches continued to lack a gasket.

8.78 From at least July 23, 2009 – July 13, 2010, GCMC violated Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin.

Code § 115.132(a)(1), for a total of at least 356 days of violations.²

8.79 In addition, on information and belief, the violation began prior to July 23, 2009 and continued after July 13, 2010 for an unknown additional number of days of violations.

Claim 16: Failure to submit deviation reports certified by a duly authorized representative.

8.80 GCMC submitted two semi-annual deviation reports to the TCEQ pursuant to Permit O1337 for the time-period beginning April 1, 2008 – March 31, 2009. The first deviation report was due October 30, 2008. The second deviation report was due April 30, 2009. The deviation reports were signed by the GCMC Manager of Environmental Affairs, Rajani Vadlamudi. Mr. Vadlamudi was not a president, secretary, treasurer, or vice-president of GCMC in charge of a principal business function, or a person who performed similar policy or decision-making functions for GCMC, nor was he a duly authorized representative of GCMC. On October 23, 2009, GCMC submitted a deviation report signed by a GCMC Vice President for another reporting period, but GCMC did not correct the deviation reports due on October 30, 2008 and on

²Each separate hatch opening is a separate emission point and therefore the facts alleged

April 30, 2009.

8.81 For the report due on October 30, 2008, GCMC violated Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; Permit O1337, General Terms and Conditions; 30 Tex. Admin. Code §§ 122.143(4), 122.165(c)(1). The violation continues until resolved. From October 30, 2008 – December 31, 2010, the violation constitutes at least 791 days of violations.

8.82 For the report due on April 30, 2009, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 122.143(4), 122.165(c)(1). The violation continues until resolved. From April 30, 2009 – December 31, 2010, the violation constitutes at least 610 days of violations.

Claim 17: Failure to report deviations related to failures to perform alumina moisture content.

8.83 During the July 2009 investigation no. 747448, the TCEQ investigator requested records related to moisture content of the alumina concentrate for the Containment Building 1 (EPN CB-1W) performed from January 1, 2005 – July 26, 2009. Records provided by GCMC indicate that during this time period, no

in this paragraph may support three separate continuing violations.

alumina moisture samples were taken for the following days:

- A. Missing sample on March 26, 2005, which should have been included in the deviation report due October 25, 2005;
- B. Missing samples during the period beginning September 21, 2005 – December 7, 2005, which should have been included in the deviation report due April 17, 2006;
- C. Missing samples during the period beginning July 28, 2006 – September 15, 2006, which should have been included in the deviation report due October 25, 2006;
- D. Missing sample January 9, 2007, which should have been included in the deviation report due April 17, 2007;
- E. Missing samples during the period beginning May 11, 2007 – August 24, 2007, which should have been included in the deviation report due October 30, 2007;
- F. Missing samples during the period beginning October 6, 2007 – March 19, 2008, which should have been included in the deviation report due April 30, 2008;

- G. Missing samples during the period beginning April 5, 2008 — July 22, 2008, which should have been included in the deviation report due October 30, 2008; and
- H. Missing samples during the period beginning January 7, 2009 – February 12, 2009, which should have been included in the deviation report due April 30, 2009.

GCMC has not submitted the data for the deviation reports described above.

8.84 For the deviation report due October 25, 2005, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From October 26, 2005 – December 31, 2010, the violation constitutes at least 1,893 days of violations.

8.85 For the deviation report due April 17, 2006, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From April 18, 2006 – December 31, 2010, the violation constitutes at least 1,718 days of violations.

8.86 For the deviation report due October 25, 2006, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From October 26, 2006 – December 31, 2010, the violation constitutes at least 1,528 days of violations.

8.87 For the deviation report due April 17, 2007, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From April 18, 2007 – December 31, 2010, the violation constitutes at least 1,354 days of violations.

8.88 For the deviation report due October 30, 2007, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From October 31, 2007- December 31, 2010, the violation constitutes at least 1,158 days of violations.

8.89 For the deviation report due April 30, 2008, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health &

Safety Code § 382.085; 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From May 1, 2008 – December 31, 2010, the violation constitutes at least 975 days of violations.

8.90 For the deviation report due October 30, 2008, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From October 31, 2008 – December 31, 2010, the violation constitutes at least 793 days of violations.

8.91 For the deviation report due April 30, 2009, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From May 1, 2009 – December 31, 2010, the violation constitutes at least 610 days of violations.

Claim 18: Failure to report deviations related to alumina moisture content.

8.92 During the July 2009 investigation no. 747448, the TCEQ investigator requested records related to moisture content tests of the alumina concentrate stored in Containment Building 1 (EPN CB-1W) performed from January 1, 2005

– July 26, 2009. GCMC records also indicated that on five days in this time period, alumina moisture samples taken showed moisture contents of less than twenty percent. GCMC failed to report alumina moisture samples that showed moisture content of less than twenty percent on the following days:

- A. November 24, 2006, which should have been included in the deviation report due April 18, 2007;
- B. July 8, 2007, July 23, 2007, and August 31, 2007, which should have been included in the deviation report due October 30, 2007; and
- C. July 21, 2008, which should have been included in the deviation report due October 30, 2008.

GCMC has not submitted the data for the deviation reports described above.

8.93 For the deviation report due April 18, 2007, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From April 19, 2007 – December 31, 2010, the violation constitutes at least 1,353 days of violations.

8.94 For the deviation report due October 30, 2007, GCMC violated

Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From October 31, 2007 – December 31, 2010, the violation constitutes at least 1,158 days of violations.

8.95 For the deviation report due October 30, 2008, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From October 31, 2008 – December 31, 2010, the violation constitutes at least 792 days of violations.

Claim 19: Failure to report a deviation related to a recordable emission event.

8.96 During the July 2009 investigation no. 747448, a GCMC representative told the TCEQ investigator that the GCMC Facility had a recordable emission event on February 15, 2008.³ The emission event was not reported in GCMC's semi-annual deviation report due on April 30, 2008.

8.97 By failing to include the required information in its deviation report, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code

³A recordable emission event is an emission event of less magnitude than an emission event involving a reportable quantity or RQ.

§ 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From May 1, 2008 – December 31, 2010, the violation constitutes at least 975 days of violations.

Claim 20: Failure to report a deviation related to a reportable emission event.

8.98 According to GCMC documents reviewed during the July 2009 investigation no. 747448, the GCMC Facility had a reportable emission event on August 11, 2008. The event was not reported in GCMC's semi-annual deviation report due on October 30, 2008. The event occurred when the pressure valve to the Ammonia Scrubber (EPN-006) was left open during a loading event. As a result, approximately 250 pounds of anhydrous ammonia were emitted from EPN-006 in two minutes.

8.99 By failing to include the required information in its deviation report, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From November 1, 2008 – December 31, 2010, the violation constitutes at least 791 days of violations.

Claim 21: Failure to report deviations related to EPN-011.

8.100 During the July 2009 investigation no. 747448, the TCEQ investigator requested records related to the Electric Arc Furnace Baghouse pressure drops (EPN-011 or 68.29-BH) from January 1, 2008 – July 29, 2009. GCMC was unable to produce records for 129 days of the requested time period. Moreover, available records revealed that GCMC routinely operated outside of the mandated pressure parameters but the records were not sufficient for the State to identify with certainty the total number of days that GCMC operated outside the pressure range. The State was able to identify at least 120 days on which GCMC records showed that EPN-011 operated at a pressure differential less than 6.0 inches or greater than 10.0 inches of water. The days on which GCMC failed to keep records and the days on which records confirmed permit violations occurred throughout the period. GCMC has not submitted a deviation report for any of the pressure differential deviations or deviations for failure to keep records related to EPN-011 pressure drops.

- A. For the period of January 1, 2008 – March 31, 2008, the deviation report was due on or before April 30, 2008;

- B. For the period of April 1, 2008 – September 30, 2008, the deviation report was due on or before October 30, 2008;
- C. For the period of October 1, 2008 – March 31, 2009, the deviation report was due on or before April 30, 2009; and,
- D. For the period of April 1, 2009 – July 29, 2009, the deviation report was due on or before October 30, 2009.

8.101 For the deviation report due April 30, 2008, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From May 1, 2008 – December 31, 2010, the violation constitutes at least 975 days of violations.

8.102 For the deviation report due October 30, 2008, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From October 31, 2008 – December 31, 2010, the violation constitutes at least 792 days of violations.

8.103 For the deviation report due April 30, 2009, GCMC violated Permit

O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From May 1, 2009 – December 31, 2010, the violation constitutes at least 610 days of violations.

8.104 For the deviation report due October 30, 2009, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From October 31, 2009 – December 31, 2010, the violation constitutes at least 427 days of violations.

Claim 22: Failure to report deviations related to EPN-65.18.

8.105 During the July 2009 investigation no. 747448, the TCEQ investigator requested records related to the Flash Dryer Baghouse pressure drops (EPN-65.18) from January 1, 2008 – July 29, 2009. GCMC was unable to produce records for 256 days during the requested time period. GCMC produced records for 320 days. Of those days produced, GCMC records showed that EPN-65.18 operated at a pressure differential less than 1.5 inches or greater than 6.0 inches of water on 247 days. The days on which GCMC failed to keep

records and the days on which records confirmed permit violations occurred throughout the period. GCMC has not submitted a deviation report for any of the pressure differential deviations or deviations for failure to keep records related to EPN-65.18 pressure drops.

- A. For the period of January 1, 2008 – March 31, 2008, the deviation report was due on or before April 30, 2008;
- B. For the period of April 1, 2008 – September 30, 2008, the deviation report was due on or before October 30, 2008;
- C. For the period of October 1, 2008 – March 31, 2009, the deviation report was due on or before April 30, 2009; and,
- D. For the period of April 1, 2009 – July 29, 2009, the deviation report was due on or before October 30, 2009.

8.106 For the deviation report due April 30, 2008, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From May 1, 2008 – December 31, 2010, the violation constitutes at least 975 days of violations.

8.107 For the deviation report due October 30, 2008, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From October 31, 2008—December 31, 2010, the violation constitutes at least 792 days of violations.

8.108 For the deviation report due April 30, 2009, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From May 1, 2009 – December 31, 2010, the violation constitutes at least 610 days of violations.

8.109 For the deviation report due October 30, 2009, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From October 31, 2009 – December 31, 2010, the violation constitutes at least 427 days of violations.

Claim 23: Failure to report deviations related to ESP-001.

8.110 During the July 2009 investigation no. 747448, the TCEQ investigator

requested records of primary voltage, primary current, and spark rate for ESP No. 1 (ESP-001) from January 1, 2008 – July 17, 2009. Representatives from GCMC provided records of ESP-001 primary voltage, primary current, and spark rate for 207 days of operation. On each of the 207 reported days of operation, one or more parameter recorded under primary voltage, primary current, or spark rate were outside the proper operating ranges established by the METCO performance test performed for ESP-001. The days on which GCMC improperly operated ESP-001 occurred throughout the period. GCMC has not submitted a deviation report for any of the deviations.

- A. For the period of January 1, 2008 – March 31, 2008, the deviation report was due on or before April 30, 2008;
- B. For the period of April 1, 2008 – September 30, 2008, the deviation report was due on or before October 30, 2008;
- C. For the period of October 1, 2008 – March 31, 2009, the deviation report was due on or before April 30, 2009; and,
- D. For the period of April 1, 2009 – July 17, 2009, the deviation report was due on or before October 30, 2009.

8.111 For the deviation report due April 30, 2008, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From May 1, 2008 — December 31, 2010, the violation constitutes at least 975 days of violations.

8.112 For the deviation report due October 30, 2008, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From October 31, 2008 — December 31, 2010, the violation constitutes at least 792 days of violations.

8.113 For the deviation report due April 30, 2009, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From May 1, 2009 — December 31, 2010, the violation constitutes at least 610 days of violations.

8.114 For the deviation report due October 30, 2009, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex.

Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From October 31, 2009 – December 31, 2010, the violation constitutes at least 427 days of violations.

Claim 24: Failure to report deviations related to ESP-002.

8.115 During the July 2009 investigation no. 747448, the TCEQ investigator requested records of primary voltage, primary current, and spark rate for ESP No. 2 (ESP-002) from January 1, 2008 – July 17, 2009. Representatives from GCMC provided records of ESP-002 primary voltage, primary current, and spark rate for 207 days of operation. On each of the 207 reported days of operation, one or more parameter recorded under primary voltage, primary current, or spark rate were outside the proper operating ranges established by the METCO performance test performed for ESP-002. The days on which GCMC improperly operated ESP-002 occurred throughout the period. GCMC has not submitted a deviation report for any of the deviations.

- A. For the period of January 1, 2008 – March 31, 2008, the deviation report was due on or before April 30, 2008;
- B. For the period of April 1, 2008 – September 30, 2008, the deviation

report was due on or before October 30, 2008;

- C. For the period of October 1, 2008 – March 31, 2009, the deviation report was due on or before April 30, 2009; and,
- D. For the period of April 1, 2009 – to July 17, 2009, the deviation report was due on or before October 30, 2009.

8.116 For the deviation report due April 30, 2008, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From May 1, 2008 – December 31, 2010, the violation constitutes at least 975 days of violations.

8.117 For the deviation report due October 30, 2008, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From October 31, 2008 – December 31, 2010, the violation constitutes at least 792 days of violations.

8.118 For the deviation report due April 30, 2009, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health &

Safety Code § 382.085; and 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From May 1, 2009 – December 31, 2010, the violation constitutes at least 610 days of violations.

8.119 For the deviation report due October 30, 2009, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From October 31, 2009 – December 31, 2010, the violation constitutes at least 427 days of violations.

Claim 25: Failure to report deviations related to records for the time ESP-001 was in operation.

8.120 During the July 2009 investigation no. 747448, the TCEQ investigator requested records related to the times and dates ESP No. 1 (ESP-001) was kept in-service at the Facility. Representatives of GCMC provided hourly temperature records for ESP-001 and asserted that the record of operation for both ESP units could be gleaned by observing the time periods in which the units were recorded at operating temperature. The GCMC representative also explained that the above records represent GCMC's record keeping under the permits. However, the temperature records provided did not distinguish between periods of actual

operation of each ESP unit and periods in which heated gas was flowing through each ESP unit without the ESP unit in operation. GCMC has not submitted a deviation report for any of the deviations.

- A. For the period of January 1, 2008 – March 31, 2008, the deviation report was due on or before April 30, 2008;
- B. For the period of April 1, 2008 – September 30, 2008, the deviation report was due on or before October 30, 2008;
- C. For the period of October 1, 2008 – March 31, 2009, the deviation report was due on or before April 30, 2009; and,
- D. For the period of April 1, 2009 – July 26, 2009, the deviation report was due on or before October 30, 2009.

8.121 For the deviation report due April 30, 2008, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From May 1, 2008 – December 31, 2010, the violation constitutes at least 975 days of violations.

8.122 For the deviation report due October 30, 2008, GCMC violated

Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From October 31, 2008 – December 31, 2010, the violation constitutes at least 792 days of violations.

8.123 For the deviation report due April 30, 2009, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From May 1, 2009 – December 31, 2010, the violation constitutes at least 610 days of violations.

8.124 For the deviation report due October 30, 2009, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From October 31, 2009 – December 31, 2010, the violation constitutes at least 427 days of violations.

Claim 26: Failure to report deviations related to records for the time ESP-002 was in operation.

8.125 During the July 2009 investigation no. 747448, the TCEQ investigator requested records related to the times and dates ESP No. 2 (ESP-002) was kept in-

service at the Facility. Representatives of GCMC provided hourly temperature records for ESP-002 and asserted that the record of operation for both ESP units could be gleaned by observing the time periods in which the units were recorded at operating temperature. The GCMC representative also explained that the above records represent GCMC's record keeping under the permits. However, the temperature records provided did not distinguish between periods of actual operation of each ESP unit and periods in which heated gas was flowing through each ESP unit without the ESP unit in operation. GCMC has not submitted a deviation report for any of the deviations.

- A. For the period of January 1, 2008 – March 31, 2008, the deviation report was due on or before April 30, 2008;
- B. For the period of April 1, 2008 – September 30, 2008, the deviation report was due on or before October 30, 2008;
- C. For the period of October 1, 2008 – March 31, 2009, the deviation report was due on or before April 30, 2009; and,
- D. For the period of April 1, 2009 – to July 26, 2009, the deviation report was due on or before October 30, 2009.

8.126 For the deviation report due April 30, 2008, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From May 1, 2008 — December 31, 2010, the violation constitutes at least 975 days of violations.

8.127 For the deviation report due October 30, 2008, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From October 31, 2008 – December 31, 2010, the violation constitutes at least 792 days of violations.

8.128 For the deviation report due April 30, 2009, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From May 1, 2009 – December 31, 2010, the violation constitutes at least 610 days of violations.

8.129 For the deviation report due October 30, 2009, GCMC violated Permit O1337, General Terms and Conditions; Tex. Water Code § 7.101; Tex.

Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A). The violation continues until resolved. From October 31, 2009 – December 31, 2010, the violation constitutes at least 427 days of violations.

Claim 27: Failure to maintain opacity from EPN-002 and EPN-008 below 20.0%.

8.130 During the July 2009 investigation no. 747448, the TCEQ documented that on June 22, 2009, GCMC observed ESP No. 2 (EPN-002) operating with a 22.0% opacity emission.

8.131 During investigation no. 791388, the TCEQ documented that on November 13, 2009, GCMC observed the Molybdenum Precipitation System (EPN-008) operating with a 20.6% opacity.

8.132 GCMC violated Permit O1337, Special Terms and Conditions 3(A)(i); Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 111.111(a)(1)(B), 122.143(4) on June 22, 2009 and November 13, 2009, for a total of two days of violations.

Claim 28: Violation of Permit O1337 by improperly claiming an exemption.

8.133 During the July 2009 investigation no. 747448, the TCEQ investigator found that GCMC stored hydrocarbon materials (such as kerosene)

that contained VOCs in storage tanks at the Facility. A representative of GCMC indicated that the storage tanks were exempt from the requirements of 30 Tex. Admin. Code Chapter 115, but GCMC failed to list the storage tanks as exempt units in GCMC's application for Permit O1337.

8.134 During the July 2009 investigation no. 747448, GCMC personnel represented to the TCEQ investigator that the Oil-Water Separator (EPN-OWS-3-T) was exempt from regulation under Permit O1337 because the Oil-Water Separator only processed volatile organic liquids with a vapor pressure of 0.5 psia or less. The TCEQ investigator found that the Oil-Water Separator was represented as such in GCMC's Permit O1337 application. The investigator requested documentation to show that the Oil-Water Separator processed materials with vapor pressures of 0.5 psia or less. GCMC produced the Material Safety Data Sheet for crude oil stored in the Oil-Water Separator. The MSDS listed the vapor pressure crude oil as ranging anywhere from 0 to 13.99 psia. Therefore, GCMC's documentation demonstrated that it was not operating as represented in the permit application.

8.135 According to the Maximum Allowable Emission Rates Tables in Permits 19793, 9803, and 1157C, GCMC has the potential to emit 31.04 tons of NO_x per year. During the July 2009 investigation no. 747448, the TCEQ investigator found that GCMC represented the Facility as a minor source (less than 25 tons per year) of NO_x emissions in its Permit O1337 application.

8.136 The TCEQ issued Permit O1337 to GCMC on March 30, 2006 and GCMC's misrepresentations in the permit application process occurred prior to that date. On information and belief, GCMC has not corrected these misrepresentations.

8.137 GCMC violated Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 122.132(e)(2)(A), 122.210(a) from at least March 30, 2006 through the present. From March 30, 2006 – December 31, 2010, this constitutes at least 1,736 days of violations and continues until resolved.

8.138 In addition, on information and belief, the violation began prior to March 30, 2006 and continued after December 31, 2010 for an unknown additional number of days of violations.

Claim 29: Failure to maintain pH level above 8.0 for EPN-009.

8.139 During the July 2009 investigation no. 747448, the TCEQ investigator requested records related to pH levels for the Electric Arc Furnace Scrubber (EPN-009). GCMC records showed that from November 1, 2008 – March 25, 2009, GCMC failed to maintain the pH level for EPN-009 above 8.0 on seven days.

8.140 GCMC violated Permit 19793, Special Condition 6; Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 116.115(c), 122.143(4) for seven days.

Claim 30: Failure to maintain flow rate for EPN-009.

8.141 During the July 2009 investigation no. 747448, the TCEQ investigator requested records related to scrubber solution flow rates for the Electric Arc Furnace Scrubber (EPN-009). Records produced by GCMC showed that from December 30, 2008 – July 31, 2009, GCMC failed to maintain the flow rate for EPN-009 between ten and twenty gallons per 1000 standard cubic feet of gas. GCMC records indicated that the blower for EPN-009 runs at 500 to 2,600

standard cubic feet. In order to comply with the permit limits, scrubbing liquid should be maintained between five and fifty-two gallons per minute. However, GCMC documents showed that the scrubbing liquid flow rate is maintained at approximately 450 gallons per minute, regardless of the actual off-gas flow rate.

8.142 On April 13, 2010 during investigation no. 799457, the TCEQ observed that GCMC continued to operate at an improper flow rate.

8.143 GCMC violated Permit 19793, Special Condition 6; Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 116.115(c), 122.143(4) from at least December 30, 2008 – July 31, 2009 and on April 13, 2010. This constitutes at least 215 days of violations, and continues until resolved.

8.144 In addition, on information and belief, the violation began prior to December 30, 2008 and continued after July 31, 2009 for an unknown additional number of days of violations.

Claim 31: Failure to maintain records of all quarterly stationary vent observations.

8.145 During the July 2009 investigation no. 747448, the TCEQ investigator found that GCMC failed to maintain complete records of all

quarterly stationary vent observations. Quarterly readings conducted on December 22, 2006; March 23, 2007; and June 19, 2007 failed to include an indication of whether visible emissions were noted.

8.146 GCMC violated Permit O1337, Special Terms and Conditions 3(A)(iv)(1),(3),(4); Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code § 122.143(4) for a total of three days of violation.

Claim 32: Failure to maintain EPN-006 in proper operating condition.

8.147 During the July 2009 investigation no. 747448, the TCEQ investigator found that the piping connecting the Ammonia Scrubber (EPN-006) to the inlet of the attached blower was duct-taped together. The remains of a rubber gasket and steel bands were visible; however, the rubber gasket had broken apart, and the scrubber piping and blower piping appeared to be two different diameters. The missing gasket allows outside air to be pulled into the blower, decreasing the effectiveness of the negative pressure system. Additionally, the concentrations of any pollutants measured in the stack during the stack test are diluted by outside air, potentially causing artificially low emission concentrations.

8.148 On January 11, 2010, a TCEQ investigator confirmed during a Facility walk-through that the repair had not been made.

8.149 During investigation no. 799457, the TCEQ investigator observed the gasket to EPN-006 repaired on April 13, 2010.

8.150 Therefore, GCMC violated Permit O1337, Special Terms and Conditions 2(H); Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 101.221(a), 122.143(4) from at least July 23, 2009 – January 11, 2010 for a total of at least 173 days of violation.

8.151 In addition, on information and belief, the violation began prior to July 23, 2009 and continued for some period of time after January 11, 2010 for an unknown additional number of days of violations.

Claim 33: Failure to maintain EPN-007 in proper operating condition.

8.152 During the July 2009 investigation no. 747448, the TCEQ investigator found that the piping connecting the blower from the Hydrochloric Acid Scrubber (EPN-007) and the piping exiting the blower to the stack were secured in place with duct-tape. The TCEQ investigator first observed the taped piping connected to EPN-007 on July 23, 2009. The TCEQ investigator returned to the

Facility on April 13, 2010 and found the taped piping connected to EPN-007 in the same condition.

8.153 GCMC violated Permit O1337, Special Terms and Conditions 2(H); Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 101.221(a), 122.143(4) from at least July 23, 2009 – April 13, 2010. This constitutes at least 265 days of violations, and continues until resolved.

8.154 In addition, on information and belief, the violation began prior to July 23, 2009 and continued after April 13, 2010 for an unknown additional number of days of violations.

Claim 34: Failure to maintain Molybdenum Kiln Baghouse in proper operating condition.

8.155 During the July 2009 investigation no. 747448, the TCEQ investigator found that the baghouse attached to the Molybdenum Kiln (identification no. 15-06) had a substantial tear in the metal siding, allowing molybdenum oxide dust to escape from this pollution control device. With this tear, the baghouse was unable to maintain the required pressure to filter the PM emitted from the Molybdenum Kiln and did not properly control PM that was captured. The TCEQ investigator first observed the torn baghouse on July 23, 2009.

8.156 GCMC violated Permit O1337, Special Terms and Conditions 2(H); Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 101.221(a), 122.143(4) on July 23, 2009, for a total of at least one day of violation.

8.157 In addition, on information and belief, the violation began prior to July 23, 2009 and continued after July 23, 2009 for an unknown additional number of days of violations.

Claim 35: Failure to maintain EPN-003 in proper operating condition.

8.158 During the July 2009 investigation no. 747448, the TCEQ investigator requested records of maintenance for the Baghouse Stack (EPN-003). GCMC records showed that the Pulse Air System attached to EPN-003 was inoperable from February 2, 2009 – April 1, 2009. The Pulse Air System removes accumulated dust from bags designed to trap PM emissions for EPN-003, ensuring the effectiveness of the baghouse pollution capture equipment.

8.159 GCMC violated Permit O1337, Special Terms and Conditions 2(H); Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex.

Admin. Code §§ 101.221(a), 122.143(4) from February 2, 2009 – April 1, 2009, for a total of fifty-eight days of violation.

Claim 36: Failure to maintain EPN-65.18 in proper operating condition.

8.160 During the July 2009 investigation no. 747448, the TCEQ investigator requested records of maintenance for Flash Dryer Baghouse (EPN-65.18). GCMC records indicated that the bags for EPN-65.18 were damaged from August 28, 2008 – September 18, 2008. In addition, from March 6, 2009 – April 2, 2009, a weld crack at the Baghouse leaked dust. GCMC records document that GCMC did not repair the weld until twenty-seven days after it was discovered.

8.161 GCMC violated Permit O1337, Special Terms and Conditions 2(H); Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 101.221(a), 122.143(4) from August 28, 2008 – September 18, 2008, for a total of at least twenty-one days of violation.

8.162 GCMC violated Permit O1337, Special Terms and Conditions 2(H); Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 101.221(a), 122.143(4) from March 6, 2009 – April 2, 2009, for a total of at least twenty-seven days of violation.

8.163 In addition, on information and belief, the violation began prior to August 28, 2008, continued in the interim from September 18, 2008 – March 6, 2009, and continued after April 2, 2009 for an unknown additional number of days of violations.

Claim 37: Failure to maintain proper baghouse pressure for EPN-65.18.

8.164 During the July 2009 investigation no. 747448, the TCEQ investigator requested records related to the Flash Dryer Baghouse pressure drops (EPN-65.18) from January 1, 2008 – July 29, 2009. GCMC produced records for 320 days. Of those days produced, GCMC records showed that EPN-65.18 operated at a pressure differential less than 1.5 inches or greater than 6.0 inches of water on 247 days.

8.165 GCMC violated Permit 19793, Special Condition 9(B); Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 116.115(c), 122.143(4) for a total of at least 247 days of violation.

Claim 38: Failure to document or conduct annual preventative maintenance on EPN-65.64.

8.166 During the July 2009 investigation no. 747448, the TCEQ investigator

requested records related to the maintenance conducted on the Coal Bin Vent (EPN-65.64).⁴ The TCEQ investigator made the request on July 22, 2009. GCMC failed to produce any records related to maintenance conducted on EPN-65.64.

8.167 GCMC violated NSR Permit 19793, Special Condition 9(D); Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 116.115(b)(2)(E)(i), (c); 122.143(4); 122.144(1) for a total of at least five days of violation.

8.168 In addition, on information or belief, the violation continued after July 22, 2009 for an unknown additional number of days of violations.

Claim 39: Failure to document or conduct annual preventative maintenance on EPN-67.05.

8.169 During the July 2009 investigation no. 747448, the TCEQ investigator requested records related to maintenance conducted on the Alumina Concentrate Bin Vent (EPN-67.05). The TCEQ investigator made the request on July 22, 2009. GCMC failed to produce any records related to maintenance conducted on EPN-67.05.

⁴A bin vent is a type of baghouse.

8.170 GCMC violated NSR Permit 19793, Special Condition 9(D); Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 116.115(b)(2)(E)(i), (c); 122.143(4); 122.144(1) for a total of at least five days of violation.

8.171 In addition, on information or belief, the violation continued after July 22, 2009 for unknown additional number of days of violations.

Claim 40: Failure to document or monitor baghouse pressure for EPN-65.18.

8.172 During the July 2009 investigation no. 747448, the TCEQ investigator requested records related to the Flash Dryer Baghouse pressure drops (EPN-65.18) from January 1, 2008 – July 29, 2009. GCMC was unable to produce records for 256 days during the requested time-period.

8.173 During the January 2010 investigation no. 791388, the TCEQ investigator requested records related to EPN-65.18 pressure drops for January 6, 2010. GCMC was unable to produce the requested records.

8.174 GCMC violated Permit 19793, Special Condition 9(B); Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; Tex. Health & Safety

Code § 382.085; and 30 Tex. Admin. Code §§ 116.115(b)(2)(E)(i), (c); 122.143(4); 122.144(1) for a total of at least 257 days of violations.

Claim 41: Failure to maintain proper baghouse pressure for EPN-011.

8.175 During the July 2009 investigation no. 747448, the TCEQ investigator requested records related to the Electric Arc Furnace Baghouse pressure drops (EPN-011 or 68.29-BH) from January 1, 2008 – July 29, 2009. GCMC was able to produce records for about 447 days of the requested time period. Of those days produced, GCMC records showed that EPN-011 operated at a pressure differential less than 6.0 inches or greater than 10.0 inches of water on 120 days.

8.176 During investigation no. 762631, the TCEQ investigator reviewed GCMC records that documented that EPN-011 operated at a pressure differential less than 6.0 inches or greater than 10.0 inches of water on August 15, 2009, August 22, 2009, and September 9, 2009.

8.177 GCMC violated Permit 19793, Special Condition 9(B); Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 116.115(c), 122.143(4) for a total of not less than 123 days of violation.

Claim 42: Failure to maintain records related to baghouse pressure for EPN-011.

8.178 During the July 2009 investigation no. 747448, the TCEQ investigator requested records related to the Electric Arc Furnace Baghouse pressure drops (EPN-011 or 68.29-BH) from January 1, 2008 – July 29, 2009. GCMC was unable to produce records for 129 days of the requested time period.

8.179 GCMC violated Permit 19793, Special Condition 9(B); Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 116.115(b)(2)(E)(i), (c); 122.143(4); 122.144(1), for a total of at least 129 days of violation.

Claim 43: Failure to document or conduct annual preventative maintenance inspections on EPN-003.

8.180 During the July 2009 investigation no. 747448, the TCEQ investigator requested records related to annual maintenance inspections performed on the Baghouse Stack (EPN-003). GCMC was unable to produce any records of annual maintenance inspections for EPN-003 for the period from January 1, 2008 – August 4, 2009. Because at least one scheduled maintenance inspection event should have occurred during the period requested, GCMC failed to perform annual preventative maintenance inspections for at least one year.

8.181 GCMC violated Permit 9803, Special Condition 8(C); Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 116.115(b)(2)(E)(i), (c); 122.143(4) for at least one year for a total of not less than one day of violation.

Claim 44: Failure to maintain records related to baghouse filter changes for EPN-011.

8.182 During the July 2009 investigation no. 747448, the TCEQ investigator requested records related to baghouse filter changes for the Electric Arc Furnace Baghouse (EPN-011). GCMC produced records from May 2007 to August 6, 2009 listing the total number of filters issued into the baghouse as recorded in GCMC's inventory tracking system, but the inventory record did not indicate the times or frequency of bag replacement. The TCEQ investigator made the request on July 22, 2009.

8.183 GCMC violated Permit 19793, Special Condition 13(F); Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 116.115(b)(2)(E)(i), (c); 122.143(4); 122.144(1) from May 2007 – August 6, 2009, for a total of at least one day of violation.

8.184 In addition, on information or belief, the violation 1) began before May 2007, 2) occurred on multiple days in the period from May 2007 – August 6, 2009, and 3) continued after August 6, 2009 for unknown additional number of days of violations.

Claim 45: Failure to maintain records related to baghouse filter changes for EPN-65.64.

8.185 During the July 2009 investigation no. 747448, the TCEQ investigator requested records related to baghouse filter changes for the Coal Bin Vent Baghouse (EPN-65.64). GCMC produced no records of baghouse filter replacements for EPN-65.64. The TCEQ investigator made the request on July 22, 2009.

8.186 GCMC violated Permit 19793, Special Condition 13(F); Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 116.115(c), 122.143(4), 122.144(1) from July 23, 2004 – July 22, 2009, for a total of at least one day of violation.

8.187 In addition, on information or belief, the violation 1) began before July 23, 2004, 2) occurred on multiple days in the period from July 23, 2004 – July

22, 2009, and 3) continued after July 22, 2009 for unknown additional number of days of violations.

Claim 46: Failure to maintain records related to baghouse filter changes for EPN-67.05.

8.188 During the July 2009 investigation no. 747448, the TCEQ investigator requested records related to baghouse filter changes for the Alumina Concentrate Bin Vent baghouse (EPN-67.05). GCMC produced no records of baghouse filter replacements for EPN-67.05. The TCEQ investigator made the request on July 22, 2009.

8.189 GCMC violated Permit 19793, Special Condition 13(F); Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 116.115(c), 122.143(4), 122.144(1) from July 23, 2004 – July 22, 2009, for a total of at least one day of violation.

8.190 In addition, on information or belief, the violation 1) began before July 23, 2004, 2) occurred on multiple days in the period from July 23, 2004 – July 22, 2009, and 3) continued after July 22, 2009 for unknown additional number of days of violations.

Claim 47: Failure to report a reportable emission event within twenty-four hours of its occurrence.

8.191 On February 9, 2010, GCMC notified TCEQ of an upset and emission event that occurred on August 11, 2008. The upset involved the Ammonia Secondary Scrubber (EPN-006). In GCMC's February 9, 2010 STEERS report, GCMC reported that 250 pounds of anhydrous ammonia escaped into the atmosphere. The TCEQ evaluated this incident in Investigation no. 795256.

8.192 GCMC violated Permit O1337, Special Terms and Conditions 2(F); Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 101.201(a)(1)(B), 122.143(4) from August 12, 2008 – February 8, 2010 for a total of not less than 545 days of violations.

Claim 48: Failure to maintain pH for EPN-006 below 5.0.

8.193 During the July 2009 investigation no. 747448, the TCEQ investigator requested records related to pH levels recorded for the Ammonia Scrubber (EPN-006) from April 1, 2008 – March 31, 2009. During this period, GCMC reported in its semi-annual deviation reports that the scrubbing solution for EPN-006 had a pH greater than 5.0 on nineteen occasions.

8.194 During the April 2010 investigation no. 799457, the investigator

requested records relating to the pH levels for the Ammonia Scrubber (EPN-006). The records reflected that on March 26, 2010, GCMC had operated Ammonia Scrubber (EPN-006) at a pH of greater than 5.0.

8.195 GCMC violated Permit 1157C, Special Condition 4; Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 116.115(c), 122.143(4) for a total of not less than twenty days of violations.

Claim 49: Failure to maintain records related to pH for EPN-006.

8.196 During the July 2009 investigation no. 747448, the TCEQ investigator requested records related to pH level deviations recorded for the Ammonia Scrubber (EPN-006) from April 1, 2008 – March 31, 2009. During this period, GCMC had reported nineteen deviations in which the scrubbing fluid for EPN-006 had a pH greater than 5.0. GCMC was able to produce only records of three of the nineteen reported deviations.

8.197 GCMC violated Permit 1157C, Special Condition 4; Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; Tex. Health & Safety

Code § 382.085; and 30 Tex. Admin. Code §§ 116.115(c), 122.143(4) for a total of not less than sixteen days of violations.

Claim 50: Failure to maintain pH to EPN-007 above 8.0.

8.198 GCMC disclosed in the deviation report for the period from October 1, 2008 – March 31, 2009, due on April 30, 2009 that the fluid contained in Scrubber 35-01 (EPN-007) fell below a pH level of 8.0 on nine occasions.

8.199 GCMC violated Permit 1157C, Special Condition 5; Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 116.115(c), 122.143(4). The violation constitutes at least nine days of violations.

Claim 51: Unauthorized release of an air contaminant.

8.200 On February 9, 2010, GCMC notified TCEQ of an upset and emission event that occurred on August 11, 2008. The upset involved the Ammonia Scrubber (EPN-006) and occurred when GCMC began unloading anhydrous ammonia from a tanker truck into a storage tank. A valve to the vent pipe V26 was left in the open position before the unloading began. With the valve open, the anhydrous ammonia was able to enter the vent line and

eventually overload the scrubber EPN-006, causing a release into the atmosphere. GCMC estimated that 250 pounds of anhydrous ammonia escaped into the atmosphere during this emission event. The TCEQ evaluated this incident in Investigation no. 795256.

8.201 GCMC violated Permit 1157C, Special Condition 1; Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 116.115(c), 122.143(4) on August 11, 2008, for a total of not less than one day of violation.

Claim 52: Unauthorized discharges from Outfall 001 and Outfall 002.

8.202 On April 23, 2009, GCMC contacted the TCEQ Houston Region Office to request emergency authorization for temporary discharge of untreated or partially untreated wastewater from its on-site Pond 3 through TPDES Outfall 001 and Outfall 002. On the same day, and without securing TCEQ approval, GCMC commenced discharging untreated or partially treated wastewater into Outfall 001 and Outfall 002. The discharge began at approximately 7:00 p.m. on April 23, 2009 and continued until approximately 10:00 a.m. on April 24, 2009.

8.203 GCMC violated TPDES Permit, Condition 2(e), (g); Tex. Water Code §§ 7.101, 26.121(a); and 30 Tex. Admin. Code § 305.125(8) from April 23 – April 24, 2009 for a total of not less than two days of violation.

Claim 53: Unauthorized discharge from Ponds 5 and 6.

8.204 Ponds 5 and 6 at the Facility are used to store spent process water from the Facility. During the April 2009 investigation no. 763722, the TCEQ investigator observed that untreated or partially treated wastewater had overflowed out of Ponds 5 and 6 because the freeboard areas for Ponds 5 and 6 were stained from the presence of untreated wastewater. The TCEQ investigator determined that the release occurred on or about April 23, 2009 and that the release from Ponds 5 and 6 traveled to the edge of the Facility and into the storm drain adjacent to the Facility.

8.205 GCMC violated TPDES Permit, Condition 2(e), (g) and Tex. Water Code §§ 7.101, 26.121(a) on April 23, 2009 for a total of not less than two days of violation.

Claim 54: Failure to comply with effluent limits for total arsenic.

8.206 On April 24, 2009 during Investigation no. 763722, the TCEQ

investigator collected a grab sample of effluent from Outfall 001. Laboratory analysis of the grab sample measured 2.09 milligrams per liter for total arsenic. The TCEQ investigator returned to the Facility on August 25, 2009 during Investigation no. 767077 and collected a grab sample of effluent from Outfall 001. Laboratory analysis of the grab sample measured 2.05 milligrams per liter for total arsenic. In addition, GCMC self-reported effluent violations to the TCEQ pursuant to TPDES Permit, Monitoring and Reporting Requirements 1. GCMC's self-reported violations indicate that the daily average discharge of total arsenic from Outfall 001 at the Facility was 13.13 pounds per day in April 2009. GCMC's self-reported violations indicate that the maximum daily discharge of total arsenic from Outfall 001 was 26.28 pounds per day in April 2009.

8.207 GCMC violated TPDES Permit, Effluent Limitations and Monitoring Requirements 1 and Tex. Water Code §§ 7.101, 26.121(a) for a single grab of effluent on at least one day in April 2009 and one day in August 2009 for a total of not less than two days of violation.

8.208 GCMC also violated TPDES Permit, Effluent Limitations and Monitoring Requirements 1 and Tex. Water Code §§ 7.101, 26.121(a) for daily

average discharge of effluent during April 2009 for a total of not less than thirty days of violation.

8.209 GCMC also violated TPDES Permit, Effluent Limitations and Monitoring Requirements 1 and Tex. Water Code §§ 7.101, 26.121(a) for daily maximum discharge of effluent on at least one day in April 2009, for a total of not less than one day of violation.

Claim 55: Failure to comply with effluent limits for total suspended solids.

8.210 During the April 2009 investigation no. 763722, the TCEQ investigator collected a grab sample of effluent from Outfall 001. The TCEQ investigator took the sample on April 24, 2009. Laboratory analysis of the grab sample measured 141 milligrams per liter for total suspended solids. In addition, GCMC self-reported an effluent violation to the TCEQ pursuant to TPDES Permit, Monitoring and Reporting Requirements 1. GCMC's self-reported violations indicate that the daily average discharge of total suspended solids from Outfall 001 was 119 pounds per day in November 2008; seventy-six pounds per day in December 2008; 1,220 pounds per day in April 2009; and sixty-eight pounds per day in May 2009. GCMC's self-reported violations indicate that the

maximum daily discharge of total suspended solids from Outfall 001 was 505 pounds per day in November 2008; 190 pounds per day in December 2008; 5,152 pounds per day in April 2009; and 231 pounds per day in May 2009.

8.211 GCMC violated TPDES Permit, Effluent Limitations and Monitoring Requirements 1 and Tex. Water Code §§ 7.101, 26.121(a) for a daily grab sample of effluent on at least one day in April 2009 for a total of not less than one day of violation.

8.212 GCMC also violated TPDES Permit, Effluent Limitations and Monitoring Requirements 1 and Tex. Water Code §§ 7.101 and 26.121(a) for daily average discharge of total suspended solids during November 2008, December 2008, April 2009, and May 2009 for a total of not less than 122 days of violations.

8.213 GCMC also violated TPDES Permit, Effluent Limitations and Monitoring Requirements 1 and Tex. Water Code §§ 7.101, 26.121(a) for daily maximum discharge of total suspended solids on at least one day each in November 2008, December 2008, April 2009, and May 2009 for a total of not less than four days of violation.

Claim 56: Failure to report an un-permitted discharge.

8.214 Ponds 5 and 6 at the Facility are used to store spent process water from the Facility. During the April 2009 investigation no. 763722, the TCEQ investigator observed that untreated or partially treated wastewater had overflowed out of Ponds 5 and 6 because the freeboard areas for Ponds 5 and 6 were stained from the presence of untreated wastewater. The TCEQ investigator determined that the release occurred on or about April 23, 2009 and that the release from Ponds 5 and 6 traveled to the edge of the Facility and into the storm drain adjacent to the Facility. GCMC failed to provide TCEQ notice of the discharge within twenty-four hours of the event. GCMC notified the TCEQ of the discharge on September 1, 2009.

8.215 GCMC violated TPDES Permit, Monitoring and Reporting Requirements 7(a) and Tex. Water Code §§ 7.101, 26.121(a) from April 24, 2009 – August 31, 2009 for a total of not less than 130 days of violations.

Claim 57: Failure to comply with effluent limits on daily average flow.

8.216 GCMC self-reported effluent violations to the TCEQ pursuant to TPDES Permit, Monitoring and Reporting Requirements 1. GCMC's self-

reported violations indicate that the average daily flow of effluent from Outfall 001 was 0.359 million gallons per day during April 2009 and 0.501 million gallons per day during July 2009.

8.217 GCMC violated TPDES Permit, Effluent Limitations and Monitoring Requirements 1 and Tex. Water Code §§ 7.101, 26.121(a) during April 2009 and July 2009 for a total of not less than sixty-one days of violations.

Claim 58: Failure to comply with effluent limits for molybdenum.

8.218 On August 25, 2009, during investigation no. 767077, the TCEQ investigator collected a grab sample of effluent from Outfall 001. Laboratory analysis of the grab sample measured 380 milligrams per liter for total molybdenum. In addition, GCMC self-reported effluent violations to the TCEQ pursuant to TPDES Permit, Monitoring and Reporting Requirements 1. GCMC's self-reported violations indicate that the daily average discharge of total molybdenum from Outfall 001 was 87.8 pounds per day in December 2008; 128.3 pounds per day in January 2009; 154.5 pounds per day in April 2009; and 105.1 pounds per day in July 2009. GCMC's self-reported violations indicate that the daily maximum discharge of total molybdenum from Outfall 001 was 206.3

pounds per day in December 2008, 224.3 pounds per day in January 2009, 385.2 pounds per day in April 2009, and 306.7 pounds per day in July 2009. The self-reported daily maximum discharge of total molybdenum from Outfall 002 was 87.3 milligrams per liter in December 2008.

8.219 GCMC violated TPDES Permit, Effluent Limitations and Monitoring Requirements 1 and Tex. Water Code §§ 7.101, 26.121(a) for a single grab sample of effluent on at least one day in August 2009 for a total of not less than one day of violation.

8.220 GCMC also violated TPDES Permit, Effluent Limitations and Monitoring Requirements 1 and Tex. Water Code §§ 7.101, 26.121(a) for daily average discharge of molybdenum from Outfall 001 during December 2008, January 2009, April 2009, and July 2009 for a total of not less than 123 days of violations.

8.221 GCMC also violated TPDES Permit, Effluent Limitations and Monitoring Requirement 1 and Tex. Water Code §§ 7.101, 26.121(a) for daily maximum discharge of molybdenum from Outfall 001 on at least one day each in

December 2008, January 2009, April 2009, and July 2009 for a total of not less than four days of violations.

8.222 GCMC also violated TPDES Permit, Effluent Limitations and Monitoring Requirement 1 and Tex. Water Code §§ 7.101, 26.121(a) for daily maximum discharge of molybdenum from Outfall 002 on at least one day in December 2008 for a total of at least one day of violation.

Claim 59: Failure to comply with effluent limits for nickel.

8.223 GCMC self-reported effluent violations to the TCEQ pursuant to TPDES Permit, Monitoring and Reporting Requirements 1. GCMC's self-reported violations indicate that the daily average discharge of total nickel from Outfall 001 was 2.84 pounds per day in April 2009. GCMC's self-reported violations indicate that the daily maximum discharge of total nickel from Outfall 001 was 5.95 in April 2009.

8.224 GCMC violated TPDES Permit, Effluent Limitations and Monitoring Requirements 1 and Tex. Water Code §§ 7.101, 26.121(a) for daily average discharge during April 2009 for a total of not less than thirty days of violation.

8.225 GCMC also violated TPDES Permit, Effluent Limitations and Monitoring Requirements 1 and Tex. Water Code §§ 7.101, 26.121(a) for daily maximum discharge during April 2009 for a total of at least one day of violation.

Claim 60: Failure to comply with effluent limits for ammonia as nitrogen.

8.226 GCMC self-reported effluent violations to the TCEQ pursuant to TPDES Permit, Monitoring and Reporting Requirements 1. GCMC's self-reported violations indicate that the daily average discharge of ammonia as nitrogen from Outfall 001 was 684 pounds per day in August 2008; 634 pounds per day in September 2008; 730 pounds per day in October 2008; 742 pounds per day in March 2009; and 2,088 in April 2009. GCMC's self-reported violations indicate that the maximum daily discharge of ammonia as nitrogen from Outfall 001 was 1,736 milligrams per liter in March 2009 and 12,325 milligrams per liter in April 2009.

8.227 GCMC violated TPDES Permit, Effluent Limitations and Monitoring Requirement 1 and Tex. Water Code §§ 7.101, 26.121(a) for daily average discharge of ammonia as nitrogen from Outfall 001 during August 2008,

September 2008, October 2008, March 2009, and April 2009 for a total of not less than 153 days of violation.

8.228 GCMC also violated TPDES Permit, Effluent Limitations and Monitoring Requirement 1 and Tex. Water Code §§ 7.101, 26.121(a) for daily maximum discharge of ammonia as nitrogen during March 2009 and April 2009 for a total of not less than two days of violation.

Claim 61: Failure to comply with effluent limits for vanadium.

8.229 GCMC self-reported effluent violations to the TCEQ pursuant to TPDES Permit, Monitoring and Reporting Requirements 1. GCMC's self-reported violations indicate that the maximum daily discharge of total vanadium from Outfall 001 was 1,080 milligrams per liter in April 2009.

8.230 GCMC violated of TPDES Permit, Effluent Limitations and Monitoring Requirements 1 and Tex. Water Code §§ 7.101, 26.121(a) for maximum daily discharge of vanadium during April 2009 for a total of not less than one day of violation.

Claim 62: Failure to comply with effluent limits for pH.

8.231 GCMC self-reported effluent violations to the TCEQ pursuant to

TPDES Permit, Monitoring and Reporting Requirements 1. GCMC's self-reported violations indicate that the pH for effluent discharges from Outfall 002 was 9.2 on August 31, 2008.

8.232 GCMC violated TPDES Permit, Effluent Limitations and Monitoring Requirements 2 and Tex. Water Code §§ 7.101, 26.121(a) on August 31, 2008 for a total of not less than one day of violation.

Claim 63: Failure to conduct proper effluent sampling.

8.233 During the August 2009 investigation no. 767077, the TCEQ investigator reviewed the chain of custody records kept by GCMC for wastewater sampling performed pursuant to the TPDES Permit. The chain of custody records indicate that oil and grease samples were taken with a composite sampler on April 24, 2009. The TCEQ investigator confirmed with GCMC employees that they were taking oil and grease samples with a composite sampler. The composite sampler is not a wide-mouth glass bottle able to collect samples from the surface water. GCMC's chain of custody records indicate that GCMC took oil and grease samples with a composite sampler on April 24, 2009. GCMC submitted a Standard Operating Procedure letter to the TCEQ on

November 2, 2009, indicating that GCMC personnel were trained in proper oil and grease sampling.

8.234 GCMC violated TPDES Permit, Monitoring and Reporting Requirements 1; Tex. Water Code § 7.101; and 30 Tex. Admin. Code § 319.11(a) on at least April 24, 2009 for a total of not less than one day of violation.

8.235 On information or belief, the violation began prior to April 24, 2009 and continued after April 24, 2009 for an unknown additional number of days of violations.

Claim 64: Failure to conduct proper composite effluent sampling.

8.236 During the August 2009 investigation no. 767077 conducted on September 9, 2009, the TCEQ requested GCMC lab personnel to describe their procedure for conducting composite samples of wastewater in compliance with the TPDES Permit. GCMC's process of collecting composite samples described by GCMC lab personnel did not include an analysis of the flow from the Outfall from which the sample was taken or adjust the sample size for the flow rate at the time the sample was taken. As a result, GCMC's method of taking composite samples failed to account for the proportionate flow of each sample.

8.237 GCMC violated TPDES Permit, Definitions and Standard Permit Conditions 3(a) and Tex. Water Code § 7.101 on September 9, 2009 for a total of not less than one day of violation.

8.238 On information or belief, the violation began prior to September 9, 2009 and continued after September 9, 2009 for an unknown additional number of days of violations.

Claim 65: Failure to report effluent deviation in discharge monthly report.

8.239 During the August 2009 investigation no. 767077, the TCEQ investigator reviewed lab results for sampling activity at the Facility performed pursuant to the TPDES Permit. GCMC records indicate that on April 24, 2009, a sample for vanadium from Outfall 001 was recorded at 1,080 milligrams per liter. The daily maximum effluent limit for vanadium is 230 milligrams per liter. This violation of the daily maximum effluent limits was not reported in GCMC's discharge monthly report for the month of April 2009. The DMR report was due May 20, 2009. GCMC reported the violation on June 23, 2009.

8.240 GCMC violated TPDES Permit, Monitoring and Reporting Requirements 1; Tex. Water Code §§ 7.101, 26.121(a); and 30 Tex. Admin. Code

§ 319.4 from May 20, 2009 – June 23, 2009 for a total of not less than thirty-four days of violations.

Claim 66: Failure to report permit deviation of more than 40% to the TCEQ within five days.

8.241 During the August 2009 investigation no. 767077, the TCEQ investigator reviewed lab results for sampling activity at the Facility performed pursuant to the TPDES Permit. GCMC records indicate that on April 24, 2009, a sample for vanadium from Outfall 001 was recorded at 1,080 milligrams per liter. The daily maximum effluent limit for vanadium is 230 milligrams per liter. GCMC reported the exceedence of vanadium from Outfall 001 on September 29, 2009.

8.242 GCMC failed to report the sample that exceeded the effluent limit by more than 40% to the TCEQ Houston Region or TCEQ Enforcement Division until September 29, 2009.

8.243 GCMC violated TPDES Permit, Monitoring and Reporting Requirements 7(c) and Tex. Water Code § 7.101 from April 29, 2009 through September 29, 2009 for a total or not less than 153 days of violations.

Claim 67: Failure to perform proper sampling for Outfall 001 and Outfall 002.

8.244 During the August 2009 investigation no. 767077, the TCEQ investigator reviewed GCMC's chain-of-custody records kept for sampling activities required by the TPDES permit. The records indicate that on April 24, 2009, GCMC personnel collected one sample from Outfall 001 (sample identification number 0904554-01) and one sample from Outfall 002 (sample identification number 0904554-02). However, the laboratory results produced by Analytical Laboratory Services for the samples taken on this date show only one sample (sample identification number 0904554-03). No results were provided for numbers 0904554-01 and 0904554-02. In addition, the chain-of-custody records did not indicate the identity of the individual who performed the samples.

8.245 GCMC violated TPDES Permit, Monitoring and Reporting Requirements 3(a) and Tex. Water Code § 7.101 for the sample taken from Outfall 001 on April 24, 2009 and Outfall 002 on April 24, 2009 for a total of not less than two days of violations.

Claim 68: Unauthorized emissions of CO from ESP-001 and ESP-002.

8.246 As a result of a March 2008 investigation no. 616941, the TCEQ

investigator reviewed results of a stack test of the Multiple Hearth Furnaces ESPs (ESP-001 and ESP-002) conducted in September 25 – 26, 2007. At the time of the test, GCMC emitted CO at a rate of 2.85 pounds per hour.

8.247 GCMC violated Permit 9803, General Condition 8, Special Conditions 1, 10; Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; and Tex. Health & Safety Code § 382.085 on September 25 – 26, 2007. This constitutes at least two days of violations.

8.248 Defendant operated both ESPs before and after the September 2007 stack tests. Stack tests for NO_x, VOCs, and CO parameters are interrelated in that altering test parameters may result in one of more of the pollutants satisfying an emission limit but at the expense of an excess emission by another of the pollutants. Although Defendant may have conducted some stack tests in which the results reflect that CO met the permit limitations, Defendant has not at any time since the September 2007 stack test conducted a valid stack test in which NO_x, VOCs, and CO all met the permit limitations. On information and belief, this violation has continued for an unknown additional number of days of violation.

Claim 69: Unauthorized emissions of NO_x from ESP-001 and ESP-002.

8.249 As a result of a March 2009 investigation no. 737976, the TCEQ investigator reviewed results of a stack test of the Multiple Hearth Furnaces ESPs (ESP-001 and ESP-002) conducted from January 12 – 16, 2009. At the time of the test, GCMC emitted NO_x at a rate of 4.74 pounds per hour. The September 2007 stack test referenced in Claim 68 above had indicated that NO_x emissions met the permit conditions, but that another interrelated pollutant, CO, did not.

8.250 GCMC violated Permit 9803, General Condition 8, Special Conditions 1, 10; Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; and Tex. Health & Safety Code § 382.085 on January 12 – 16, 2009. This constitutes at least five days of violations.

8.251 Defendant operated both ESPs before and after the January 2009 stack tests. Stack tests for NO_x, VOCs, and CO parameters are interrelated in that altering test parameters may result in one of more of the pollutants satisfying an emission limit but at the expense of an excess emission by another of the pollutants. Although Defendant may have conducted some stack tests in which the results reflect that NO_x met the permit limitations, Defendant has not at any

time since the September 2007 stack test conducted a valid stack test in which NO_x, VOCs, and CO all met the permit limitations. On information and belief, this violation has continued for an unknown additional number of days of violation before and after the September 2007 stack test.

Claim 70: Unauthorized off-site emissions of nickel.

8.252 On November 15 – 17, 2005, the TCEQ Mobile Monitoring Team conducted ambient air sampling downwind of the GCMC Facility. Eighteen samples taken by the TCEQ over three days showed nickel concentrations ranging from 0.091 µg/m³ to 2.23 µg/m³.

8.253 On July 21 – 23, 2007, the TCEQ Mobile Monitoring Team conducted ambient air sampling downwind of the GCMC Facility. Eight samples taken by the TCEQ over three days showed nickel concentrations ranging from 0.168 µg/m³ to 0.79 µg/m³.

8.254 As a result of a September 5, 2008 investigation no. 702236, the TCEQ investigator reviewed results of an ambient air quality test conducted on September 25 – 26, 2007. At the time of the test, GCMC measured ambient air levels of nickel at 0.514 µg/m³.

8.255 As a result of a March 2009 investigation no. 740890, the TCEQ investigator reviewed results of an ambient air quality test conducted on January 14, 2009. At the time of the test, GCMC measured ambient air levels of nickel at 0.381 $\mu\text{g}/\text{m}^3$.

8.256 From March 4 – 5, 2009, the TCEQ Mobile Monitoring Team conducted ambient air sampling downwind of the GCMC Facility. Twelve samples taken by the TCEQ over two days showed nickel concentrations ranging from 0.365 $\mu\text{g}/\text{m}^3$ to 1.99 $\mu\text{g}/\text{m}^3$.

8.257 From October 25 – 27, 2010, the TCEQ Mobile Monitoring Team conducted ambient air sampling downwind of the GCMC Facility. Fifteen samples taken by the TCEQ over three days showed nickel concentrations ranging from 0.019 $\mu\text{g}/\text{m}^3$ to 0.549 $\mu\text{g}/\text{m}^3$.

8.258 The effects screening level (“ESL”) for nickel at the time of the test was 0.15 $\mu\text{g}/\text{m}^3$ (short term) and 0.015 $\mu\text{g}/\text{m}^3$ (long term). The air monitoring comparison value (“AMCV”)⁵ of nickel is 0.15 $\mu\text{g}/\text{m}^3$ (short term) and 0.015 $\mu\text{g}/\text{m}^3$ (long term).

⁵The ESL and AMCV are similar values and often set the same potential health effect threshold level.

8.259 GCMC violated Permit 9803, Special Condition 11C; Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; and Tex. Health & Safety Code § 382.085 on November 15 – 17, 2005, July 21 – 23, 2007, September 25 – 26, 2007, on January 14, 2009, March 4 – 5, 2009, and October 25 – 27, 2010. This constitutes at least fourteen days of violations.

8.260 Defendant operated both before and after the November 2005, July and September 2007, January and March 2009, and October 2010 air tests. On information and belief, this violation has continued for an unknown additional number of days of violation before, between, and after the ambient air tests.

Claim 71: Unauthorized off-site emissions of cobalt.

8.261 On November 15 – 17, 2005, the TCEQ Mobile Monitoring Team conducted ambient air sampling downwind of the GCMC Facility. Fifteen samples taken by the TCEQ over three days showed cobalt concentrations ranging from 0.043 $\mu\text{g}/\text{m}^3$ to 0.448 $\mu\text{g}/\text{m}^3$.

8.262 On July 21 – 23, 2007, the TCEQ Mobile Monitoring Team conducted ambient air sampling downwind of the GCMC Facility. Two samples taken by the TCEQ over two days showed cobalt concentrations ranging from 0.044 $\mu\text{g}/\text{m}^3$

to 0.066 $\mu\text{g}/\text{m}^3$.

8.263 From March 4 – 5, 2009, the TCEQ Mobile Monitoring Team conducted ambient air sampling downwind of the GCMC Facility. Twelve samples taken by the TCEQ over two days showed cobalt concentrations ranging from 0.038 $\mu\text{g}/\text{m}^3$ to 0.175 $\mu\text{g}/\text{m}^3$.

8.264 From October 25 – 27, 2010, the TCEQ Mobile Monitoring Team conducted ambient air sampling downwind of the GCMC Facility. One sample taken by the TCEQ on one day showed a cobalt concentration of 0.038 $\mu\text{g}/\text{m}^3$.

8.265 The ESL for cobalt at the time of the test was 0.2 $\mu\text{g}/\text{m}^3$ (short term) and 0.02 $\mu\text{g}/\text{m}^3$ (long term). The AMCV of cobalt is 0.2 $\mu\text{g}/\text{m}^3$ (short term) and 0.02 $\mu\text{g}/\text{m}^3$ (long term).

8.266 GCMC violated Permit 9803, Special Condition 11C; Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; and Tex. Health & Safety Code § 382.085 on November 15 – 17, 2005, July 21 – 23, 2007, March 4 – 5, 2009, and October 25 – 27, 2010. This constitutes at least eight days of violations.

8.267 Defendant operated both before and after the November 2005, July and September 2007, January and March 2009, and October 2010 air tests. On

information and belief, this violation has continued for an unknown additional number of days of violation before, between, and after the ambient air tests.

Claim 72: Unauthorized off-site emissions of vanadium.

8.268 On November 15 – 17, 2005, the TCEQ Mobile Monitoring Team conducted ambient air sampling downwind of the GCMC Facility. Eighteen samples taken by the TCEQ over three days showed vanadium concentrations ranging from 0.084 $\mu\text{g}/\text{m}^3$ to 4.56 $\mu\text{g}/\text{m}^3$.

8.269 On July 21 – 23, 2007, the TCEQ Mobile Monitoring Team conducted ambient air sampling downwind of the GCMC Facility. Nine samples taken by the TCEQ over two days showed vanadium concentrations ranging from 0.07 $\mu\text{g}/\text{m}^3$ to 0.296 $\mu\text{g}/\text{m}^3$.

8.270 As a result of a September 5, 2008 investigation no. 702236, the TCEQ investigator reviewed results of an ambient air quality test conducted on September 25 – 26, 2007. At the time of the test, GCMC measured ambient air levels of vanadium at 0.881 $\mu\text{g}/\text{m}^3$.

8.271 As a result of a March 2009 investigation no. 740890, the TCEQ investigator reviewed results of an ambient air quality test conducted on January

14, 2009. At the time of the test, GCMC measured ambient air levels of vanadium at 0.80 $\mu\text{g}/\text{m}^3$.

8.272 From March 4 – 5, 2009, the TCEQ Mobile Monitoring Team conducted ambient air sampling downwind of the GCMC Facility. Twelve samples taken by the TCEQ over two days showed vanadium concentrations ranging from from 0.541 $\mu\text{g}/\text{m}^3$ to 3.09 $\mu\text{g}/\text{m}^3$.

8.273 From October 25 – 27, 2010, the TCEQ Mobile Monitoring Team conducted ambient air sampling downwind of the GCMC Facility. Twenty-five samples taken by the TCEQ on one day showed a vanadium concentration ranging from of 0.066 $\mu\text{g}/\text{m}^3$ to 1.19 $\mu\text{g}/\text{m}^3$.

8.274 The ESL for vanadium at the time of the test was 0.5 $\mu\text{g}/\text{m}^3$ (short term) and 0.05 $\mu\text{g}/\text{m}^3$ (long term).

8.275 GCMC violated Permit 9803, Special Condition 11C; Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; and Tex. Health & Safety Code § 382.085 on September 25 – 26, 2007, January 14, 2009, and on two days during February 27, 2009 – March 6, 2009. This constitutes at least five days of violations.

8.276 Defendant operated both before and after the November 2005, July and September 2007, January and March 2009, and October 2010 air tests. On information and belief, this violation has continued for an unknown additional number of days of violation before, between, and after the ambient air tests.

Claim 73: Unauthorized off-site emissions of arsenic.

8.277 From March 4 – 5, 2009, the TCEQ Mobile Monitoring Team conducted ambient air sampling downwind of the GCMC Facility. Three samples taken by the TCEQ over two days detected arsenic at ranges of 0.115 $\mu\text{g}/\text{m}^3$ to 0.338 $\mu\text{g}/\text{m}^3$.

8.278 The AMCV of arsenic is 0.10 $\mu\text{g}/\text{m}^3$ (short term) and 0.01 $\mu\text{g}/\text{m}^3$ (long term).

8.279 GCMC violated Permit 9803, Special Condition 11C; Permit O1337, Special Terms and Conditions 8; Tex. Water Code § 7.101; and Tex. Health & Safety Code § 382.085 on two days during March 4 – 5, 2009. This constitutes at least two days of violations.

Claim 74: Creating an unauthorized and continuing nuisance due to metal emissions from the Facility.

8.280 On November 15 – 17, 2005, the TCEQ Mobile Monitoring Team

conducted ambient air sampling downwind of the GCMC Facility. Eighteen samples taken by the TCEQ over three days showed nickel concentrations ranging from 0.091 $\mu\text{g}/\text{m}^3$ to 2.23 $\mu\text{g}/\text{m}^3$.

8.281 On July 21 – 23, 2007, the TCEQ Mobile Monitoring Team conducted ambient air sampling downwind of the GCMC Facility. Eight samples taken by the TCEQ over three days showed nickel concentrations ranging from 0.168 $\mu\text{g}/\text{m}^3$ to 0.79 $\mu\text{g}/\text{m}^3$.

8.282 As a result of a September 5, 2008 investigation no. 702236, the TCEQ investigator reviewed results of an ambient air quality test conducted on September 25 – 26, 2007. At the time of the test, GCMC measured ambient air levels of nickel at 0.514 $\mu\text{g}/\text{m}^3$.

8.283 As a result of a March 2009 investigation no. 740890, the TCEQ investigator reviewed results of an ambient air quality test conducted on January 14, 2009. At the time of the test, GCMC measured ambient air levels of nickel at 0.381 $\mu\text{g}/\text{m}^3$.

8.284 From March 4 – 5, 2009, the TCEQ Mobile Monitoring Team conducted ambient air sampling downwind of the GCMC Facility. Twelve

samples taken by the TCEQ over two days showed nickel concentrations ranging from 0.365 $\mu\text{g}/\text{m}^3$ to 1.99 $\mu\text{g}/\text{m}^3$.

8.285 From October 25 – 27, 2010, the TCEQ Mobile Monitoring Team conducted ambient air sampling downwind of the GCMC Facility. Fifteen samples taken by the TCEQ over three days showed nickel concentrations ranging from 0.019 $\mu\text{g}/\text{m}^3$ to 0.549 $\mu\text{g}/\text{m}^3$.

8.286 The ESL for nickel at the time of the test was 0.15 $\mu\text{g}/\text{m}^3$ (short term) and 0.015 $\mu\text{g}/\text{m}^3$ (long term). The AMCV of nickel is 0.15 $\mu\text{g}/\text{m}^3$ (short term) and 0.015 $\mu\text{g}/\text{m}^3$ (long term).

8.287 On November 15 – 17, 2005, the TCEQ Mobile Monitoring Team conducted ambient air sampling downwind of the GCMC Facility. Fifteen samples taken by the TCEQ over three days showed cobalt concentrations ranging from 0.043 $\mu\text{g}/\text{m}^3$ to 0.448 $\mu\text{g}/\text{m}^3$.

8.288 On July 21 – 23, 2007, the TCEQ Mobile Monitoring Team conducted ambient air sampling downwind of the GCMC Facility. Two samples taken by the TCEQ over two days showed cobalt concentrations ranging from 0.044 $\mu\text{g}/\text{m}^3$ to 0.066 $\mu\text{g}/\text{m}^3$.

8.289 From March 4 – 5, 2009, the TCEQ Mobile Monitoring Team conducted ambient air sampling downwind of the GCMC Facility. Twelve samples taken by the TCEQ over two days showed cobalt concentrations ranging from 0.038 $\mu\text{g}/\text{m}^3$ to 0.175 $\mu\text{g}/\text{m}^3$.

8.290 From October 25 – 27, 2010, the TCEQ Mobile Monitoring Team conducted ambient air sampling downwind of the GCMC Facility. One sample taken by the TCEQ on one day showed a cobalt concentration of 0.038 $\mu\text{g}/\text{m}^3$.

8.291 The ESL for cobalt at the time of the test was 0.2 $\mu\text{g}/\text{m}^3$ (short term) and 0.02 $\mu\text{g}/\text{m}^3$ (long term). The AMCV of cobalt is 0.2 $\mu\text{g}/\text{m}^3$ (short term) and 0.02 $\mu\text{g}/\text{m}^3$ (long term).

8.292 On November 15 – 17, 2005, the TCEQ Mobile Monitoring Team conducted ambient air sampling downwind of the GCMC Facility. Eighteen samples taken by the TCEQ over three days showed vanadium concentrations ranging from 0.084 $\mu\text{g}/\text{m}^3$ to 4.56 $\mu\text{g}/\text{m}^3$.

8.293 On July 21 – 23, 2007, the TCEQ Mobile Monitoring Team conducted ambient air sampling downwind of the GCMC Facility. Nine samples taken by the TCEQ over two days showed vanadium concentrations ranging from 0.07

$\mu\text{g}/\text{m}^3$ to $0.296 \mu\text{g}/\text{m}^3$.

8.294 As a result of a September 5, 2008 investigation no. 702236, the TCEQ investigator reviewed results of an ambient air quality test conducted on September 25 – 26, 2007. At the time of the test, GCMC measured ambient air levels of vanadium at $0.881 \mu\text{g}/\text{m}^3$.

8.295 As a result of a March 2009 investigation no. 740890, the TCEQ investigator reviewed results of an ambient air quality test conducted on January 14, 2009. At the time of the test, GCMC measured ambient air levels of vanadium at $0.80 \mu\text{g}/\text{m}^3$.

8.296 From March 4 – 5, 2009, the TCEQ Mobile Monitoring Team conducted ambient air sampling downwind of the GCMC Facility. Twelve samples taken by the TCEQ over two days showed vanadium concentrations ranging from from $0.541 \mu\text{g}/\text{m}^3$ to $3.09 \mu\text{g}/\text{m}^3$.

8.297 From October 25 – 27, 2010, the TCEQ Mobile Monitoring Team conducted ambient air sampling downwind of the GCMC Facility. Twenty-five samples taken by the TCEQ on one day showed a vanadium concentration ranging from of $0.066 \mu\text{g}/\text{m}^3$ to $1.19 \mu\text{g}/\text{m}^3$.

8.298 The ESL for vanadium at the time of the test was 0.5 $\mu\text{g}/\text{m}^3$ (short term) and 0.05 $\mu\text{g}/\text{m}^3$ (long term).

8.299 From March 4 – 5, 2009, the TCEQ Mobile Monitoring Team conducted ambient air sampling downwind of the GCMC Facility. Three samples taken by the TCEQ over two days detected arsenic at ranges of 0.115 $\mu\text{g}/\text{m}^3$ to 0.338 $\mu\text{g}/\text{m}^3$.

8.300 The AMCV of arsenic is 0.10 $\mu\text{g}/\text{m}^3$ (short term) and 0.01 $\mu\text{g}/\text{m}^3$ (long term).

8.301 On information and belief, GCMC operates daily throughout the year. The emission of metals from the GCMC Facility appears to be a continuous and regular result of their daily operations. Metals at levels exceeding health screening levels and/or air monitoring comparison values have been identified on each of the above test dates. This creates a presumption that the nuisance condition is continuous throughout the period.

8.302 GCMC violated Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code § 101.4 from November 15, 2005 – October 27, 2010. This constitutes at least 1,808 days of violations.

8.303 On information and belief, the nuisance metal emissions from Defendant's Facility started prior to November 15, 2005 and continued after October 27, 2010 for unknown number of days of violation. The violation will continue until abated.

Claim 75: Unauthorized disposal and discharge of industrial solid waste from the Facility.

8.304 From July 20 – 26, 2007, the TCEQ conducted soil sampling on properties in and around the Defendant's Facility. Those tests documented the presence of metals in the soil above expected background levels. The metals identified as above background were aluminum, antimony, arsenic, barium, beryllium, chromium, cobalt, copper, lead, manganese, nickel, selenium, strontium, tin, vanadium, and zinc. Defendant's Facility is the primary, if not virtually exclusive, source for these metals.

8.305 On December 14 – 15, 2010, the TCEQ again began a soil sampling program in and around the Facility. Preliminary results revealed the presence of antimony, arsenic, chromium, cobalt, copper, lead, manganese, nickel, selenium, strontium, tin, and zinc above expected background levels. Defendant's Facility is the primary, if not virtually exclusive, source for these metals. The State's soil

testing program continues.

8.306 The metals are deposited on properties adjoining and in the vicinity of Defendant's Facility by means of air emissions and water effluent excursions from the Facility. This off-site deposition amounts to the disposal and discharge of industrial solid waste.

8.307 In addition, the Defendant's Facility is near the Gulf of Mexico and many waters of the State of Texas. The metal discharges from the Facility are discharges into or adjacent to waters of the State.

8.308 Metals in soil do not deteriorate and will persist unless removed.

8.309 Defendant does not have a permit to discharge or dispose of industrial solid waste on properties adjacent to or in the vicinity of the Facility.

8.310 GCMC violated Tex. Water Code §§ 7.101, 26.121 and 30 Tex. Admin. Code §§ 330.7, 335.2 on and from July 20, 2007 until all the unlawfully disposed of waste is removed and lawfully disposed of at a waste management facility authorized to take industrial solid waste. Through December 31, 2010, Defendant committed not less than 1,261 days of violations.

8.311 On information and belief, the unlawful discharge and disposal of

industrial solid waste from the Facility began at a date earlier than July 20, 2007 for unknown additional number of days of violation. The violation will continue until abated.

Claim 76: Failure to maintain opacity from the Ammonia Scrubber (EPN-006) below 20.0%.

8.312 On September 17, 2010, GCMC notified TCEQ of an upset and emission event that occurred on September 15, 2010. The upset involved the Ammonia Scrubber (EPN-006) under Permit 1157C. GCMC reported that the event lasted approximately twenty-seven hours, ending at 5:00 p.m. on September 16, 2010. During the event, the scrubber stack had an opacity of 40.0%, twice the authorized opacity level. The TCEQ investigated this incident on November 3, 2010 in investigation no. 872667.

8.313 GCMC violated Permit O1337, Special Terms and Conditions 3(A)(i); Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 111.111(a)(1)(B), 122.143(4) September 15 – 16, 2010, for a total of two days of violations.

Claim 77: Failure to report a reportable emission event within twenty-four hours of its occurrence (repeat violation).

8.314 On September 17, 2010, GCMC notified TCEQ of an upset and emission event that occurred on September 15, 2010. The upset involved the Ammonia Scrubber (EPN-006) under Permit 1157C. GCMC reported that the event lasted approximately twenty-seven hours, starting at 2:00 p.m. on September 15, 2010 and ending at 5:00 p.m. on September 16, 2010. GCMC did not make the initial notification of the incident to TCEQ until approximately 6:30 p.m. on September 17, 2010, more than twenty-four hours after the event had been discovered. The TCEQ investigated this incident on November 3, 2010 in investigation no. 872667.

8.315 GCMC violated Permit O1337, Special Terms and Conditions 2(F); Tex. Water Code § 7.101; Tex. Health & Safety Code § 382.085; and 30 Tex. Admin. Code §§ 101.201(a)(1)(B), 122.143(4) from September 16 – 17, 2010 for a total of two days of violation.

IX. CIVIL PENALTIES

9.1 Texas Water Code § 7.102 provides that a person who causes, suffers, allows, or permits a violation of a permit issued by the TCEQ or a rule

based on Texas Health and Safety Code, Chapter 382, or a statute within the TCEQ's jurisdiction shall be assessed for each violation a civil penalty of not less than \$50 nor greater than \$25,000 for each day of each violation. Each day of a continuing violation is a separate violation. *Id.*

9.2 The State requests that upon final trial, Defendant be assessed a civil penalty within the statutory range for each violation and each day of violation alleged in Section VIII above.

X. ADDITIONAL FACTS FOR INJUNCTIVE RELIEF

10.1 In addition to \$2,750,000 in criminal fines imposed on Defendant in May 2010 for environmental crimes, during the last four years TCEQ has entered the following administrative orders imposing administrative penalties against Defendant for violations of environmental regulations that occurred over several years:

A. A September 19, 2007, Agreed Order in docket number 2004-1389-AIR-E imposing an administrative penalty of \$118,500.

B. A January 16, 2008, Agreed Order in docket number 2006-0583-AIR-E imposing an administrative penalty of \$154,275.

C. A May 21, 2008, Agreed Order in docket number 2007-1520-AIR-E imposing an administrative penalty of \$31,050.

D. A June 4, 2008, Agreed Order in docket number 2007-1631-IHW-E imposing an administrative penalty of \$3,600.

In spite of the fact that Defendant's operation of the Facility has been the subject of multiple enforcement proceedings resulting in fines⁶ in excess of \$3 million, environmental regulatory violations continue at the Facility.

10.2 Since the summer of 2009, the TCEQ has investigated over fifty complaints regarding air particulate or odor emissions from GCMC's Facility. Air emissions are fleeting, literally blowing away with the wind so the TCEQ was not able to experience the same conditions that were experienced by persons who live and/or work in the vicinity of the Facility. The number of complaints, however, is telling.

10.3 On information and belief and based on the sworn search warrant affidavit filed by the State of Texas to obtain a criminal search warrant for the Facility executed in February 2010, Defendant appeared to manipulate and

⁶In addition, the administrative orders contained ordering provisions imposing technical requirements much like injunctive relief. The criminal proceeding also resulted in injunctive

conceal data from the TCEQ regarding wastewater effluent. This concealment included claims by Defendant's former employees that the Defendant altered the effluent flow prior to sampling for permit compliance purposes and also maintained dual spreadsheets with effluent testing data, only one of which was reported to the TCEQ. The second spreadsheet, labeled 001.xls, contained evidence of many more effluent permit exceedences than Defendant reported to the TCEQ.

10.4 In October 2010 during a stack test at the Facility, TCEQ employees were exposed to a number of safety hazards. One TCEQ staff member was exposed to ammonia fumes in sufficient concentration to cause discomfort and minor physical effects. Others were exposed to uncontrolled dust emissions that were hazardous wastes and to SO_x from the stack being tested. When molten metal began spewing from the tested stack, the TCEQ determined to leave the Facility for safety reasons. One of Defendant's contractors testing the stack received modest burns from the molten emissions.

10.5 A November 2010 safety audit conducted by Defendant at the insistence of the TCEQ revealed in excess of fifty safety problems at the Facility

type relief in the forms of probation and required remedial actions.

that need to be addressed. TCEQ's staff members are at an increased safety risk when trying to monitor Defendant's compliance with environmental laws due both to the increased frequency of TCEQ's oversight given Defendant's poor environmental compliance and to Defendant's questionable safety practices and procedures.

XI. INJUNCTIVE RELIEF

11.1 The Attorney General, at the request of the TCEQ, may bring an action for injunctive relief if it appears that a violation or threat of violation of a statute within the TCEQ's jurisdiction or a rule adopted or an order or a permit issued under such a statute has occurred or is about to occur. Tex. Water Code §§ 7.032, 7.105. As stated in Section VIII above, the Defendant is currently in violation of permits issued by the TCEQ, TCEQ Rules, the Texas Water Code and the Texas Health & Safety Code, Chapter 382.

11.2 The State requests that this Court grant temporary and permanent injunctions against Gulf Chemical & Metallurgical Corp., ordering it, its officers, agents, servants, employees, and all other persons acting in active concert or

participation with it who receive actual notice of this injunction to be enjoined as outlined in the Paragraphs below.

Site Assessment

11.3 No later than one hundred and eighty days (180) after the effective date of this injunction, GCMC shall perform and complete soil sampling at the Facility to determine the extent of soil contamination at the Facility. The sampling shall comply with the following requirements:

- A. GCMC shall not begin sampling without written approval of a written sampling plan from the TCEQ prior to the sampling event.
- B. GCMC shall submit a sampling plan to the TCEQ no later than thirty (30) days after the effective date of this injunction. One copy shall be sent to the TCEQ Central Office and one copy shall be sent to the TCEQ Houston Region Office. The sampling plan shall identify the third-party contractor and its associated lab that will perform the sampling.
- C. No later than sixty (60) days after the effective date of this injunction, GCMC shall begin sampling at the Facility. GCMC shall

not conduct any sampling at the Facility without TCEQ observers present. The soil shall be analyzed for aluminum, antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, manganese, molybdenum, nickel, selenium, silver, strontium, thallium, tin, vanadium, and zinc. The results of the sampling shall be sent directly from the third-party contractor to the TCEQ Central Office and the TCEQ Houston Region Office no later than sixty (60) days after the last date of sampling.

11.4 No later than one hundred and eighty days (180) after the effective date of this injunction, GCMC shall perform and complete soil sampling on properties adjacent to and in the vicinity of the Facility to determine the extent of soil contamination surrounding the Facility. The sampling shall comply with the following requirements:

- A. GCMC shall not begin sampling without written approval of a written sampling plan from the TCEQ prior to the sampling event.
- B. GCMC shall submit a sampling plan to the TCEQ no later than thirty (30) days after the effective date of this injunction. One copy shall be

sent to the TCEQ Central Office and one copy shall be sent to the TCEQ Houston Region Office. The sampling plan shall identify the third-party contractor and its associated lab that will perform the sampling.

- C. No later than sixty (60) days after the effective date of this injunction, GCMC shall begin sampling. GCMC shall not conduct any sampling without TCEQ observers present. The soil shall be analyzed for aluminum, antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, manganese, molybdenum, nickel, selenium, silver, strontium, thallium, tin, vanadium, and zinc. The results of the sampling shall be sent directly from the third-party contractor to the TCEQ Central Office and the TCEQ Houston Region Office no later than sixty (60) days after the last date of sampling.
- D. The sampling and assessment shall be performed in accordance with the Texas Risk Reduction Program rules in Chapter 350, Tex. Admin. Code, which is incorporated herein.

E. No later than one hundred eighty (180) days after the effective date of this injunction, GCMC shall have completed and submitted to the TCEQ an administratively and technically complete Affected Property Assessment Report as provided for in Chapter 350, Tex. Admin. Code, which is incorporated herein.

Notice of Registration

11.5 No later than sixty (60) days after the effective date of this injunction, GCMC shall update the Notice of Registration (“NOR”) for the Facility to reflect all past and current wastes generated, stored, and treated, including, but not limited to, the wastewater historically and currently generated from the calcine as a stream and washwaters.

11.6 No later than sixty (60) days after the effective date of this injunction, GCMC shall update the NOR for the Facility to reflect all past and current waste management units maintained or operated at the Facility. GCMC shall include complete, current, and accurate process and instrumentation diagram drawings for the entire Facility with the NOR and provide as-built drawings to the TCEQ if requested.

Facility Operations

11.7 Defendant shall immediately start all planning, maintenance, and operations necessary to cease operation of the Facility for taking and processing any new materials. Defendant shall have completed all planning, maintenance and operations necessary to cease the processing of new materials at the Facility no later than thirty (30) days after the effective date of this injunction.

11.8 Defendant shall immediately start all planning, maintenance, and operations to remove all solid wastes and inventory materials from the Facility. Defendant shall have removed all solid wastes and inventory materials from the Facility no later than one hundred eighty (180) days after the effective date of this injunction.

11.9 No later than sixty (60) days after the effective date of this injunction, GCMC shall conduct a full facility Resource Conservation and Recovery Act ("RCRA") Facility Investigation/RCRA Facility Assessment (collectively "RFI/RFA") of the Facility in accordance with 40 C.F.R. Chapter 264. The RFI/RFA shall, at a minimum and in addition to all requirements imposed in Chapter 264 above, collect the information necessary to fully characterize the

nature, extent, and rate of migration of hazardous waste or constituents, and to interpret this information to determine whether interim corrective measures and a Corrective Measures Study may be necessary.

11.10 In the event that the Court determines that the injunctive relief identified in Paragraphs 11.7, 11.8, and 11.9 above is not appropriate, then as an alternative, GCMC shall perform the requirements of Paragraphs 11.10 through and including 11.21 below.

11.11 No later than ninety (90) days after the effective date of this injunction, GCMC shall complete a third-party compliance audit of its operations at the Facility including the following topics:

- A. The auditor is to determine whether GCMC's operations are in compliance with TCEQ rules, Texas Water Code, Texas Health & Safety Code, and all TCEQ and EPA permits issued to GCMC.
- B. The auditor is to evaluate whether GCMC is maintaining full and complete compliance documentation and records as required by TCEQ rules, the Texas Water Code, the Texas Health & Safety Code, and all TCEQ and EPA permits issued to GCMC.

- C. The auditor is to determine whether all pollution control equipment at the Facility meets the Best Available Control Technology (BACT) standards and that such devices are functioning properly.
- D. The auditor shall conduct a mechanical/structural integrity study of all Facility equipment to identify mechanical and structural integrity issues that could result in unexpected emissions, failures of control equipment, or equipment that does not meet engineering and construction standards.
- E. The auditor shall evaluate facility-wide housekeeping, operating, and maintenance procedures that minimize fugitive particulate matter emissions ("PM₁₀" and "PM_{2.5}"), oxides of nitrogen ("NO_x"), volatile organic compounds ("VOCs"), carbon monoxide ("CO"), and sulfur dioxide ("SO₂") that have the potential to leave the Facility.
- F. The auditor shall evaluate GCMC's processes at the Facility to determine if all representations made in GCMC's permit applications are consistent with its actual operation of the Facility.

- G. The auditor shall evaluate the operating procedures and the personnel training program related to the operation and maintenance of all pollution control equipment at the Facility.
- H. The auditor shall evaluate whether contact stormwater containing hazardous waste enters any of the stormwater ponds at the Facility.

11.12 The audit provided for in Paragraph 11.11 above shall be completed by one or more independent and qualified auditors approved in advance of the audit by the TCEQ in writing. No later than twenty (20) days after the effective date of this injunction, GCMC shall submit the name or names of independent and qualified auditors to the TCEQ for approval.

11.13 No later than thirty (30) days after completion of the audit provided for in Paragraph 11.11 above, GCMC shall obtain from the auditor a complete report describing all findings, including any violations of TCEQ rules, Texas Water Code, Texas Health & Safety Code, and any TCEQ or EPA permits issued to GCMC. GCMC shall not review or comment on drafts of the auditor's reports nor shall GCMC have direct input into or editorial privileges of any draft of the report or the final report. The report shall further make detailed and lawful

recommendations to cure any violations of applicable laws or permits. The auditor's report shall be delivered by GCMC to the TCEQ and the Office of the Attorney General no later than three (3) days after it is first received by GCMC.

11.14 No later than one hundred and eighty (180) days after the effective date of this injunction, GCMC shall conduct stack sampling on the following EPNs at the Facility: EPN-001, EPN-002, EPN-003, EPN-006, EPN-007, EPN-008, EPN-009, EPN-011, EPN-012, and EPN-013. Each EPN shall be tested for all pollutants that 1) are described in any permit and emission limitations for each EPN and 2) any other pollutant that has been emitted, or may be emitted, from the EPN even if not described in any permit. The TCEQ shall be notified and allowed to observe all such stack sample tests as required by any permit or law. The stack sampling shall be performed as required by all applicable permits and law and in accordance with A and B immediately below.

- A. No later than seven (7) calendar days before any stack sampling procedure is performed, including initial tests or retests, GCMC shall conduct a pre-test meeting with the TCEQ Houston Region Office.

- B. GCMC shall submit sampling reports from any stack sampling conducted in compliance with this ordering Paragraph 11.14 to the TCEQ Central Office and the TCEQ Houston Region Office no later than forty five (45) days after the date of such sampling.

11.15 No later than ninety (90) days after the effective date of this injunction, GCMC shall install, operate, and maintain internet-accessible video cameras that continuously monitor the entire Facility for particulate emissions. The cameras shall be located off-site and capable of viewing the following locations: all fence lines surrounding the Facility; the effluent gas stacks for the EAF Building, including EPN-009, EPN-012, and EPN-013; the Roaster Stacks (EPN-001 and EPN-002); the HCl Scrubber Stack (EPN-007); and the NH₃ Scrubber Stack (EPN-006). Before placing the cameras required under this ordering paragraph, GCMC shall obtain approval from the TCEQ in writing on the location of each camera. The cameras required under this ordering paragraph shall be operational no less than twenty-three hours per day and capable of continuous live video streaming and shall be accessible to the TCEQ via the Internet. In addition, the cameras shall record a snapshot image of their

current view every five minutes and GCMC shall record each of those images in an archive for two years and make those images available to the TCEQ upon request.

11.16 No later than ninety (90) days after the effective date of this injunction, GCMC shall install, calibrate, operate, and maintain a Continuous Opacity System ("COMS") on EPN-001, EPN-002, EPN-009, and EPN-011 at the Facility. GCMC shall operate the COMS in accordance with 40 C.F.R. Chapter 60 and shall comply with 40 C.F.R. Chapter 60, Appendix B, Performance Standard 1, which is incorporated herein. GCMC shall not use a Predictive Emission Monitoring System (PEMS) to comply with the terms of this paragraph.

11.17 No later than ninety (90) days after the effective date of this injunction, GCMC shall install, calibrate, operate, and maintain a Continuous Emissions Rate Monitoring System ("CERMS") for NO_x, CO, SO₂, oxygen ("O₂"), and metals emitted from EPN-001 and EPN-002. GCMC shall monitor the CERMS in accordance with 40 C.F.R. Chapter 60, Appendix B and Appendix F, which are incorporated herein. The CERMS shall be capable of providing data in pounds per hour of emissions averaged to one-minute data points and hourly

averages. GCMC shall not use a Predictive Emission Monitoring System (“PEMS”) to comply with the terms of this paragraph.

11.18 No later than sixty (60) days after the effective date of this injunction, GCMC shall install, calibrate, operate, and maintain process controls that monitor and record the real-time catalyst feed rate for the roasters. The controls shall accurately track and record on a continuous basis the pounds per hour feed rates from all feed sources. The process controls shall be equipped with alarms and interlocks to alert the operator in real time when feed rates exceed the limits established by GCMC’s permits and cease the feed process if no adjustment is promptly made by the operator. The equipment shall be calibrated at least once each calendar year and shall directly measure and electronically record the amount of catalyst from all sources feed to the roasters on a continuous basis. The records shall be maintained in not less than fifteen minute averages and kept on-site for a minimum of five years. The records shall be made immediately available to the TCEQ upon request.

11.19 No later than thirty (30) days after the effective date of this injunction, Defendant shall retain a third party to monitor and report on its

operations at the Facility. The monitor shall have access to all Facility records and to observe all Facility operations, but is not responsible for or intended to be an operator or decision maker. The monitor shall document any compliance issues or failures observed during the monitoring term. The monitor shall submit a report to the TCEQ each calendar week of any compliance issues or failures observed during the prior calendar week.

11.20 The monitor provided for in Paragraph 11.19 above shall be implemented by one or more independent and qualified monitors approved in advance by the TCEQ. No later than twenty (20) days after the effective date of this injunction, GCMC shall submit the name or names of independent and qualified monitors to the TCEQ for approval.

11.21 During the first thirty (30) days of the period of monitoring, a monitor shall be on site at the Facility all hours of each day so that there is continuous twenty-four hour coverage. Thereafter, the monitor shall determine a schedule so that at least fifty percent (50%) of all operating hours at the Facility are monitored. The monitor may vary the hours monitored from day to day and

is not required to provide advance scheduling and notice of the hours monitored to the Defendant.

XII. ATTORNEY'S FEES

12.1 Texas Water Code § 7.108 authorizes the Attorney General to recover and collect reasonable attorney's fees, court costs, and reasonable investigative costs incurred on behalf of the State in this case if the State prevails. Texas Gov't Code § 402.006(c) further authorizes the State to recover its attorney's fees and court costs in a case in which the State is entitled to recover penalties.

12.2 The State requests judgment against the Defendant for attorney's fees, court costs, and reasonable investigative costs.

PRAYER

ACCORDINGLY, Plaintiff, the State of Texas, prays for judgment against Defendant, Gulf Chemical & Metallurgical Corporation, as follows:

- A. That the Defendant be cited to appear and answer herein;

- B. That the Defendant be cited to appear and show cause why a temporary injunction order should not be issued as requested in this petition;
- C. That upon hearing, a temporary injunction be issued as requested above;
- D. That upon final trial of this case, a permanent injunction be issued as requested above;
- E. That the State recover from Defendant civil penalties within the statutory range;
- F. That the State recover from Defendant its reasonable attorney's fees, court costs, and investigative costs; and
- G. That the State be granted all other relief, at law and in equity, to which it is entitled.

Respectfully submitted,

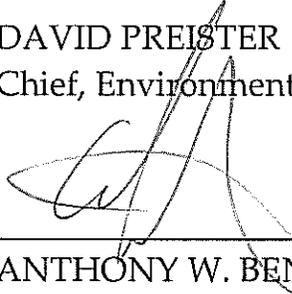
GREG ABBOTT
Attorney General of Texas

DANIEL T. HODGE
First Assistant Attorney General

BILL COBB
Deputy Attorney General for Civil
Litigation

BARBARA B. DEANE
Chief, Environmental Protection and
Administrative Law Division

DAVID PREISTER
Chief, Environmental Protection Section



ANTHONY W. BENEDICT
State Bar No. 02129100
Assistant Attorney General



MARK A. STEINBACH
State Bar No. 24056653
Assistant Attorney General

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Fax: (512) 320-0911

ATTORNEYS FOR THE STATE OF
TEXAS

AFFIDAVIT

STATE OF TEXAS)
)
COUNTY OF HARRIS)

Before me, the undersigned notary, on this day personally appeared Daniel O'Brien, a person whose identity is known to me. After administering an oath to him, upon oath he said:

"My name is Daniel O'Brien. I am over the age of eighteen years and of sound mind, capable of making this Affidavit, and personally acquainted with the facts herein.

I am employed by the Texas Commission on Environmental Quality as an Investigator. In this capacity, I have the authority to make this Affidavit. Furthermore, in this capacity, I am familiar with the Gulf Chemical & Metallurgical Corporation facility located at 302 Midway Road, Freeport, Brazoria County, Texas, and the investigations referenced in the foregoing Plaintiff's Original Petition and Application for Temporary and Permanent Injunctive Relief.

I have read the foregoing Plaintiff's Original Petition and Application for Temporary and Permanent Injunctive Relief. Based on my personal observations, my review of documents and other information provided by Gulf Chemical & Metallurgical Corporation, statements made to me by employees of Gulf Chemical & Metallurgical Corporation, and my review of public records, the facts alleged in paragraphs 8.3, 8.6, 8.11, 8.24, 8.27, 8.33, 8.36, 8.42, 8.45, 8.51, 8.54, 8.70, 8.71, 8.76, 8.249, and 8.251 of the Original Petition are true and correct."



Daniel O'Brien
Investigator
Texas Commission on Environmental Quality

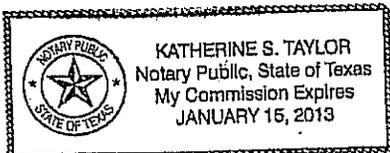
SUBSCRIBED AND SWORN TO BEFORE ME on February 25, 2011, to certify which witness my hand and official seal.

(Seal)



Notary Public in and for the State of Texas

My commission expires: January 15, 2013



AFFIDAVIT

STATE OF TEXAS)
)
COUNTY OF HARRIS)

Before me, the undersigned notary, on this day personally appeared Karen Shantz Puente, a person whose identity is known to me. After administering an oath to her, upon oath she said:

"My name is Karen Shantz Puente. I am over the age of eighteen years and of sound mind, capable of making this Affidavit, and personally acquainted with the facts herein.

I am employed by the Texas Commission on Environmental Quality as an Investigator. In this capacity, I have the authority to make this Affidavit. Furthermore, in this capacity, I am familiar with the Gulf Chemical & Metallurgical Corporation facility located at 302 Midway Road, Freeport, Brazoria County, Texas, and the investigations referenced in the foregoing Plaintiff's Original Petition and Application for Temporary and Permanent Injunctive Relief.

I have read the foregoing Plaintiff's Original Petition and Application for Temporary and Permanent Injunctive Relief. Based on my personal observations, my review of documents and other information provided by Gulf Chemical & Metallurgical Corporation, statements made to me by employees of Gulf Chemical & Metallurgical Corporation, and my review of public records, the facts alleged in paragraphs 8.246 and 8.248 of the Original Petition are true and correct."

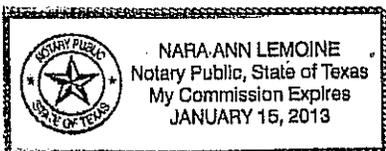
Karen Shantz Puente
Karen Shantz Puente
Investigator
Texas Commission on Environmental Quality

SUBSCRIBED AND SWORN TO BEFORE ME on February 25, 2011, to certify which witness my hand and official seal.

(Seal)

Nara Ann Lemoine
Notary Public in and for the State of Texas

My commission expires: January 15, 2013



AFFIDAVIT

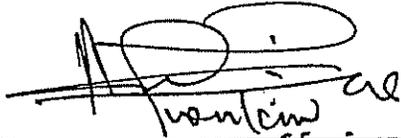
STATE OF TEXAS }
 }
COUNTY OF HARRIS }

Before me, the undersigned notary, on this day personally appeared Nwachukwu Okonkwo, a person whose identity is known to me. After administering an oath to him, upon oath he said:

“My name is Nwachukwu Okonkwo. I am over the age of eighteen years and of sound mind, capable of making this Affidavit, and personally acquainted with the facts herein.

I am employed by the Texas Commission on Environmental Quality as an Investigator. In this capacity, I have the authority to make this Affidavit. Furthermore, in this capacity, I am familiar with the Gulf Chemical & Metallurgical Corporation facility located at 302 Midway Road, Freeport, Brazoria County, Texas, and the investigations referenced in the foregoing Plaintiff's Original Petition and Application for Temporary and Permanent Injunctive Relief.

I have read the foregoing Plaintiff's Original Petition and Application for Temporary and Permanent Injunctive Relief. Based on my personal observations, my review of documents and other information provided by Gulf Chemical & Metallurgical Corporation, statements made to me by employees of Gulf Chemical & Metallurgical Corporation, and my review of public records, the facts alleged in paragraphs 8.202, 8.204, 8.206, 8.210, 8.214, 8.216, 8.218, 8.223, 8.226, 8.229, 8.231, 8.233, 8.236, 8.239, 8.241, 8.242, and 8.244 of the Original Petition are true and correct.”



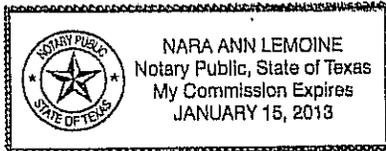
Nwachukwu Okonkwo
Investigator
Texas Commission on Environmental Quality

SUBSCRIBED AND SWORN TO BEFORE ME on February 25, 2011, to
certify which witness my hand and official seal.

(Seal)

Nara Ann Lemoine
Notary Public in and for the State of Texas

My commission expires: January 15, 2013



AFFIDAVIT

STATE OF TEXAS }
 }
COUNTY OF HARRIS }

Before me, the undersigned notary, on this day personally appeared Gary Ackerman, a person whose identity is known to me. After administering an oath to him, upon oath he said:

"My name is Gary Ackerman. I am over the age of eighteen years and of sound mind, capable of making this Affidavit, and personally acquainted with the facts herein.

I am employed by the Texas Commission on Environmental Quality as an Investigator. In this capacity, I have the authority to make this Affidavit. Furthermore, in this capacity, I am familiar with the Gulf Chemical & Metallurgical Corporation facility located at 302 Midway Road, Freeport, Brazoria County, Texas, and the investigations referenced in the foregoing Plaintiff's Original Petition and Application for Temporary and Permanent Injunctive Relief.

I have read the foregoing Plaintiff's Original Petition and Application for Temporary and Permanent Injunctive Relief. Based on my personal observations, my review of documents and other information provided by Gulf Chemical & Metallurgical Corporation, statements made to me by employees of Gulf Chemical & Metallurgical Corporation, and my review of public records, the facts alleged in paragraphs 8.312 and 8.314 of the Original Petition are true and correct."

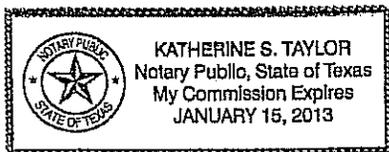

Gary Ackerman
Investigator
Texas Commission on Environmental Quality

SUBSCRIBED AND SWORN TO BEFORE ME on February 25, 2011, to certify which witness my hand and official seal.

(Seal)


Notary Public in and for the State of Texas

My commission expires: January 15, 2013



AFFIDAVIT

STATE OF TEXAS)
)
COUNTY OF HARRIS)

Before me, the undersigned notary, on this day personally appeared Amy Messick, a person whose identity is known to me. After administering an oath to her, upon oath she said:

"My name is Amy Messick. I am over the age of eighteen years and of sound mind, capable of making this Affidavit, and personally acquainted with the facts herein.

I am employed by the Texas Commission on Environmental Quality as an Investigator. In this capacity, I have the authority to make this Affidavit. Furthermore, in this capacity, I am familiar with the Gulf Chemical & Metallurgical Corporation facility located at 302 Midway Road, Freeport, Brazoria County, Texas, and the investigations referenced in the foregoing Plaintiff's Original Petition and Application for Temporary and Permanent Injunctive Relief.

I have read the foregoing Plaintiff's Original Petition and Application for Temporary and Permanent Injunctive Relief. Based on my personal observations, my review of documents and other information provided by Gulf Chemical & Metallurgical Corporation, statements made to me by employees of Gulf Chemical & Metallurgical Corporation, and my review of public records, the facts alleged in paragraphs 8.1, 8.5, 8.10, 8.13, 8.14, 8.16, 8.19, 8.22, 8.26, 8.31, 8.35, 8.40, 8.44, 8.49, 8.53, 8.58, 8.61, 8.63, 8.65, 8.68, 8.69, 8.74, 8.75, 8.80, 8.83, 8.92, 8.96, 8.98, 8.100, 8.105, 8.110, 8.115, 8.120, 8.125, 8.130, 8.133, 8.134, 8.135, 8.139, 8.141, 8.142, 8.145, 8.147, 8.148, 8.149, 8.152, 8.155, 8.158, 8.160, 8.164, 8.166, 8.169, 8.172, 8.175, 8.178, 8.180, 8.182, 8.185, 8.188, 8.193, 8.194, 8.196, and 8.198 of the Original Petition are true and correct."



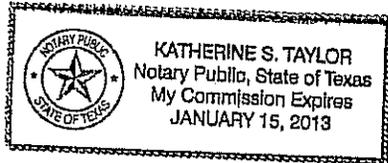
Amy Messick
Investigator
Texas Commission on Environmental Quality

SUBSCRIBED AND SWORN TO BEFORE ME on February 25, 2011, to certify which witness my hand and official seal.

(Seal)

Katherine S. Taylor
Notary Public in and for the State of Texas

My commission expires: January 15, 2013



AFFIDAVIT

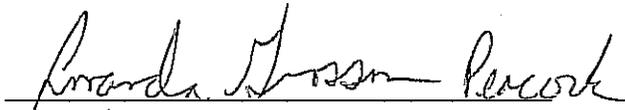
STATE OF TEXAS }
 }
COUNTY OF Travis }

Before me, the undersigned notary, on this day personally appeared Amanda Grossman Peacock, a person whose identity is known to me. After administering an oath to her, upon oath she said:

"My name is Amanda Grossman Peacock. I am over the age of eighteen years and of sound mind, capable of making this Affidavit, and personally acquainted with the facts herein.

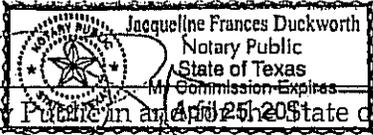
I am employed by the Texas Commission on Environmental Quality as an Investigator. In this capacity, I have the authority to make this Affidavit. Furthermore, in this capacity, I am familiar with the Gulf Chemical & Metallurgical Corporation facility located at 302 Midway Road, Freeport, Brazoria County, Texas, and the investigations referenced in the foregoing Plaintiff's Original Petition and Application for Temporary and Permanent Injunctive Relief.

I have read the foregoing Plaintiff's Original Petition and Application for Temporary and Permanent Injunctive Relief. Based on my personal observations, my review of documents and other information provided by Gulf Chemical & Metallurgical Corporation, statements made to me by employees of Gulf Chemical & Metallurgical Corporation, and my review of public records, the facts alleged in paragraphs 8.2, 8.4, 8.7, 8.17, 8.20, 8.23, 8.25, 8.28, 8.32, 8.34, 8.37, 8.41, 8.43, 8.46, 8.50, 8.52, 8.55, 8.59, 8.77, 8.131, 8.173, and 8.176 of the Original Petition are true and correct."


Amanda Grossman Peacock
Investigator
Texas Commission on Environmental Quality

SUBSCRIBED AND SWORN TO BEFORE ME on 25th day of February, 2011, to certify which witness my hand and official seal.

(Seal)

 Jacqueline Frances Duckworth
Notary Public
State of Texas
My Commission Expires April 25, 2011
Notary Public in and for the State of Texas

My commission expires: April 25, 2011

AFFIDAVIT

STATE OF TEXAS)
)
COUNTY OF HARRIS)

Before me, the undersigned notary, on this day personally appeared Rian Bienek, a person whose identity is known to me. After administering an oath to him, upon oath he said:

“My name is Rian Bienek. I am over the age of eighteen years and of sound mind, capable of making this Affidavit, and personally acquainted with the facts herein.

I am employed by the Texas Commission on Environmental Quality as an Investigator. In this capacity, I have the authority to make this Affidavit. Furthermore, in this capacity, I am familiar with the Gulf Chemical & Metallurgical Corporation facility located at 302 Midway Road, Freeport, Brazoria County, Texas, and the investigations referenced in the foregoing Plaintiff's Original Petition and Application for Temporary and Permanent Injunctive Relief.

I have read the foregoing Plaintiff's Original Petition and Application for Temporary and Permanent Injunctive Relief. Based on my personal observations, my review of documents and other information provided by Gulf Chemical & Metallurgical Corporation, statements made to me by employees of Gulf Chemical & Metallurgical Corporation, and my review of public records, the facts alleged in paragraphs 8.191 and 8.200 of the Original Petition are true and correct.”

Rian Bienek

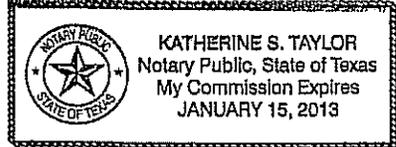
Rian Bienek
Investigator
Texas Commission on Environmental Quality

SUBSCRIBED AND SWORN TO BEFORE ME on February 25, 2011, to certify which witness my hand and official seal.

(Seal)

Katherine S. Taylor
Notary Public in and for the State of Texas

My commission expires: January 15, 2013

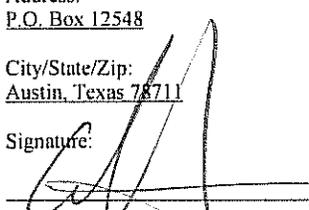


CIVIL CASE INFORMATION SHEET

CAUSE NUMBER (FOR CLERK USE ONLY): _____ COURT (FOR CLERK USE ONLY): _____

STYLED: STATE OF TEXAS V. GULF CHEMICAL & METALLURGICAL CORPORATION
 (e.g., John Smith v. All American Insurance Co; In re Mary Ann Jones; In the Matter of the Estate of George Jackson)

A civil case information sheet must be completed and submitted when an original petition or application is filed to initiate a new civil, family law, probate, or mental health case or when a post-judgment petition for modification or motion for enforcement is filed in a family law case. The information should be the best available at the time of filing. This sheet, approved by the Texas Judicial Council, is intended to collect information that will be used for statistical purposes only. It neither replaces nor supplements the filings or service of pleading or other documents as required by law or rule. The sheet does not constitute a discovery request, response, or supplementation, and it is not admissible at trial.

1. Contact information for person completing case information sheet: Name: <u>Anthony Benedict</u> Address: <u>P.O. Box 12548</u> City/State/Zip: <u>Austin, Texas 78711</u> Signature:  Email: <u>anthony.benedict@ong.state.tx.us</u> Telephone: <u>512-475-4153</u> Fax: <u>512-320-0911</u> State Bar No: <u>02129100</u>	Names of parties in case: Plaintiff(s)/Petitioner(s): <u>State of Texas</u> Defendant(s)/Respondent(s): <u>Gulf Chemical & Metallurgical Corp.</u> (Attach additional page as necessary to list all parties)	Person or entity completing sheet is: <input checked="" type="checkbox"/> Attorney for Plaintiff/Petitioner <input type="checkbox"/> Pro Se Plaintiff/Petitioner <input type="checkbox"/> Title IV-D Agency <input type="checkbox"/> Other: _____ Additional Parties in Child Support Case: Custodial Parent: _____ Non-Custodial Parent: _____ Presumed Father: _____
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2. Indicate case type, or identify the most important issue in the case (select only 1):				
<i>Civil</i>			<i>Family Law</i>	
Contract Debt/Contract <input type="checkbox"/> Consumer/DTPA <input type="checkbox"/> Debt/Contract <input type="checkbox"/> Fraud/Misrepresentation <input type="checkbox"/> Other Debt/Contract: _____ Foreclosure <input type="checkbox"/> Home Equity—Expedited <input type="checkbox"/> Other Foreclosure <input type="checkbox"/> Franchise <input type="checkbox"/> Insurance <input type="checkbox"/> Landlord/Tenant <input type="checkbox"/> Non-Competition <input type="checkbox"/> Partnership <input type="checkbox"/> Other Contract: _____	Injury or Damage <input type="checkbox"/> Assault/Battery <input type="checkbox"/> Construction <input type="checkbox"/> Defamation Malpractice <input type="checkbox"/> Accounting <input type="checkbox"/> Legal <input type="checkbox"/> Medical <input type="checkbox"/> Other Professional Liability: _____ <input type="checkbox"/> Motor Vehicle Accident <input type="checkbox"/> Premises Product Liability <input type="checkbox"/> Asbestos/Silica <input type="checkbox"/> Other Product Liability List Product: _____ <input type="checkbox"/> Other Injury or Damage: _____	Real Property <input type="checkbox"/> Eminent Domain/Condemnation <input type="checkbox"/> Partition <input type="checkbox"/> Quiet Title <input type="checkbox"/> Trespass to Try Title <input type="checkbox"/> Other Property: _____ Related to Criminal Matters <input type="checkbox"/> Expunction <input type="checkbox"/> Judgment Nisi <input type="checkbox"/> Non-Disclosure <input type="checkbox"/> Seizure/Forfeiture <input type="checkbox"/> Writ of Habeas Corpus—Pre-indictment <input type="checkbox"/> Other: _____	Marriage Relationship <input type="checkbox"/> Annulment <input type="checkbox"/> Declare Marriage Void Divorce <input type="checkbox"/> With Children <input type="checkbox"/> No Children Other Family Law <input type="checkbox"/> Enforce Foreign Judgment <input type="checkbox"/> Habeas Corpus <input type="checkbox"/> Name Change <input type="checkbox"/> Protective Order <input type="checkbox"/> Removal of Disabilities of Minority <input type="checkbox"/> Other: _____	Post-judgment Actions (non-Title IV-D) <input type="checkbox"/> Enforcement <input type="checkbox"/> Modification—Custody <input type="checkbox"/> Modification—Other Title IV-D <input type="checkbox"/> Enforcement/Modification <input type="checkbox"/> Paternity <input type="checkbox"/> Reciprocal (UIFSA) <input type="checkbox"/> Support Order Parent-Child Relationship <input type="checkbox"/> Adoption/Adoption with Termination <input type="checkbox"/> Child Protection <input type="checkbox"/> Child Support <input type="checkbox"/> Custody or Visitation <input type="checkbox"/> Gestational Parenting <input type="checkbox"/> Grandparent Access <input type="checkbox"/> Paternity/Parentage <input type="checkbox"/> Termination of Parental Rights <input type="checkbox"/> Other Parent-Child: _____
Employment <input type="checkbox"/> Discrimination <input type="checkbox"/> Retaliation <input type="checkbox"/> Termination <input type="checkbox"/> Workers' Compensation <input type="checkbox"/> Other Employment: _____	Other Civil <input type="checkbox"/> Administrative Appeal <input type="checkbox"/> Antitrust/Unfair Competition <input type="checkbox"/> Code Violations <input type="checkbox"/> Foreign Judgment <input type="checkbox"/> Intellectual Property <input type="checkbox"/> Lawyer Discipline <input type="checkbox"/> Perpetuate Testimony <input type="checkbox"/> Securities/Stock <input type="checkbox"/> Tortious Interference <input checked="" type="checkbox"/> Other: <u>Enforcement</u>			
Tax <input type="checkbox"/> Tax Appraisal <input type="checkbox"/> Tax Delinquency <input type="checkbox"/> Other Tax	Probate & Mental Health Probate/Wills/Intestate Administration <input type="checkbox"/> Dependent Administration <input type="checkbox"/> Independent Administration <input type="checkbox"/> Other Estate Proceedings <input type="checkbox"/> Guardianship—Adult <input type="checkbox"/> Guardianship—Minor <input type="checkbox"/> Mental Health <input type="checkbox"/> Other: _____			

3. Indicate procedure or remedy, if applicable (may select more than 1):		
<input type="checkbox"/> Appeal from Municipal or Justice Court <input type="checkbox"/> Arbitration-related <input type="checkbox"/> Attachment <input type="checkbox"/> Bill of Review <input type="checkbox"/> Certiorari <input type="checkbox"/> Class Action	<input type="checkbox"/> Declaratory Judgment <input type="checkbox"/> Garnishment <input type="checkbox"/> Interpleader <input type="checkbox"/> License <input type="checkbox"/> Mandamus <input type="checkbox"/> Post-judgment	<input type="checkbox"/> Prejudgment Remedy <input type="checkbox"/> Protective Order <input type="checkbox"/> Receiver <input type="checkbox"/> Sequestration <input checked="" type="checkbox"/> Temporary Restraining Order/Injunction <input type="checkbox"/> Turnover