

KING CITY, CA 939 831.385.4090 831.385.6683 (FAX)



September, 20 2012

Ms. Christine Stora Compliance Project Manager Calpine King City Cogen, LLC California Energy Commission 1516 Ninth Street, MS-15 Sacramento, CA 95814

PETITION TO AMEND COMMISSION DECISION

CONDITIONS OF CERTIFICATION

**DOCKET NO. 85-AFC-5** 

Dear Ms. Stora:

RE:

Pursuant to Section 1769 of the California Energy Commission (CEC) Siting Regulations, Calpine King City Cogen, LLC (KCC) hereby submits the attached Petition to amend Docket No. 85-AFC-5 Conditions of Certification to include minor permit amendments that have been requested of the Monterey Bay Unified Air Pollution Control District (MBUAPCD).

Calpine has submitted an application to MBUAPCD requesting minor amendments to Title V Permit TV38-01B and Permits to Operate. The permit amendments will alleviate the need to request variance relief from existing permit conditions during federal or state mandated performance testing and periodic turbine and boiler tuning activities. Tuning is necessary to maintain the combustion turbines, steam turbine, auxiliary boilers, and pollution control systems in compliance, either seasonally or after major maintenance activities, such as balancing and alignment. Effective tuning can require multiple startups, shutdowns, and operation at low loads during which emissions compliance cannot be maintained.

This application is also being submitted to allow for performance testing on the turbine required by the Western Electricity Coordinating Council (WECC). These activities may require the turbine to shutdown more than once per day and operate at low loads at which compliance with existing hourly concentration and mass emissions permit limits cannot be achieved; however, compliance with daily, quarterly, and annual emission limits will be maintained.

Additionally, the application requests an extension of the due date for report submittals and clarifies that the cogeneration shutdown limit of one shutdown per day should only apply to planned shutdowns during normal operating periods, i.e., should the cogeneration unit experience an unanticipated shutdown event on any given day, it would not be precluded from coming back on-line and then subsequently shutting down again on that same day.

Finally, this amendment request also includes various conforming permit condition amendments to ensure that the CEC Conditions and the MBUAPCD Permits are consistent. To that end, CEC Staff previously requested various data associated with the MBUAPCD Permit conditions, responses to which are included in this package.

Please contact me at (408) 337-3429 if you have any questions regarding this submittal.

Sincerely,

Fernando Parra

Authorized Signatory and General Manager

**California Energy Commission** 

DOCKETED 85-AFC-5C

TN # 67521

OCT 04 2012

## PETITION FOR INSIGNIFICANT AMENDMENTS TO OPERATIONS CONDITIONS OF CERTIFICATION

As required by Section 1769 of the CEC Siting Regulations, KCC hereby submits the following discussion to amend DOC Condition 20 of KCC's Application for Certification 85-AFC-5.

Pursuant to Section 1769 (a)(1)(A) and (B), a description of the proposed modifications, including new language for affected conditions and the necessity for the modifications is required.

The modifications proposed to the conditions of certification are as follows:

Add a new condition for the gas turbine and auxiliary boilers exempting them from the hourly emissions limits during combustion tuning, balancing and testing periods or regulatory mandated performance testing periods.

Add a new condition of certification 52: The gas turbine emission limits contained in Conditions 6, 10, 11, 12 shall not apply during periods of combustion tuning, or non-Air District regulatory mandated performance testing. These periods shall not exceed 100 hours per year per turbine.

Calpine King City Cogen shall notify the District prior to initiating any of these activities, and shall monitor and record all periods of these activities in a log maintained on-site and shall submit a summary of this data to the District on an annual basis.

Add a new condition of certification 53: The auxiliary boiler emission limits contained in Conditions 18, 19 shall not apply during periods of boiler tuning. Auxiliary boiler tuning shall not exceed 50 hours per year per boiler.

Delete condition 31 limiting the facility to one cold startup and one shutdown per day. This condition prevents the plant from starting up following a shutdown. The removal of this condition will have on impact on actual emissions from the facility.

<u>Delete Conditions of Certification 40</u>: The turbine shall undergo no more than one startuup and one shut down per day.

Additional modifications to the Conditions of Certification have been identified in order to conform the CEC decision to the Air Quality Permits. The changes are listed in the attached table.

Pursuant to Section 1769 (C), a discussion is required on if the modification is based on information that was known by the petitioner during the certification proceeding, and an explanation of why the issue was not raised at that time.

Adding conditions of certification 52 and 53 would eliminate the need to request variance relief from existing permit conditions during federal or state mandated performance testing and periodic turbine and boiler tuning activities. Tuning is necessary to maintain the combustion turbines, steam turbine, auxiliary boilers, and pollution control systems in compliance either seasonally or after major maintenance activities such as balancing and alignment. Effective tuning can require multiple startups, shutdowns, and operation at low loads during which emissions compliance cannot be maintained. The daily mass emissions limits will not be exceeded.

The new Condition 52 and 53 is being requested is based on new information that was learned as a result of operating experience gained at the facility and was not known at the time of certification.

The proposed change to Condition 31 is based on information learned after the completion of the certification process during the commissioning and operation phase of the project.

The conforming amendments were not known about during the certification process.

Pursuant to Section 1769 (D), a discussion is required on whether the modification is based on new information that changes or undermines the assumptions, rationale, findings, or other bases of the final decision, and explanation of why the change should be permitted.

The new Conditions 52 and 53 are being requested based on new information that was learned as a result of operating experience gained at the facility and was not known at the time of certification. This amendment was triggered by performance testing on the turbine required by the Western Electricity Coordinating Council (WECC). These activities may require the turbine to shutdown more than once per day and operate at low loads at which compliance with existing hourly concentration and mass emissions permit limits cannot be achieved; however, compliance with daily, quarterly, and annual emission limits will be maintained.

The changes to 31 are administrative in nature, and have no impact on original assumptions or other bases of the final decision.

The conforming amendments in the attached Table have no impact on the assumptions, rationale, findings or other bases for the final decision.

Pursuant to Section 1769 (E), an analysis of the impacts the modifications may have on the environment and proposed measures to mitigate any significant adverse impacts is required.

The proposed changes to the conditions of certification will not result in any significant adverse environmental impact.

Pursuant to Section 1769 (F), a discussion of the impact of the modification on the facility's ability to comply with applicable laws, ordinances, regulations, and standards is required.

The proposed amendments will have a positive impact on the facility's ability to comply with applicable laws, ordinances, regulations, and standards. The proposed change in the calculation method for ammonia slip is more accurate than previous methods used.

Pursuant to Section 1769 (G), a discussion of how the modifications affect the public is required.

Calpine asserts that the proposed modifications to the conditions of certification will not adversely affect the public.

Pursuant to Section 1769 (H), a list of property owners potentially affected by the modification is required.

The proposed amendments are minor and administrative in nature, therefore no property owners will be affected by the modifications.

Pursuant to Section 1769 (I), a discussion of the potential effect on nearby property owners, the public and the parties in the application proceedings is required.

The proposed amendments will have no impact on property owners, the public, or any other parties.

#### ANSWERS TO CEC DATA REQUEST

1) The amendment submitted requested an extension of the due date for report submittals. Please verify the extension request was for California Energy Commission conditions AQ-55 (previously AQ-53) and AQ-44 (DOC 35), and the request is from 30 to 45 days which would be consistent with Monterey Bay Unified Air Pollution Control District (MBUAPCD) requirements.

Response: The CEC permit ends with AQ-51. We don't know of condition 53. AQ-44 is not applicable because the amendment was not for extending the Air monitoring station report due date. The MBUAPCD now owns and operates the ambient air monitoring station. Copies of the air station reports are provided to Calpine by MBUAPCD.

2) According to our records, for ambient monitoring with respect to AQ-44 (DOC 35), there is a discrepancy between the Energy Commission's and MBUAPCD's monitoring and reporting requirements with regard to NO2. Per email correspondence dated 5/8/2012, there is an agreement with MBUAPCD to monitor only ozone and PM10. Please provide a copy of the agreement or a statement from MBUAPCD regarding good cause to discontinue monitoring NO2.

Response: A copy of the Air Monitoring Station Agreement is attached.

- 3) There is a discrepancy with respect to the exemption for start up and shutdown emissions for the boilers MBUAPCD permits exempt the boilers from the mass emission rates for all pollutants (lbs/hr) (Ref 14744/14743 #18), whereas the Commission Condition exempts the boilers from only the NOx concentration limit (ppmvd). If this needs to be rectified, please submit a request to amend. Response: AQ-18 is the mass emission rates for the boilers and it does not include exemption during startup and shutdown. An amendment is needed.
- 4) There are discrepancies with the monitoring and testing requirements for the turbine and boilers.
  - a. The Energy Commission (condition AQ-34 –DOC 24) requires testing for NOX, CO, VOC, ammonia as well as SOx and particulates. Email correspondence dated 5/8/2012, indicates the facility conducts annual testing of NOx, CO, VOC and ammonia. Please provide additional information regarding the SOx and particulate testing requirements. Reply: Condition AQ-34 applied during initial startup activities for the plant. No annual performance requirement to conduct SOx and PM testing is required in condition AQ-34.

b. The Energy Commission (condition AQ-35-DOC 25) does not clearly indicate ongoing testing requirements as outlined in MBUAPCD permits. Response: Same as 4a above. The MBUAPCD annual performance testing does not include SOx and PM10.

For both 4a and 4b: please submit any additional information regarding these differences and if necessary a request for an amendment.

Response: Submit amendment to include ongoing annual performance testing per MBUAPCD.

- 5) There are some inconsistencies with limits associated with firing on No. 2. Fuel oil.
  - a. The turbine SOx limits in Condition AQ-14 (DOC 5) are listed as 48.38 lbs/hr and 1161 lb/day. Records indicate MBUAPCD's limits are 116.1 lbs/hr and 2,786 lbs/day. Please confirm MBUAPCD's SOx limit for fuel oil firing in the turbine.
  - b.
  - c. The boiler SOx limit in Condition AQ-12 (DOC 12) is 7.54 lb.hr. Records indicate MBUAPCD's limit is 7.55 lb/hour. Please confirm MBUAPCD's SOx limit for fuel firing in the boilers.

These numbers have been verified.

6) In addition to the items discussed above, it was noticed the addition of the averaging provisions requested in 2004 for condition #19 was not included in the Commission's Decision. If this averaging provision is to be included, please rerequest the addition of the averaging provision for consistency with MBUAPCD permits 14744 and 14743 condition #5.

Response: These were previously approved by the commission.

7) Pursuant to the California Code of Regulations, Title 20, Section 1770, the Energy Commission shall provide adequate monitoring of all conditions and measures set forth in the final decision required to mitigate potential impacts and to assure that the facility is constructed and operated in compliance with all applicable laws. In accordance with this requirement, I am requesting that you provide information on any changes that have taken place to conditions and measures regulating the King City Co-Gen facility, going back to 2000.

All the CEC conditions were verified in the attached Table and any discrepancies were adjusted in the attached Conditions of Certification.

King City Cogen Condition of Certification and Title V Comparison

		300 cast cast	Dictionanciae	Recommendation
Title V Condition	CEC Condition Of Certification	Animidaly		
	COC#1	Submit major changes to CEC 120 days prior to implementation		
	COC #2	Submit Minor changes to CEC within 48 hours prior or 7 days after change.		
	6#200	Get Permit Exemption for PSD from MBUAPCD or get PSD permit		Delete Condition.
	COC #4	Make site available for inspection		
	S# 202	MBUAPCD shall monitor operations of the facility		
Condition #6	9# 202	CO limit of 10 ppm @15% O2	NO exemption for Startup or shutdown in CEC decision.	Exemption language needs to be added.
	2#200	Annual CO <130 tons/year		
	8#202	Aux boilers operational hour limits		
	6#202	Initial Aux Boiler Source testing		Delete Condition.
Condition #19		Boiler Tuning	New Condition	
Condition #1	COC #10	Gas Turbine hourly and daily emission rates	CEC states SO2 limit of 0.49lb/hr; Title V states SO2 Limit as 0.5 lb/hr	Make limits consistent
Condition #3	COC #11	Gas turbine Nox Limit of 9 ppm @15% O2		
Condition #5	COC #12	Ammonia Emissions limited to 10 ppm, 3 hour average.		
Condition #12	COC #13 and COC #20	Oil firing only in the event of NG curtailment		
Condition #13	COC #14	Gas Turbine oil firing hourly and daily limits		-
Condition #15	COC #15	Gas Turbine Nox emissions for oil firing at 15 ppm @ 15% O2		
Condition #20	COC #16	Cold Start up Protocol		

King City Cogen Condition of Certification and Title V Comparison

	COC #17	SCR system design		Delete Condition.
Condition #2	COC #18	Aux Boiler lb/hr limits	CEC states TSP limit of 0.63 lb/hr; Title V states 0.60 lb/hr	Make limits consistent
Condition #4	COC #19	3% 02 a 3% 02 a 3% 02 a 40 b b b b b b b b b b b b b b b b b b	Title V states Clock Hour and has additional language that at less than 40% load the NO2 limit is 100 ppm @ 3% O2. In addition, title V has exemption for shutdown of 30 minutes and cold start up for 3 hours or hot start up of 30 minutes.	Make limits consistent
	COC#20	Aux Boiler only use NG unless curtailed		
Condition #14	COC#21	Aux Boiler Oil firing lb/hr limits	COC has SO2 emissions at 18.1 lb/hr; the Title V has SO2 emissions at 7.55. The exemption for Start up and shutdown is missing in the COCs.	Make limits consistent
Condition #16	COC #22	Aux Boiler while oil fired Nox limit to 69 ppm 3% O2	COC does not included Clock hour average; COC does not include exemption for startup and shutdown. Also the COC does not specifically restrict condition to greater than 40% load.	Make limits consistent
Condition #17	COC #23	Oil Sulfur content	The Title V states that fuel oil sulfur limit is 0.05% by weight. The COC states the requirement is 0.12%.	Make limits consistent
	COC # 24	Aux Boiler CO catalyst details		Delete Condition.
	COC#25	Aux Boiler Low Nox Burner Details		Delete Condition.
	COC #26			
	COC #27	Install CEMS for Nox, CO, and O2		

King City Cogen Condition of Certification and Title V Comparison

		Monitor Fuel Consumption and	
	COC #28	meet 5% accuracy	
Condition #47	62#30	Monitor Mole Ratio of Ammonia	
	000 #30	Monitor SCR temp and pressure drop	
	Coc#31	Monitor Aux boiler CO catalyst pressure drop and temp	
	COC #32		on
	COC #33	Aux boiler sampling ports Delete Condition	no
	COC #34	Gas Turbine initial source test	lon
	COC #35	Aux boiler initial source testing	ion
	9£#202	Ammonia Source testing quarterly to semi-annual	
	COC #37	Provide Emissions offsets Delete Condition	ion
	COC #38	Record all oil firing	
	62#30	Record all SU and SD	
	COC #40	No more than one start and one stop per day	
Condition #24	COC #41	Operation consistent with all data in application.	:
Condition #25	COC #42	Maintain equipment in good operating condition	
Condition #26	COC #43	Must vent equipment to air pollution control device	
Condition #31	COC #44	Ambient monitoring station for NO2 PM10 and ozone	
	COC #45	Entry of air district personnel	

King City Cogen Condition of Certification and Title V Comparison

		Vegetable dryers and humidifiers		
		cannot be operated while aux		
		boiler or gas turbine are		
	COC #46	operated.		
		Gas Turbine and aux boiler can		
		only have 6 hours of		
		simultaneous operation in a day		
	COC #47			
		Cooling tower drift rate limited		
	COC #48	to 0.002%		
		Flow meter to monitor circ rate		
	COC #49	in cooling tower		
	05# 202	Monthly TDS in cooling tower		
		COC states the calculation		
		methodology for the PM10		
Condition #27		method from the cooling tower.		
	COC #51a			
Condition #18		GT Tuning	New Condition	
		Daily Nox not to exceed 1070		
Condition #21		lb/day.		
Condition #22		Quarterly and annual lb limits		
Condition #23		Training/testing of aux boiler		
		PM 10 limit in cooling tower to		
	700 413	be adjusted after first year of		
	2TC#107			

## AIR MONITORING STATION COOPERATION AGREEMENT

This Air Monitoring Station Cooperation Agreement ("Agreement") is effective as of July 1, 2010 ("Effective Date"), by and between Calpine King City Cogen, LLC ("CKCC"), Aera Energy, LLC ("AERA"), Chevron U.S.A., Inc. ("CVX"), Salinas River Cogeneration Company and Sargent Canyon Cogeneration Company ("Salinas/Sargent"), and the Monterey Bay Unified Air Pollution Control District ("MBUAPCD") Each a "Party," and combined, the "Parties").

#### RECITALS

WHEREAS, due to the limited number of air monitoring stations in the region, the Parties desire to participate in the usage of an air monitoring station ("Station"), and share the costs associated with MBUAPCD's operation and maintenance thereof as further described herein; and

WHEREAS, a Station is currently located at the San Lorenzo Middle School, 415 Pearl Street, King City, CA 93930

WHEREAS, from time to time MBUAPCD will agree to (i) operate and maintain the Station, (ii) provide separate data reports for each of the Parties, and (iii) submit such data reports to the appropriate governmental agencies on behalf of each of the respective Parties (except for MBUAPCD); and

WHEREAS, MBUAPCD wishes to maintain the Station at its current location at, to meet the Parties monitoring requirements and the Parties have agreed to share the cost thereof.

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which the Parties acknowledge, the parties intending to be legally bound agree as follows:

- 1) Replacement of Outdated Equipment. MBUAPCD will replace any outdated equipment, as described on Exhibit B, on the Station. The Parties named above shall reimburse MBUAPCD as defined in Cost Sharing Section 3 below for the invoiced replacement of outdated equipment costs incurred by MBUAPCD including, but not limited to invoiced labor and administrative costs incurred by MBUAPCD.
- 2) Shared Services. MBUAPCD will perform the services set forth in Exhibit C, attached hereto and made a part hereof (the "Services"), on behalf of all the Parties. Exhibit C may be modified from time to time in writing by the Parties.
- 3) <u>Cost Sharing.</u> The costs and expenses for replacement of outdated equipment and invoiced Services shall be shared among the Parties as follows:
  - i) CKCC shall pay sixteen and three-quarters percent (16.75%);
  - ii) AERA shall pay sixteen and three-quarters percent (16.75%);

- iii) CVX shall pay sixteen and three-quarters percent (16.75%);
- iv) Salinas/Sargent shall pay sixteen and three-quarters percent (16.75%); and
- v) MBUAPCD shall pay thirty-three percent (33.00%)
- 4) Additional Costs. AERA, CVX, Salinas/Sargent and CKCC shall each pay to MBUAPCD one fifth (1/5<sup>th</sup>) the cost of monthly invoiced lease and utility charges for the Station (collectively, the "Monthly Reimbursement Amount"). For convenience, MBUAPCD will invoice each of AERA, CVX, Salinas/Sargent and CKCC for such Party's share of the Monthly Reimbursement Amount. All invoices shall be supported with copies of lease and utility receipts and sent to the addresses set forth in Section 6 below.
- 5) <u>Billing.</u> MBUAPCD will separately invoice CKCC, AERA, CVX, and Salinas/Sargent quarterly, on a net thirty (30) day basis for their respective share of the costs, as set forth in Section 3 above, for the invoiced Services performed by MBUAPCD. All invoices shall be supported with receipts and a description of the work performed and sent to the following:
  - a) Calpine King City Cogen, LLC
     750 Metz Road
     King city, CA 93930
     Attn: Accounts Payable
  - b) Aera Energy, LLC Star Route Box 50 66893 Sargent Canyon Road San Ardo, CA 93450 Attn: Environmental Advisor
  - c) Chevron U.S.A., Inc. P. O. Box 1392 Bakersfield, CA 93302 Attn: San Ardo Air Specialist
  - d) Salinas River Cogeneration Company
     P. O. Box 80778
     Bakersfield, CA 93380
     Attn: Accounts Payable
  - e) Sargent Canyon Cogeneration Company PO Box 81018 Bakersfield, CA 93380 Attn: Accounts Payable

They may also be sent to such other address as any Party may designate by notice complying with the terms of this Section 8. Each such notice shall be deemed delivered (i) on the date actually delivered if by messenger or courier service; (ii) on the date of confirmed receipt of

by facsimile; and (iii) on the date upon which the return receipt is signed or delivery is refused or the notice is designated by the postal authorities as not deliverable, as the case may be, if mailed.

- 6) Choice of Law. This Agreement shall be governed by the laws of the State of California.
- 7) <u>Termination</u>. This Agreement may be terminated by any of the Parties hereto upon sixty (60) days prior written notice to each of the other Parties.
- 8) Counterparts. This Agreement may be executed in counterparts. Each signed counterpart shall be deemed original and all signed counterparts taken together shall constitute one and the same Agreement, which shall be binding and effective as to all the Parties.

\* \* \*

# THIS PAGE INTENTIONALLY LEFT BLANK

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the dates written below.

CALPINE KING CITY COGEN, LLC	10 JUN 21 P2:58  MONTEREY BAY UNIFIED AIR  POLLUTION CONTROL DISTRICT
By: William Fragger WM Title: VICO MASIGORE	
Title: VICO PRASISONE	By:
Date: 4/17/10	Title:
, 1	Date:
AERA ENGERGY, LLC	
By:	
Title:	
Date:	
CHEVRON U.S.A.	
By:	·
Title:	
Date:	
SALINAS RIVER COGENERATION COMPANY	
By:	
Title:	
Date:	
SARGENT CANYON COGENERATION COMPANY	
Ву:	
Title:	·,

Date:

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the dates written below.

CALPINE KING CITY COGEN, LLC	MONTEREY BAY UNIFIED POLLUTION CONTROL DIS	AIR STRICT
By:		
Title:	Ву:	
Date:	Title:	
	Date:	
AERA ENGERGY, LLC		
By: 1 Jeff Watson		
Title: Sr. Buyes		
Date: 4-15-2010		
CHEVRON U.S.A.  By:  Title:  Date:  SALINAS RIVER COGENERATION		10 PR 22 A9:37
By:		
Title:		
Date:		
SARGENT CANYON COGENERATION COMPANY	•	
By:		

Date:

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the dates written below. MONTEREY BAY UNIFIED AIR CALPINE KING CITY COGEN, LLC POLLUTION CONTROL DISTRICT By:\_\_\_\_\_ Title: \_\_\_\_\_ By:\_\_\_\_\_ Date: Title: Date: \_\_\_\_\_ **AERA ENGERGY, LLC** By: \_\_\_\_\_ Title: Date: CHEVRON U.S.A. VAN BRATCHER By: Van Bratcher Title: AGSISTANT SECRETARY Date: 5/18/2010 SALINAS RIVER COGENERATION **COMPANY** By: \_\_\_\_\_ Title: Date: SARGENT CANYON COGENERATION **COMPANY** 

 IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the dates written below.

CALPINE KING CITY COGEN, LLC	MONTEREY BAY UNIFIED AIR POLLUTION CONTROL DISTRICT
By:	
Title:	Ву:
Date:	Title:
AERA ENGERGY, LLC	Date:
By:	
Title:	
Date:	
CHEVRON U.S.A.	·
By:	
Title:	
Date:	
SALINAS RIVER COGENERATION COMPANY  Lilly fucus  By: Kerry Lucas  Title: Execurive Director  Date: April 20, 2010	
SARGENT CANYON COGENERATION COMPANY Lelly facas	

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the dates written below.

CALPINE KING CITY COGEN, LLC	MONTEREY BAY UNIFIED AIR POLLUTION CONTROL DISTRICT
By:	
Title:	By: Man
Date:	Title: APCO
AERA ENGERGY, LLC	Date: 4/6/10
By:	
Title:	
Date:	
CHEVRON U.S.A.	
By:	
Title:	
Date:	
SALINAS RIVER COGENERATION COMPANY	
By:	
Title:	
Date:	
SARGENT CANYON COGENERATION COMPANY	
By:	

Title: \_\_\_\_\_\_
Date: \_\_\_\_\_

# THIS PAGE INTENTIONALLY LEFT BLANK

## EXHIBIT A

## AIR MONITORING STATION EQUIPMENT

a)	TECO 49C Ozone Analyzer
b)	Station temperature monitor XTI LM35
c)	Met System; RM Young or Met One
d)	PM10 Tisch instrument - new purchase reconditioned monitor
e)	Dell Optiplex 320 Data logger
f)	Building 8 by 10 foot with decking on roof
g)	Met tower
h)	2-instrument racks

## EXHIBIT B

## **OUTDATED EQUIPMENT**

a)	Ozone analyzer
b)	Ozone calibrator for station auto calibrations
c)	Ozone transfer standard calibrator
d)	Data logger system with strip chart printing

### **EXHIBIT C**

#### MBUAPCD'S SCOPE OF SERVICES

MBUAPCD shall operate and maintain the Station and produce data reports for each of the Parties in accordance with the provisions of this Agreement and the scope of services outlined below. Services to be performed shall include, but not be limited to, the following:

### 1. Air Monitoring Parameters

MBUAPCD shall measure and record the air monitoring parameters as follows:

- (a) Ozone (O3)
- (b) Inhalable Particulates (PM10)
- (c) Wind Speed (WSA)
- (d) Wind Direction (WDA)
- (e) Station Temperature (STM)
- (f) Ambient Temperature (ATM)

#### 2. Data processing

MBUAPCD shall perform all data processing activities and complete automated operation of the calibration systems procedures at the Station.

## 3. Operation and Maintenance

MBUAPCD shall perform all the required operation and maintenance work as follows:

- (a) Total responsibility for all monitoring;
- (b) All routine maintenance;
- (c) All routine quality assurance activities;
- (d) All emergency maintenance and field repairs;
- (e) All site visits and site checks;
- (f) Preventative maintenance;
- (g) All calibration activities;
- (h) Traceability to NIST standards;
- (i) Weekly precision checks minimum;
- (j) Week Level 1 calibrations;
- (k) Performance audits (completed by CARB);
- (l) Data processing and quality assurance reviews of data;
- (m) Daily remote telemetry access to data;
- (n) Daily quality assurance review of data;
- (o) Semi-annual multipoint calibrations on all gaseous analyzers;
- (p) Semi-annual calibration on PM10 sampler;
- (q) Semi-annual meteorological sensor calibration; and
- (r) Building structure service and safety updates.

#### 4. Equipment Malfunction

If an event occurs which causes the station to become non-operational, the Parties shall be notified as soon as possible to follow their respective permit conditions and internal reporting procedures.

#### 5. Report and Data Outputs

MBUAPCD shall perform all the required report and data output work as follows:

- (a) Submit a detailed monthly report summarizing the entire operation of the Station;
- (b) Submit monthly data summaries and reports to the Parties in hard copy and electronic forms within thirty (30) days after the end of each month of monitoring;
- (c) Submit an annual data summary report to the Parties in hard copy and electronic forms within thirty (30) days after the end of the calendar year; and
- (d) Modify these procedures, as requested by the Parties in writing.