

South Coast Air Quality Management District

CHECKLIST & CERTIFICATION FOR NOx / SOx RECLAIM CEMS RATA REPORT

(To be completed by authorized source testing firm representative and included in source test report)

Facility ID: _____ Date(s) Tested: _____
Facility Name: _____
Equipment Address: _____
Equipment Tested: _____
Device ID, A/N, P/N: _____
Report ID or Job No: _____

LEGEND

YES N/A*
[X] [] Indicates that item has been included or discussed in report.
[] [X] Indicates that item was not required ("not applicable") for this particular test or CEMS.

* Each checkbox item must be checked. The "NA" check box is only provided as an alternative choice in instances where the required information or testing is not necessary due to the process monitored by that particular CEMS, or the CEMS itself.

GENERAL GUIDELINES

- a. [] [] All items in report arranged according to Standard Format
c. [] [] All pages have headers that are properly annotated & unique to this report
e. [] [] Raw field data form entries are in indelible ink (corrections are single-line strike through)
b. [] [] All pages in report consecutively numbered
d. [] [] All supporting documentation is consistent with reported results (Run Nos., dates, times, data)

INTRODUCTION

- a. [] [] Modifications to CEMS and/or facility since last test**
c. [] [] Purpose of test & test dates (including last test date)
b. [] [] List personnel involved in test & present at test (AQMD, test firm, facility representatives)

SUMMARY OF RESULTS

- a. [] [] Overall summary of RATA results (including K-Factor if applicable, & BAFs**)
c. [] [] QA/QC summary for RM & facility CEMS
e. [] [] Previous K-Factor (if applicable) & BAFs are included**
b. [] [] Summary of calculations for each individual RATA type (flow, conc., mass), including intermediate results & runs not used for calculations
d. [] [] All RATA runs are included (Not necessary to include runs not used, in calculation)

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FACILITY CEMS DESCRIPTION

- | | |
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| <p>a. <input type="checkbox"/> <u>YES</u> <u>N/A</u> Make / mdl / range of CEMS components, analyzers, DAS/RTU, flowmeters, recorder, sample conditioner**</p> <p>c. <input type="checkbox"/> <input type="checkbox"/> Identify specific modifications to facility CEMS since RATA**</p> | <p>b. <input type="checkbox"/> <u>YES</u> <u>N/A</u> Dimensional drawing of Facility CEMS probe location, sampling point location within stack, with respect to process equipment & RM CEMS probe</p> |
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PROCESS AND EQUIPMENT DESCRIPTION

- | | |
|---|--|
| <p>a. <input type="checkbox"/> <u>YES</u> <u>N/A</u> Process & equipment description (including control equipment)</p> <p>c. <input type="checkbox"/> Equipment rated capacities**</p> <p>e. <input type="checkbox"/> Operating schedule</p> | <p>b. <input type="checkbox"/> <u>YES</u> <u>N/A</u> Process drawing (including flow of materials & emission test points)</p> <p>d. <input type="checkbox"/> Fuel types allowed by rule/permit**</p> |
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PROCESS CONDITIONS AND EQUIPMENT OPERATION DURING TEST

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| <p>a. <input type="checkbox"/> <u>YES</u> <u>N/A</u> Process/equipment operating conditions (loads, throughput, firing rate, fuel type, fuel rate) during test & last test**</p> | <p>b. <input type="checkbox"/> <u>YES</u> <u>N/A</u> Chronology of key testing events</p> |
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REFERENCE METHOD (RM) SAMPLING & ANALYTICAL METHODS

- | | |
|--|---|
| <p>a. <input type="checkbox"/> <u>YES</u> <u>N/A</u> Brief description of standard test methods (incl calibrations, analyses & QA/QC) are referenced according to established source test method</p> <p>c. <input type="checkbox"/> <input type="checkbox"/> Thorough description of non-standard methods or modifications to established methods (incl drawing, calibrations, analyses & QA/QC)</p> | <p>b. <input type="checkbox"/> <u>YES</u> <u>N/A</u> Discussion of representativeness of sampling (test location(s), numbers of points sampled, cyclonic/stratified flow checks)</p> <p>d. <input type="checkbox"/> Discussion of on-going laboratory QA/QC program</p> |
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SPECIAL REFERENCE METHOD (RM) SAMPLING & ANALYTICAL METHODS

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| <p>a. <input type="checkbox"/> <input type="checkbox"/> LoNO_x/LoSO_x recovery, and/or spiking or surrogate spiking procedure required? (If you answered "YES", additional QA documentation must be included concerning surrogates, spiked/unspiked values, dilution factors, etc.)</p> <p>a. <input type="checkbox"/> <input type="checkbox"/> Specific interference testing required? (If you answered "YES", additional QA documentation must be included)</p> | <p>b. <input type="checkbox"/> <input type="checkbox"/> Time-shared CEMS RATA test? (If you answered "YES", RATA must have been conducted in the time-shared mode and clearly documented with respect to all cycles shown on DAS, stripcharts, calculations, times, etc.)</p> <p>b. <input type="checkbox"/> Discussion of representativeness of sampling (test location(s), numbers of points sampled, cyclonic/stratified flow checks)</p> |
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TEST CRITIQUE OF RESULTS

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| <p>a. <u>YES</u> <u>N/A</u>
<input type="checkbox"/> <input type="checkbox"/> How unusual operating conditions (process interruptions**, weather conditions, other conditions) affect test data.</p> <p>c. <input type="checkbox"/> <input type="checkbox"/> Explanation why data/RATA runs not used</p> | <p>b. <u>YES</u> <u>N/A</u>
<input type="checkbox"/> <input type="checkbox"/> Exceptions to accepted/approved test methodology</p> <p>d. <input type="checkbox"/> <input type="checkbox"/> Explanation of lapses in data recording exceeding 30-minutes, between RATA runs</p> |
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CALCULATIONS

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| <p>a. <u>YES</u> <u>N/A</u>
<input type="checkbox"/> All intermediate results concerning emission calculations are shown</p> <p>c. <input type="checkbox"/> An example calculation, using actual test data for each type of equation, is provided</p> <p>e. <input type="checkbox"/> Calculations show all corrections for calibration drift</p> | <p>b. <u>YES</u> <u>N/A</u>
<input type="checkbox"/> All equations, algorithms, constants, & calculations, etc. are clearly shown and referenced where applicable.</p> <p>d. <input type="checkbox"/> Calculation spreadsheets clearly show progression from raw measurement to resultant emissions for each run</p> <p>f. <input type="checkbox"/> Calculation of all QA data is provided (e.g., NOx converter efficiency, bias, linearity, etc.)</p> |
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SIGNED AFFIDAVITS & CERTIFICATES

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| <p>a. <u>YES</u> <u>N/A</u>
<input type="checkbox"/> <u>Facility Statement</u>, signed by authorized facility representative (may <u>not</u> be signed by test firm representative)**</p> <p>c. <input type="checkbox"/> Current AQMD LAP for test firm</p> | <p>b. <u>YES</u> <u>N/A</u>
<input type="checkbox"/> <u>Statement of No-Conflict</u>, signed by authorized source test firm representative</p> |
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APPENDICES: FACILITY CEMS INFORMATION

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| <p>a. <u>YES</u> <u>N/A</u>
<input type="checkbox"/> DAS data record included for test duration that coincides with stripchart, test summary & RM info (including all raw parameters available to compute emissions)**</p> <p>c. <input type="checkbox"/> Charts are properly annotated (date, time, location, measuring event, analyzer, range, calibration gas values & cyl. ID, initials)**</p> | <p>b. <u>YES</u> <u>N/A</u>
<input type="checkbox"/> Strip chart included for test duration (including excerpt from daily calibration stripchart)**</p> <p>d. <input type="checkbox"/> All data provided in smallest time increment as collected & used for facility DAS and/or stripchart</p> |
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APPENDICES: REFERENCE METHOD (RM) CEMS INFORMATION

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|---|---|
| <p>a. <input type="checkbox"/> <u>YES</u> <u>N/A</u> Raw field test data for all RM measured parameters are provided (velocity, fuel flow, strat/cyclonic flow check, field calibrations, moisture, ambient measurements, gas conditioner temperature, etc.)</p> <p>c. <input type="checkbox"/> Charts are properly annotated (date, time, location, measuring event, analyzer, range, calibration gas & cyl. no., run no., chartspeed, initials)**</p> | <p>b. <input type="checkbox"/> <u>YES</u> <u>N/A</u> All DAS and/or stripchart data is included for the full test duration & is consistent with test summary & facility CEMS info</p> |
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APPENDICES: QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

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| <p>a. <input type="checkbox"/> <u>YES</u> <u>N/A</u> Latest periodic calibrations for RM and facility CEMS equipment used at test are provided (Pitot tube, temp/pressure/flow devices, gas divider, fuel meter, analyzers, converters, GC, calorimeter, etc.)</p> <p>c. <input type="checkbox"/> <input type="checkbox"/> Lab equipment calibrations (manual samples) are provided</p> | <p>b. <input type="checkbox"/> <u>YES</u> <u>N/A</u> Current cal gas cylinder certificates (both RM & facility CEMS**) are provided</p> <p>d. <input type="checkbox"/> <input type="checkbox"/> Lab equipment preparation/sample analysis "chain-of-custody" sheet are provided</p> |
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ATTACHMENTS

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| <p>a. <input type="checkbox"/> <input type="checkbox"/> <u>YES</u> <u>N/A</u> Special test requirements / data / calculations/ supporting documentation (low conc/low lvl spiking, dilution probe, low flow/oxy-fuel)</p> | <p>b. <input type="checkbox"/> <input type="checkbox"/> <u>YES</u> <u>N/A</u> Additional data/info attached to further augment reported results</p> |
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As the legally authorized representative of the source testing firm of:

Source Test Firm: _____
Business Address: _____

I certify that I have reviewed this RATA report in conjunction with this checklist, and having checked each item, I believe the information provided in this document is true, accurate, and complete. (Significant penalties may be imposed for submitting false, inaccurate, or incomplete information, including suspension or revocation of AQMD LAP status, and/or invalidation of all or part of the RATA report).

Signature: _____ **Date:** _____

 (NAME) (TITLE) (PHONE) (DATE)