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# **Laboratory Approval Program Application for Method 3.1 Sampling Manual Source Sampling for Gas Density**

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## Laboratory Approval Program Application for Method 3.1 Sampling Manual Source Sampling for Gas Density

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*This approval applies to single-point grab, single-point integrated, and multi-point integrated manual sampling for fixed gases from stationary sources and the calculation of dry molecular weight and excess oxygen using Method 3.1. This application is in addition to the General Application. Please complete this form if you wish your testing laboratory to be evaluated for the above method. If you determine dry gas density using instrumented sampling, please request approval for Method 100.1 instead. Check the appropriate boxes or write NA where not applicable.*

FOR SCAQMD USE ONLY
LAP Code Number: Application received: Review started: Letter sent: Findings:
Approval/Denial: Issuance Date: Remarks:

### COMPANY INFORMATION

LEGAL NAME AND FULL ADDRESS of the testing laboratory. This name will be used for all correspondences with the testing laboratory.

Laboratory Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Phone No. \_\_\_\_\_ Fax No. \_\_\_\_\_

**Scope of Application**

Which manual gas sampling techniques do you want to be evaluated for? Check all that apply

- Method 3.1 single-point grab sampling
- Method 3.1 single-point integrated sampling
- Method 3.1 multi-point integrated sampling

Which tests do you want to apply these techniques to?

- gas density
- other (describe) \_\_\_\_\_

Which tasks will you perform?

- rigid-wall sample container preparation (grab sample)
- integrated sampling train and sample bag preparation (integrated sample)
- sampling
- calculation of dry gas density

Do you plan to subcontract any of the above tasks? If so, please describe the task, subcontractor and LAP status \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Personnel**

Complete Table I by filling in the information pertaining to your staff and their experience in manual gas sampling. Please show who is the report signatory, who supervises the work, and who performs the work. (This may be one person)

**TABLE I: EDUCATION AND EXPERIENCE OF PERSONNEL**

Individual's Name and Degree	Position or Title	Years of Source Testing Experience	Approximate Number of Traverse and velocities Supervised/Performed in the Last -		Individual Will Perform Following Test Method/ Measurements in Proposed Work
			12 Months	3 Months	

**NOTE:** *If more than one person may perform a specific procedure, or you are not able at this time to specify the personnel most likely to be sent to the test site, please describe the qualifications of all personnel who might be sent.*

## Methods

LAP requires the following improvements in the performance of Method 3.1

CRITERIA FOR applying single-point grab, single point integrated, and multi-point integrated.

CRITERIA FOR selecting sampling time or numbers of samples

SPECIFICATIONS (if any) for condenser

PROCEDURE FOR checking whether rigid sample containers are leak free

CAUTION on Tedlar bag leaks

att'd    none

- |                          |                          |  |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | Please attach current copies of any instructions (SOPs, flow charts, and procedures) that your test facility uses in reference to the above techniques.                  |
| <input type="checkbox"/> | <input type="checkbox"/> | Have you modified the adopted method? If so, please attach a description of the purpose and method modification(s).  |
| <input type="checkbox"/> | <input type="checkbox"/> | Are there any limitations on your performance of the above method? (Limitations may be by source, stack velocity, temperature etc.). If so, please attach a description. |
| <input type="checkbox"/> | <input type="checkbox"/> | Are you applying for an equivalent method? If so, please attach the date and SCAQMD contact for any approved equivalent method.  |

yes    no

- |                          |                          |   |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | Are the methods, SOPs or other instructions readily available to staff? |
|--------------------------|--------------------------|---|

## Documentation checklist

Please attach de-identified actual or “dummy” copies of these documents:

att'd    none

- |                          |                          |   |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | report including manual sampling techniques                               |
| <input type="checkbox"/> | <input type="checkbox"/> | intermediate calculations (spreadsheet printouts, hand calculations etc.) |
| <input type="checkbox"/> | <input type="checkbox"/> | raw data (handwritten field data sheets)                                  |
| <input type="checkbox"/> | <input type="checkbox"/> | background data (equipment preparation, calibration data etc.)            |
| <input type="checkbox"/> | <input type="checkbox"/> | chain of custody and analysis request                                     |

Is the following original data reported or recorded for each test?

- | yes                      | no                       |   |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | source name   |
| <input type="checkbox"/> | <input type="checkbox"/> | test date   |
| <input type="checkbox"/> | <input type="checkbox"/> | process description   |
| <input type="checkbox"/> | <input type="checkbox"/> | dimensioned diagram of stack, port(s) and flow disturbances                         |
| <input type="checkbox"/> | <input type="checkbox"/> | technique used (single-point grab, single-point integrated, multi-point integrated) |
| <input type="checkbox"/> | <input type="checkbox"/> | diagram of sampling equipment   |
| <input type="checkbox"/> | <input type="checkbox"/> | sample container leak check results and sample container ID                         |
| <input type="checkbox"/> | <input type="checkbox"/> | chain of custody for outgoing sampling containers (if applicable)                   |
| <input type="checkbox"/> | <input type="checkbox"/> | sampling point(s)   |
| <input type="checkbox"/> | <input type="checkbox"/> | field equipment leak check  |
| <input type="checkbox"/> | <input type="checkbox"/> | approximate probe purge volume  |
| <input type="checkbox"/> | <input type="checkbox"/> | sampling time and rate (integrated sampling)  |
| <input type="checkbox"/> | <input type="checkbox"/> | observations and deviations   |
| <input type="checkbox"/> | <input type="checkbox"/> | equipment ID numbers  |
| <input type="checkbox"/> | <input type="checkbox"/> | sample container ID numbers   |
| <input type="checkbox"/> | <input type="checkbox"/> | operator signature and date   |
| <input type="checkbox"/> | <input type="checkbox"/> | chain of custody for incoming samples and analysis request form (if applicable)     |
| <input type="checkbox"/> | <input type="checkbox"/> | Is there version control on submitted documents including methods and SOPs?         |

### QA checklist

- | att'd                    | none                     |  |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | Please indicate how and by whom problems that affect accuracy and reproducibility (wrong technique or time, equipment leaks, calculation errors etc.) are detected, annotated and corrected. |
| <input type="checkbox"/> | <input type="checkbox"/> | Please attach information on any internal audits, and any related audits, accreditations, approvals or certifications  |

### Physical requirements checklist

#### Facilities

yes    no

- Are all areas where LAP work will be performed secure? (includes main facility, mobile labs, equipment storage areas, evidence retention areas and report preparation areas)
- Do you perform consecutive source tests without returning equipment or personnel to your main test facility?
- If "Yes" to above, do you have established procedures, which are used in the field to maintain sampling equipment when not returned to the test facility? Please attach a description of this procedure.

#### Equipment and reagents, sample containers and preparation

Yes    N/A

- number, type and volume of rigid grab sample containers  
\_\_\_\_\_  
\_\_\_\_\_
- types and volumes of bag sample containers  
\_\_\_\_\_  
\_\_\_\_\_
- manifold and gas that you use to purge sample containers during preparation  
\_\_\_\_\_  
\_\_\_\_\_
- make and model of the vacuum pump that you use to evacuate and clean sample containers  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- pressure indicator (manometer, pressure gauge etc.) that you use to determine whether rigid sample containers are leak-free.  
\_\_\_\_\_  
\_\_\_\_\_

yes    no

- Do rigid sample containers and pressure indicators have unique, permanent ID numbers?

*Sampling equipment and preparation*

yes    N/A

       number and type of equipment used to purge the sampling probe in the field

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       approximate number, types and lengths of sampling probes

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       number and type of vacuum gauge(s) for leak-checking sampling train in the field.

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       number and type of rate meter(s) (rotameter or equivalent)

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       amount and type of sampling pumps, approximate rates

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       number and types of valves used to adjust flow

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       number and types of moisture condensers

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yes    no

       Do valves, pumps, rate meters, pressure gauges and vacuum gages each have a unique, permanent ID number?

       Is there a(n) equipment logbook(s) that describe(s) the repair and calibration history of each piece of equipment?

The above information is true to the best of my knowledge and belief

\_\_\_\_\_  
Signature, authorized contact

\_\_\_\_\_  
Date

**Attach this application to the LAP General Application and submit to :**

**The Laboratory Approval Program Coordinator  
Monitoring and Analysis  
South Coast Air Quality Management District  
21865 E. Copley Drive  
Diamond Bar, California, 91765-4182  
Phone: (909) 396-2228  
Fax: (909) 396-2099**