Maricopa County
Air Quality Department

AIR QUALITY DEPARTMENT
1001 North Central Avenue
Phoenix, AZ 85004

CALGON CARBON – GILA BEND PLANT
JEREMY DOLAN, PLANT MANAGER
521 SOUTH BUTTERFIELD TRAIL
GILA BEND, AZ 85337

The purpose of the letter is to inform you that the application for a permit renewal and minor permit revision has been approved and will be incorporated into Air Quality Permit 100094. The applicable Permit Conditions are enclosed with this letter.

If you need assistance with the permit, please contact the Small Business Assistance Coordinator office at 602.506.5102 or contact the undersigned at 602.506.7248. Email communications may be sent to AQPermits@mail.maricopa.gov.

MARICOPA COUNTY AIR QUALITY DEPARTMENT

Engineering and Permitting Division

1001 N. Central Avenue, Suite 400, Phoenix, Arizona 85004
Phone: (602) 506-6010 Fax: (602) 506-6985

AIR QUALITY PERMIT TO OPERATE AND/OR CONSTRUCT

(As required by Title 49, Chapter 3, Article 2, Section 49-480, Arizona Revised Statutes)

ISSUED TO

CALGON CARBON – GILA BEND PLANT
521 SOUTH BUTTERFIELD TRAIL
GILA BEND, AZ 85337

This air quality permit to operate and/or construct does not relieve the applicant of the responsibility of meeting all air pollution regulations.

THE PERMITTEE IS SUBJECT TO THE SPECIFIC AND GENERAL CONDITIONS IDENTIFIED IN THIS PERMIT.

PERMIT NUMBER: 100094 **RENEWAL DATE:** 11/01/2016

REVISION NUMBER: 1.0.0.0 **EXPIRATION DATE:** 10/31/2021

Todd Martin, Non-Title V Permit Supervisor

TABLE OF CONTENTS

SPECIFIC CONDITIONS **1**
1. Prohibition – Disturbed Surfaces: 1

CARBON PROCESSING **1**
2. Plant-Wide Allowable Emissions: 1
3. Production Rate: 1
4. Emission Standards (Not to Exceed Values): 1
5. Opacity: 2
6. Standards: 2
7. Emergency Provisions: 3
8. Recordkeeping: 3

CONTROL DEVICES **3**
9. Emission Controls Required: 3
10. Natural Gas Thermal Oxidizer Standards: 3

RULE 241 - PERMITS FOR NEW SOURCES AND MODIFICATIONS TO EXISTING SOURCES **3**
11. Best Available Control Technology (BACT) Required: 3
12. Reasonably Available Control Technology (RACT) Required: 3
13. Circumvention: 4

BACKUP NAT. GAS GENERATORS (2x) **4**
14. Operational Limitations: 4
15. Fuel Limitations: 4
16. Monitoring: 4
17. NSPS Subpart JJJJ Requirements: 4
18. Recordkeeping: 5

OPERATION AND MAINTENANCE (O&M) PLAN **5**
19. Operations and Maintenance Plans: 5
20. Recordkeeping: 6

PERFORMANCE TESTING **6**
21. Target Pollutants: 6
22. Test Methods for INLET/OUTLET Test: 7
23. Performance Testing General Requirements: 8

REPORTING REQUIREMENTS **9**
24. Semi-Annual Reporting: 9

GENERAL CONDITIONS **10**
25. Posting of Permit: 10
26. Compliance: 10
27. Malfunctions, Emergency Upsets, and Excess Emissions: 10
28. Revision / Reopening / Revocation: 10
29. Records: 10
30. Right to Entry: 11
31. Severability: 11

Any cited regulatory paragraphs or section numbers refer to the version of the rules and regulations that were in effect on the first date of public notice of the applicable Permit Condition unless specified otherwise. However, in the event the rules and regulations are amended during the term of this Permit, the amended rules and regulations shall apply to this Permit. Whenever the term, Control Officer, is used in this Permit it shall be interpreted to mean, Control Officer or designated representative. Where the term "Rule" appears, it shall be construed to mean "Maricopa County Air Pollution Control Regulations" unless otherwise noted.

SPECIFIC CONDITIONS

1. Prohibition – Disturbed Surfaces:

The Permittee may not perform any routine dust-generating operation without first obtaining a revision to this permit. This includes activities such as unpaved parking lots, unpaved haul and access roads, unpaved material or equipment staging areas. A violation of this permit condition will trigger a permanent subjectivity to Rule 310 and the corresponding SIP; the requirement to submit a permit modification to include these Rules in the permit; and the requirement under these Rules to provide a Dust Control Plan to the department.

[SIP Rule 310 §§304, 305]

CARBON PROCESSING

2. Plant-Wide Allowable Emissions:

The Permittee shall not allow emissions into the atmosphere in excess of any of the following:

Pollutant:	12-Month Rolling Emission Limits
Carbon Monoxide (CO)	50.0 tons
Sulfur Dioxide (SO_2)	22.0 tons
Nitrogen Oxides (NOx)	23.0 tons
Volatile Organic Compounds (VOC)	21.0 tons
PM < 10 Microns Diameter (PM_{10})	11.0 tons
PM < 2.5 Microns Diameter ($PM_{2.5}$)	10.0 tons
Hydrochloric Acid (HCl)	5,887 pounds
Total Hazardous Air Pollutants (HAPs)	14,717 pounds

The 12-month rolling total emissions shall be calculated monthly within 30 days following the end of each calendar month by summing the emissions over the most recent 12 calendar months. The Permittee shall keep this emission report on-site for inspection or submittal upon request

[Rule 220 §302.2] [Rule 241 §§304, 305, 308] [Locally Enforceable Only]

3. Production Rate:

The Permittee shall limit dry on-spec activated carbon production to no more than 6,400 lbs per hour.

[Rule 220 §302.2] [Rule 241 §§304, 305, 308]

4. Emission Standards (Not to Exceed Values):

The Permittee shall not exceed the following emission standards at the stack as determined by performance testing requirements contained in this permit:

a. CO: 3.57 lbs/ton of dry on-spec activated carbon produced
b. SO_2: 1.57 lbs/ton of dry on-spec activated carbon produced
c. NOx: 1.64 lbs/ton of dry on-spec activated carbon produced
d. VOC: 1.53 lbs/ton of dry on-spec activated carbon produced
e. PM_{10}: 0.78 lbs/ton of dry on-spec activated carbon produced
f. $PM_{2.5}$: 0.71 lbs/ton of dry on-spec activated carbon produced
g. HCl: 0.21 lbs/ton of dry on-spec activated carbon produced

[Rule 220 §302.2] [Rule 241 §§304, 305, 308]

5. Opacity:

No person shall discharge into the ambient air from any single source of emissions any air contaminant, other than uncombined water, in excess of 20% opacity for a period aggregating more than three minutes in any 60-minute period.

a. If any non-compliant visible emissions (excluding water vapor) are detected or reported, the Permittee shall determine the cause and/or the source of emissions. The Permittee shall then take immediate corrective action(s) and if necessary, shut down the applicable equipment. If visible emissions (excluding water vapor) exceed the above opacity standards subsequent to implementing corrective action(s), the Permittee shall shut down the applicable equipment and institute repairs or changes necessary to ensure compliance prior to resuming operations.

b. Compliance with the opacity requirement shall be determined by observations of visible emissions conducted in accordance with EPA Reference Method 9 as modified by EPA Reference Method 203B.

[Rule 300 §§301, 501]

6. Standards:

a. The Permittee shall not process spent carbon from any application other than drinking water treatment and other potable/food-grade applications.

b. The Permittee shall not process virgin materials for the manufacture of new activated carbon without first submitting an application to modify this permit accordingly.

c. The Permittee may only use natural gas, butane and propane as fuels for kilns and Thermal Oxidizer.

[Rule 220 §302.2] [Rule 241 §§304, 305, 308]

d. Reasonable Stack Height Required: Where a stack, vent or other outlet is at such a level that air contaminants are discharged to adjoining property, the Control Officer may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet to a degree that will adequately dilute, reduce or eliminate the discharge of air contaminants to adjoining property.

[Rule 320 §303] [SIP Rule 32.D]

e. No person shall emit into the ambient air SOx or sulfuric acid in such a manner and amounts as to result in ground level concentrations at any place beyond the premises on which the source is located exceeding those limits shown in the following table:

Concentration of SO_2	Averaging Time
850 µg/m³	1 hour
250 µg/m³	24 hour
120 µg/m³	72 hour

Concentration of H_2SO_4 and SO_3 expressed as Sulfuric Acid	Averaging Time
15 µg/m³	24 hour

[SIP Rule 32.F]

f. Limitation - Hydrogen Sulfide (H_2S): No person shall emit H_2S from any location in such a manner or amount that the concentration of such emissions into the ambient air at any occupied place beyond the premises on which the source is located exceeds 0.03 parts per million by volume (ppmv) for any averaging period of 30 minutes or more.

[Rule 320 §304] [SIP Rule 32.E]

g. No person shall discharge into the atmosphere reduced sulfur, which includes sulfur equivalents from all sulfur emissions including but not limited to SO_2, SO_3, and H_2SO_4 in excess of 10% percent of the sulfur entering the process as feed.

[SIP Rule 32.G]

7. Emergency Provisions:
The Permittee shall comply with all record keeping and reporting requirements of Rule 130 (Emergency Provisions) and Rule 140 (Excess Emissions) with each instance of noncompliance with any of the above.
[Rule 130; Rule 140]

8. Recordkeeping:
The Permittee shall keep daily records of the amount of activated carbon produced on site and available upon request. The records shall be retained for 5 years.
[Rule 220 §302.7]

CONTROL DEVICES

9. Emission Controls Required:

a. The Permittee shall not operate kilns unless they are vented without bypass to the properly functioning thermal oxidizer and dry sorbent injection retention chamber (DSI) / baghouse array at all times.

b. The thermal oxidizer shall provide at least 90% conversion of total organic compounds contained in the process effluent to carbon dioxide and overall VOC control efficiency of at least 85% by weight.

c. Control efficiencies and emissions shall be determined and demonstrated by performance testing as required in Permit Conditions 21-22 for all pollutants listed in Permit Condition 21.a, and their corresponding emission limits contained in Permit Conditions 2 and 4.

d. All emission controls shall be operated and maintained in accordance with an approved O&M Plan and in accordance with Permit Conditions 19-20.
[Rule 330 §304] [Rule 320 §§303, 304] [SIP Rule 32] [Rule 220 §302.2] [Rule 241 §§304, 305, 308]

10. Natural Gas Thermal Oxidizer Standards:
The Permittee shall comply with the following conditions:

a. The Permittee shall maintain the thermal oxidizer temperature at the base of the outlet duct at no less than 1,400 degrees Fahrenheit (1400 °F). This condition may be relaxed provided the Permittee demonstrates compliance with the emission limitations of this Permit with a lesser temperature.

b. The Permittee shall install and maintain a temperature recording device with an accuracy of ±5 degrees Fahrenheit. It shall be installed and maintained to continuously demonstrate compliance with the above condition.
[Rule 330 §304] [Rule 220 §302.2]

RULE 241 - PERMITS FOR NEW SOURCES AND MODIFICATIONS TO EXISTING SOURCES

11. Best Available Control Technology (BACT) Required:
The Permittee shall apply BACT for each pollutant emitted which exceeds any of the threshold limits set forth in any one of the following criteria:

a. Any new stationary source which emits more than 25 tons/yr of volatile organic compounds, nitrogen oxides, sulfur dioxide, or ; more than 15 tons/yr of PM_{10}; more than 100 tons/yr of carbon monoxide; more than 10 tons/yr of $PM_{2.5}$; or more than 0.3 tons/yr of lead.
[Rule 241 §304.1]

b. Any modified stationary source if the modification causes an increase in the source's maximum capacity to emit more than 25 tons/yr of volatile organic compounds, nitrogen oxides, sulfur dioxide ; more than 15 tons/yr of PM_{10}; more than 100 tons/yr of carbon monoxide; more than 10 tons/yr of $PM_{2.5}$; or more than 0.3 tons/yr of lead. BACT is only required for the emission unit or group of emission units being modified.
[Rule 241 §304.2]

12. Reasonably Available Control Technology (RACT) Required:

An applicant for a permit or permit revision for a new or modified stationary source which emits or causes an increase in emissions of up to 25 tons/yr of volatile organic compounds, nitrogen oxides, sulfur dioxide; up to 15 tons/yr of PM_{10}; up to 100 tons/yr of carbon monoxide; up to 10 tons/yr of $PM_{2.5}$; or up to 0.3 tons/yr of lead shall implement RACT for each pollutant emitted from said new or modified stationary source.

[Rule 241 §305]

13. Circumvention:

The submission of applications for permits or permit revisions for new or modified sources in phases so as to circumvent the BACT/RACT requirements is prohibited. The applicant bears the burden to prove that an application for a permit or permit revision is not being submitted as a phase of a larger project. The Permittee shall not build, erect, install, or use any article, machine, equipment, condition, or any contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, conceals or dilutes an emission which would otherwise constitute a violation of this section. The Permittee shall not circumvent this section to dilute air contaminants by using more emission openings than is considered normal practice by the industry or by the activity in question.

[Rule 241 §314]

BACKUP NAT. GAS GENERATORS (2x)

14. Operational Limitations:

a. The Permittee shall limit the operation of each of the emergency engines to no more than 100 hours each per calendar year for the purposes of maintenance checks and readiness testing.

b. The Permittee shall limit the total hours of operation of each of the emergency engines to no more than 500 hours each per any twelve consecutive months including the hours listed in Subpart [a] above.

[SIP Rule 324 §205]

c. The emergency engine(s) shall not be used for peak shaving. The emergency engine(s) shall only be used for the following purposes:

i. For power when normal power service fails from the serving utility or if onsite electrical transmission or onsite power generation equipment fails;

ii. Reliability-related activities such as engine readiness, calibration, or maintenance or to prevent the occurrence of an unsafe condition during electrical system maintenance as long as the total number of hours of the operation does not exceed 100 hours per calendar year per engine as evidenced by an installed non-resettable hour meter.

[SIP Rule 324 §205] [40 CFR 60.4243(d)]

15. Fuel Limitations:

The Permittee shall only operate spark ignition (SI) engines using gasoline, natural gas, or LPG.

a. The Permittee may operate an SI natural gas fired engine using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use.

[Rule 220 §302.2] [40 CFR 60.4243(e)]

b. Engines that burn gasoline must meet gasoline sulfur standards of 30 ppm per gallon as a refinery or importer average and 80 ppm per gallon as a per-gallon cap.

[40 CFR §§ 60.4235, 80.195]

16. Monitoring:

The Permittee shall install a non-resettable hour meter prior to startup of the engine(s). The Permittee shall not operate the engines unless the cumulative run time meter is installed and working properly.

[Rule 220 §302.4] [40 CFR 60.4237]

17. NSPS Subpart JJJJ Requirements:

a. The natural gas emergency engines shall be certified by the manufacturer to meet the specified EPA emission standard and shall comply with all requirements of this Permit Condition:

Maximum Engine Power	Manufacture Date	CO	NOx + HC
25 < HP < 130	1/1/2009 and later	387 g/HP-hr	10 g/HP-hr

b. The Permittee shall operate and maintain the engines according to the manufacturer's emission-related written instructions.

c. The Permittee shall meet the requirements as specified in 40 CFR Part 1068, Subparts A through D, as they apply.

[40 CFR 60.4233(d)] [40 CFR 60.4243]

18. Recordkeeping:

a. The Permittee shall maintain the following records for a period of at least five years from the date of the records and make them available to the Control Officer upon request:

i. An initial one time entry listing the particular engine combustion type (compression or spark-ignition or rich or lean burn); manufacturer; model designation, rated brake horsepower, serial number and where the engine is located on the site.

ii. Monthly rolling twelve month total of hours of operation, including hours of operation for testing, reliability and maintenance.

iii. Fuel type and sulfur content of fuel. The Permittee shall maintain fuel receipts, contract specifications, pipeline meter tickets, Material Safety Data Sheets (MSDS), fuel supplier information or purchase records, if applicable, from the fuel supplier, indicating the sulfur content of the fuel oil. In lieu of these, testing of the fuel oil for sulfur content to meet the applicable sulfur limit shall be permitted as evidence of compliance.

iv. An explanation for the use of the engine if it is used as an emergency engine.

v. Records of the 12-month rolling total emissions, as required by Permit Condition 2.

[SIP Rule 324 §502.1] [Rule 324 §502.4] [40 CFR 60.4245(b)]

b. The Permittee shall maintain a copy of manufacturer data for each engine listed in Permit Condition 17 indicating compliance with the standards in this Permit.

[40 CFR 60.4245(a)(3)]

OPERATION AND MAINTENANCE (O&M) PLAN

19. Operations and Maintenance Plans:

a. The Permittee shall comply with the most recently approved O&M Plan for the following devices. The Permittee shall revise the O&M Plan upon the request of the Department and whenever substantive changes are made to the equipment or plan, in accordance with the Department guidelines:

Thermal Oxidizer
Dry Sorbent Injection Retention Chamber (DSI) / Baghouse
Pressure / Vacuum Blowers
Programmable Logic Controls (PLC)
Dust Collectors (bulk delivery, packaging, sorbent injection, bin vents, waste handling)

b. The Operation and Maintenance (O&M) Plan shall specify key system operating parameters, such as temperatures, pressures and/or flow rates, necessary to determine compliance and describe in detail procedures to maintain the approved emission control system. The Permittee shall monitor, operate and maintain the equipment in accordance with the device's approved O&M Plan.

c. The O&M Plan shall be subject to review and approval by the department.

d. Changes to an existing O&M Plan shall be made by submitting a complete, revised O&M Plan along

with a cover letter identifying all changes and the reason for such changes. The Permittee may implement the changes addressed in the revised O&M plan after it submits the revision to the Department. Unless disapproved in writing by the Department, the Permittee shall continue to operate in accordance with the revised O&M plan.

e. If any control device is found to be operating outside a specified range, the Permittee shall immediately take corrective action to bring the device back into the specified operating range or shut down the device and the associated equipment vented to it.

f. If an excursion of operation outside the specified operating range occurs, the Permittee shall submit for Department approval a Corrective Action Plan (CAP) to bring the devices back into the specified operating range. The CAP shall be submitted in accordance with Permit Condition 24.

[Rule 220 §302.4]

20. Recordkeeping:

The Permittee shall keep the following records on site and available upon request. The records shall be retained for 5 years.

a. Monitoring and maintenance records specified in the O&M Plan:

i. Monitoring Records shall consist of an operations log sheet to be completed for every day the process and/or control device is in operation. Operations log sheets shall, at a minimum, contain the following information: equipment identification; date and time of readings; identification of the individual recording the data; operating parameters to be monitored including units of measure, operating limits (upper and lower limits), and locations for recording measurements; measurement frequency; and if applicable, corrective action taken. An explanation shall be recorded for any periods of operation when the control device was not operating.

ii. Maintenance Records shall, at a minimum, contain the following information: equipment identification; date; identification of the individual performing the maintenance check; procedures to be performed including frequency of occurrence; results of inspection (acceptable, nozzle plugged, belt cracked, etc.); and corrective action taken (none, cleaned nozzle, replaced belt, etc.).

b. Whenever the O&M Plan requires that maintenance be performed, a record shall be made of the maintenance actions taken within 24 hours of maintenance completion.

c. An explanation shall be recorded for any scheduled maintenance that is not performed during the period designated in the O&M Plan.

d. The records required by this permit can be maintained in electronic format. In addition, the Permittee can use existing reports from other systems at the facility as long as these reports contain the data being requested in the records.

[Rule 220 §302.7]

PERFORMANCE TESTING

21. Target Pollutants:

a. Testing performed shall be INLET/OUTLET testing. Testing shall be performed at the stack (OUTLET), and at the inlet of the thermal oxidizer and outlet of one of the kilns (INLET). These results shall be used to demonstrate emissions of these pollutants do not exceed the limits of this permit and used to demonstrate the control efficiencies of the emission control train (thermal oxidizer and DSI/baghouse array). Testing shall be performed to measure emissions of:

i. Carbon Monoxide (CO)

ii. Oxides of Nitrogen (NOx),

iii. Particulate Matter <10 microns diameter (PM_{10}),

iv. Particulate Matter <2.5 microns diameter ($PM_{2.5}$), and

v. Hydrogen Chloride (HCl)

b. The OUTLET results of performance testing shall be converted into emission factors, for each pollutant (pounds of pollutant per ton of dry product produced (lb/ton)) and compared to the Not to Exceed values established in Permit Condition 4.

c. The INLET results of performance testing shall be converted into bypass emission factors to be used to calculate emissions during a bypass event, for each pollutant (pounds of pollutant per ton of dry product produced (lb/ton)) and compared to the Not to Exceed values established in Permit Condition 4 during a bypass event.

d. If performance testing results demonstrate an exceedance of any of the Not to Exceed values established in Permit Condition 4, the Permittee shall submit an application to modify this permit within 30 days of the test results. In addition, the Permittee shall re-calculate emissions using the results of the performance test to determine whether an exceedance of the emission limits of Permit Condition 2 has occurred. Any exceedance shall be reported to the Control Officer in writing at the same time as the permit modification application.

[County Rule 270 §403]

22. Test Methods for INLET/OUTLET Test:

a. The Permittee shall measure the concentrations of CO, NOx, $PM_{10/2.5}$, and HCl in the exhaust stream at the stack (control train outlet) and at the aft of one of the kilns (inlet to thermal oxidizer and control train). Testing shall demonstrate compliance with all applicable CO, NOx, $PM_{10/2.5}$, and HCl concentrations, Not to Exceed values and/or emission limits of Permit Condition 4.

b. Tests shall be conducted dry and results shall be corrected to 3% O_2.

c. The Permittee shall conduct testing at the stack (OUTLET) using the following methods:

i. CO testing shall be conducted in accordance with EPA Test Method 10.

ii. NOx testing shall be conducted in accordance with EPA Test Method 7E.

iii. $PM_{10/2.5}$ testing shall be conducted in accordance with EPA Test Method 5/202.

iv. HCl testing shall be conducted at the stack in accordance with EPA Test Method 26/26A.

v. Volumetric flow rate shall be measured in accordance with EPA Test Method 1/2.

vi. Oxygen and carbon dioxide shall be measured in accordance with EPA Test Method 3A.

vii. Moisture content shall be measured in accordance with EPA Test Method 4

viii. Gas dilution system certification shall be performed in accordance with EPA Test Method 205.

d. The Permittee shall conduct testing of the kiln exhaust (INLET) using the following methods:

i. Same as the above except $PM_{10/2.5}$ testing shall be conducted in accordance with EPA Test Method 17/202.

e. The Permittee shall collect the following testing data at the time of testing:

i. The Permittee shall record the baghouse pressure drop during the performance test.

ii. The Permittee shall record the combustion temperature and combustion set-point temperature of the thermal oxidizer during the performance test.

iii. The Permittee shall measure and record the total volumetric flow rate at the exhaust during the performance test in cubic feet per minute (cfm) (both kilns for OUTLET testing; one kiln for INLET testing).

iv. The Permittee shall measure and record the production rate of total dry on-spec activated carbon during the performance test in (lbs/hour) (both kilns for OUTLET testing; one kiln for INLET testing).

[County Rule 200 §309] [Arizona Testing Manual for Air Pollutant Emissions]

23. Performance Testing General Requirements:

a. Testing Requirements:

i. The Permittee shall perform an INLET/OUTLET test every 5 years (no later than 62 months from the date of the previous test). The testing deadline may be extended by the Control Officer for good cause, but in no case shall the testing deadline, including test report submittal, extend beyond 180 days after the renewal issuance date.

ii. If performance testing indicates a failure to comply with the Not to Exceed values established in Permit Condition 4, then the Permittee shall conduct testing annually within 10 to 14 months of the previous test until the results of at least two consecutive tests comply with the Not to Exceed values established in Permit Condition 4. Subsequent performance tests may then be conducted every 5 years within 60 days after the issuance date of each Renewal.

[County Rule 200 §310.1] [County Rule 270 §401] [SIP Rule 27.A]

b. The Permittee shall record the results of each test in parts per million, volumetric (ppmv) and convert each of those results into an hourly emission rate, and an emission factor for each pollutant being tested for.

[County Rule 200 §310] [Arizona Testing Manual for Air Pollutant Emissions]

c. Testing Criteria:
Performance tests shall be conducted and data reduced in accordance with the test methods and procedures specified in the Test Methods section of this Permit Condition unless otherwise specified by the Control Officer. The Control Officer may specify or approve minor changes in methodology to a reference method, approve the use of an equivalent test method, approve the use of an alternative method that has been determined to be acceptable for demonstrating compliance, or waive the requirement for performance tests because the Permittee has demonstrated by other means that the source is in compliance with the standard.

[County Rule 270 §402]

d. Test Methods:
Sampling sites and velocity traverse points shall be selected in accordance with EPA Test Method 1 or 1A. The gas volumetric flow rate shall be measured in accordance with EPA Test Method 2, 2A, 2C, 2D, 2F, 2G or 19. The dry molecular weight shall be determined in accordance with EPA Test Method 3, 3A or 3B. The stack gas moisture shall be determined in accordance with EPA Test Method 4. These methods must be performed, as applicable, during each test run.

[Rule 270 §301.1] [SIP Rule 27 §B] [SIP Rule 323 §504]

e. Operating Conditions:
Performance tests shall be conducted under representative operating conditions and all equipment shall be operated during testing in accordance with the most recently approved O&M Plan or according to its operations manual if no O&M Plan is required. The Permittee shall make available to the Control Officer any records necessary to determine appropriate conditions for performance tests. Operations during periods of startup, shutdown, and equipment malfunction shall not constitute representative conditions for performance tests unless otherwise specified in the applicable standard or Permit Conditions. Representative operating conditions shall be determined with MCAQD during the stack testing protocol phase.

[County Rule 270 §403]

f. Monitoring Requirements:
The Permittee shall record all process and control equipment information that is necessary to document operating conditions during the test and explain why the conditions represent normal operation. Operational parameters shall be monitored and recorded at least once every 30 minutes during each of the required test runs and documented in the test report. The operational parameters monitored shall be capable of indicating that the equipment is operating within the permitted limits, both during and after the performance tests.

[Rule 270 §301.1] [SIP Rule 27 §B] [SIP Rule 323 §504]

g. Test Protocol Submittal:
The Permittee shall submit a separate test protocol for each performance test to the Department for review and approval at least 30 days prior to each performance test unless otherwise specified in the applicable standard or in this permit. The test protocol shall be prepared in accordance with the most recent version of the Department's "Air Quality Performance Test Guidelines for Compliance Determination in Maricopa County." A completed copy of the Department's "Test Protocol Submittal Form" shall accompany each test protocol.

[County Rule 270 §301.1] [SIP Rule 27.B]

h. Minimum Testing Requirements:
Each performance test shall consist of three separate test runs with each test run being at least one hour in duration unless otherwise specified in the applicable standard or in this permit. The same test methods shall be used simultaneously for both the inlet and outlet measurements, if applicable, or justification for any necessary exceptions shall be provided in the test protocol. Emissions rates, concentrations, grain loadings, and/or efficiencies shall be determined as the arithmetic average of the values determined for each individual test run. Performance tests may only be stopped for good cause, which includes forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the Permittee's control. Termination of a performance test without good cause after the first test run has commenced shall constitute a failure of the performance test.

[Rule 270 §406]

i. Compliance with Emission Limits:
Compliance with allowable emission limits and standards shall be determined by the performance tests specified in this permit. If test results do not demonstrate compliance with the requirements of these permit conditions, the Permittee shall make the necessary repairs and/or adjustments to the equipment and demonstrate compliance through retesting. This will not nullify the fact that test results did not demonstrate compliance with the requirements of the permit conditions or nullify any violations that may result from this noncompliance. In addition to compliance demonstrations, test results shall be used for annual emissions inventory purposes if the Permittee is required to complete an emissions inventory survey.

[County Rule 270 §407]

j. Correspondence:
All test extension requests, test protocols, test date notifications, and test reports required by this permit shall be submitted to the Department and addressed to the attention of the Performance Test Evaluation Supervisor.

[County Rule 270 §301.1] [SIP Rule 27.B]

k. Authority:
The above testing requirements represent the minimum level of testing to monitor for compliance with the emission limits in this permit. Nothing in this section shall prevent the Control Officer from requiring additional performance testing as deemed necessary to ensure permit compliance and protection of the public health and welfare.

[County Rule 200 §309] [County Rule 270 §402.5]

REPORTING REQUIREMENTS

24. Semi-Annual Reporting:
The Permittee shall submit a semiannual report to the Department, Attention: Compliance Manager, within 60 days after the end of each 6-month period (January – June and July – December), stating every occurrence of unintended control device shutdown within the report period. At a minimum, the report shall include the following information.

a. Time and day the shutdown occurred.

b. Explanation of the incident and suspected cause. If the cause is unknown, the report shall indicate that the cause is unknown.

c. Corrective action taken. If no corrective action was taken, the report shall indicate that no corrective action was taken.

d. The Corrective Action Plan (CAP) shall be revised to include new corrective actions and included with each semiannual report.

[County Rule 220 §302.8]

GENERAL CONDITIONS

25. Posting of Permit:

This Permit shall be posted in a clearly visible and accessible location on the site where the equipment is installed.

[Rule 200 §312]

26. Compliance:

a. The issuance of any Permit or Permit revision shall not relieve the Permittee from compliance with any Federal laws, Arizona laws, or the County or SIP Rules, nor does any other law, regulation or permit relieve the Permittee from obtaining a Permit or Permit revision required under the County Rules.

[Rule 200 §§309, 310.3] [Rule 220 §406.3 - Locally Enforceable Only]

b. The Permittee shall comply with all conditions of this Permit including all applicable requirements of Federal laws, Arizona laws, and Maricopa County Air Pollution Control Rules and Regulations now in effect and as amended in the future. Any Permit noncompliance is grounds for enforcement action, Permit termination or revocation, or for denial of a renewal application. In addition, non-compliance with any federally enforceable requirements constitutes a violation of the Clean Air Act.

[Rule 200 §310.4] [Rule 220 §302.24] [A.A.C. R18-2-306.A.8.a] [Locally Enforceable Only]

c. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with these Permit Conditions.

[Rule 220 §302.10] [A.A.C. R18-2-306.A.8.b - Locally Enforceable Only]

d. Rights and Privileges: This Permit does not convey any property rights or exclusive privilege of any sort.

[Rule 220 §302.12] [Locally Enforceable Only]

e. Fees: The Permittee shall pay all fees to the Control Officer in accordance with Rule 280. No permit or permit revision is valid until the applicable permit fee has been received and until the permit is issued by the Control Officer.

[Rule 200 §409] [Rule 280 §302] [A.R.S. 49-480(D)] [SIP Rule 28]

27. Malfunctions, Emergency Upsets, and Excess Emissions:

An affirmative defense of an emergency, excess emission, and/or during startup and shutdown shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence as outlined in Rule 130 for emergencies and Rule 140 for excess emissions.

[Rule 130 §§201, 400] [Rule 140 §§400, 500] [SIP Rule 140]

28. Revision / Reopening / Revocation:

The Permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any Permit Condition.

[Rule 220 §302.11] [Locally Enforceable Only]

29. Records:

a. The Permittee shall furnish information that the Control Officer may request in writing to determine whether cause exists for revising, revoking and reissuing this permit, or terminating this permit, or to determine compliance with this permit. The information shall be provided in a timeframe specified by

the Control Officer. Upon request, the Permittee shall also furnish to the Control Officer copies of records required to be kept by this Permit. For information claimed to be confidential, the Permittee shall furnish a copy of such records directly to the Administrator along with a claim of confidentiality.

[Rule 220 §302.13] [SIP Rule 40]

b. If the Permittee fails to submit any relevant facts or has submitted incorrect information in a permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, the Permittee shall provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application is filed but prior to release of a proposed permit. Willful misrepresentation of facts in a permit application is cause for revocation or denial of a permit.

[Rule 220 §§301.5, 301.6] [Locally Enforceable Only]

30. Right to Entry:

a. The Control Officer during reasonable hours, for the purpose of enforcing and administering County or SIP Rules or the Clean Air Act, or any provision of the Arizona Revised Statutes relating to the emission or control prescribed pursuant thereto, may enter every building, premises, or other place, except the interior of structures used as private residences. Every person is guilty of a petty offense under A.R.S. 49-488 who in any way denies, obstructs or hampers such entrance or inspection that is lawfully authorized by warrant.

b. The Permittee shall allow the Control Officer or his designated representatives, upon presentation of proper credentials (e.g., Maricopa County Air Quality Department identification) and other documents as may be required by law, to:

i. Enter upon the Permittee's premises where a source is located or emissions-related activity is conducted, or where records are required to be kept pursuant to the conditions of the permit;

ii. Have access to and copy, at reasonable times, any records that are required to be kept pursuant to the conditions of the permit;

iii. Inspect, at reasonable times, any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required pursuant to this permit;

iv. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the Permit or other applicable requirements; and

v. Record any inspection by use of written, electronic, magnetic, and photographic media.

[Rule 100 §105] [Rule 220 §302.17-21] [SIP Rule 43]

31. Severability:

The rules, paragraphs, clauses, provisions, and/or sections of this Permit are severable, and, if any rule, paragraph, clause, provision, and/or section of this Permit is held invalid, the remainder of this Permit shall not be affected thereby.

[Rule 220 §302.9] [SIP Rule 80]

Equipment List

CALGON CARBON CORPORATION
Permit Number 100094

Date Issued: 10/14/11
Revision: 1.0.0.0

	Equipment Description	Rated Capacity	Quantity Exist/Future
>> PROCESS EQUIPMENT:			
1.	KILN - NAT. GAS CARBON PROCESSING KILNS\	11.00 MM BTU/HR	2 /
2.	SCREEN - PRODUCT SCREENER	1.50 TON(S)/HR	2 /
>> EMISSION CONTROL EQUIPMENT:			
1.	THERMAL OXIDIZER	6,000,000.00 BTU/HR	1 /
2.	SCRUBBER - DRY SORBENT INJECTION (DSI) RETENTION CHAMBER	13,000.00 CFM	1 /
3.	BAGHOUSE	13,000.00 CFM	1 /
4.	DUST COLLECTOR - KILN BIN DUST COLLECTOR	1,512.00 CFM	2 /
5.	DUST COLLECTOR - PACKAGING DUST COLLECTOR	7,000.00 CFM	1 /
6.	DUST COLLECTOR - WASTE HANDLING DUST COLLECTOR	300.00 CFM	1 /
7.	DUST COLLECTOR - SORBENT BIN DUST COLLECTOR	150.00 CFM	1 /
8.	DUST COLLECTOR - TRUCK FILLING DUST COLLECTOR	1,680.00 CFM	1 /
9.	DUST COLLECTOR - HURRICANE INDUSTRIAL VACUUM DUST COLLECTOR	2,350.00 CFM	1 /
>> CONVEYORS, ELEVATORS, BINS AND LOADERS:			
1.	CONVEYOR - KILN SCREW WEIGH CONVEYOR	1.60 TON(S)/HR	2 /
2.	CONVEYOR - SPENT CARBON TRANSFER CONVEYOR	26.20 TON(S)/HR	1 /
3.	CONVEYOR - KILN FEED SCREW	1.60 TON(S)/HR	2 /
4.	ELEVATOR - PRODUCT ELEVATOR	1.50 TON(S)/HR	2 /
5.	BIN - KILN FEED BIN	26.20 TON(S)/HR	2 /
6.	BIN - TRUCK LOADING BIN (SINGLE HOPPER LOADING INTO CAMBELT)	20.00 TON(S)/HR	1 /
7.	BIN - SCREENER BYPASS BINS	.50 TON(S)/HR	2 /
8.	BIN - PRODUCT BINS	1.50 TON(S)/HR	2 /
9.	LOADER - PRODUCT SUPERSACK LOADING STATION	13.10 TON(S)/HR	2 /
10.	CONVEYOR - ENCLOSED CONVEYOR WITH NOZZLE DISCHARGE	20.00 TON(S)/HR	1 /
11.	BIN - 2 SACK RACK LOADING HOPPER (FROM INDUSTRIAL VACCUM TO SUPER SACK)	18.00 TON(S)/HR	1 /
12.	BIN - 3 SACK RACK LOADING HOPPER FROM BUNKER TO BOBCAT TO SACK	18.00 TON(S)/HR	1 /
13.	BIN - CONCRETE BUNKERS FOR BULK STORAGE	250.00 TON(S)	2 /
14.	EQUIPMENT - SKID STEER	26.20 TON(S)/HR	1 /
15.	VACUUM - "HURRICANE" INDUSTRIAL VACUUM (ELECTROC MOTOR)	18.00 TON(S)/HR	1 /
De Minimis Equipment:			
1.	EMERGENCY GENERATOR - NATRUAL GAS	35.00 KW	2 /

Equipment List

CALGON CARBON CORPORATION
Permit Number 100094

Equipment Description	Rated Capacity	Quantity Exist/Future
De Minimis Equipment:		
2. VACUUM - JOHN DEERE TURBO CHARGED CI, 6 CYL, TRAILER MOUNTED, 2350 CFM (NON-ROAD CERTIFIED)	170.00 HP	1 /