

# AIR MONITORING INSTRUCTIONS

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The air monitoring form is attached to this booklet and provides all the information that is required by the various agencies and for good practice. If the form is completed correctly the information can be used to make a report that includes all the requirements needed.

There are no mindlessly repeated lines, if you find that you are putting the same information on different lines of this form you are doing it wrong and you need to read this booklet again or you need to call me at 800-644-1924 103. You may want to make a template with the information that does not change, Employer etc and then photocopy the sheet and use the copy to complete the rest of the data.

This form can be used for both area samples or worker (Personal breathing zone, OBZ ) samples as required by OSHA. If the section marked Person is filled in the report is made assuming the sample is an OBZ. If the person line is left blank you can assume that the report is an area sample. More about that later.

Each space on the form is referenced to a number of the paragraphs below, please refer to the paragraph number if you have any questions about a specific item. By the way this information is all required by some law, or code requirement, its not there to irritate you, that is the job of the lawyers. The information in many instances cannot be changed later, so please be accurate, do not guess or make up information. Well here goes the information.

- 1) P O #--The first item is a purchase order number, this helps the accounting people at your company and the laboratory identify the sample and the bill. You can use any numbers or letters for this field the space allowed is eleven (11) characters. Many companies use this field to identify jobs or projects. This cannot be changed at a later date, be certain that the information is correct.
- 2) Date--The next line is the date, this is the date of the sample, the day the sample started. Sometimes the sample is started on one day and ends on the next, 2200 hours and ending 0415. Notice that military time was used not 1100 to 4:15, why because one meant that the sample was during the day and the other meant that the sample was at night.
- 3) Sample #--The sample number is the next and the most important item on this sheet. The analytical Laboratory will use this to assign a unique number to each analyte. Once issued this identification number will never be changed.
- 4) Method--This is the NIOSH or OSHA Reference Method Number. The laboratory will tell you what they will do with the sample when you bring it in, you will need to have a copy of the method before you begin sampling. The Method will tell you how much air you need to collect and what flow rates should be used.
- 5) Media What media was used to collect the analyte. CCST Coconut Charcoal Sample Tube, MCE 25 MM 1.2 filter, etc. This is determined by the method, see the preceding paragraph.
- 6) Area of sample/The worker was in--This field is specifically for the identification of the work area, the immediate work area. Your report should read something like "The sample was taken in the \_\_\_\_\_." In this example you would put 23 floor Central area as the area description. The report line would read "The sample was taken in the 23 floor Central area. Do not use the phrases Personal Monitoring area or Area sample because that does not tell us anything important except what is already apparent. The goal of every air sample is to clearly identify the area so at some later date the report will have some salient meaning. Think of a sentence beginning with "The person was in the \_\_\_\_\_." or "The area sample was taken in the \_\_\_\_\_." If this is a Blank please put the word

Blank on this line, no other information is necessary on this line. Fill in the address lines and your name, do not fill in flow rate, calibration data or personal equipment information. The method requires that blanks are submitted with each set of samples. Again review the method to determine the correct number of blank media that need to be submitted. You must number them as you do all other samples. Take it to the laboratory in the same bag as the exposed media.

- 7) Person--This field is for the name of the person who wore the sampling pump, not your name, you will get to put your name on later. Do not put anything else here or your report will read the person who wore the pump was Chiller Room, or some other equally foolish statement.
- 8) SSNO--Social Security Number LAST 4 --This is of course the last 4 numbers of the person who wore the pump. If you have company assigned employee numbers use them it to help identify the person who wore the personal sampling pump.
- 9) Company & Client--Put your employer company here, you can put a job name or whatever you choose, but the Company represented by the sample is most appropriate.
- 10) Address--Put the job address here, that is the address of the area that was sampled. Not the address of the company somewhere in Egypt but, the area that was sampled. If you put a home office address here the report will read as though the air sample was taken in the company office.
- 11) City--Again the city of the study.
- 12) Operation: What was the worker doing/Worker Job Title--many people have problems with this space. Put simple descriptions like (Glove Bag Removal or Welder) here perhaps you may want to say Supervisor or laborer, but your best bet is the specific thing the worker was doing, if you need more space use the back side of the form.
- 13) Personal Protection Used--Place a very brief description of the PPE ( Personal Protective Equipment) here. for example -- Tyvec FBC, Type "C", boots, gloves (That means tyvec full body covering, Type "C" respirators, boots and gloves were worn by the individual who wore the sampling pump). If you need more space use the back of the form.
- 14) Pump Manufacturer/Serial Number--This is a simple item, if the pumps you are using do not have a serial number, assign on with a permanent marker. This assures you that the data that you collected can be traced to a valid method using the correct type of sampling equipment.
- 15) Rotameter #--We assume that a rotameter is used before and after the sampling period to accurately estimate the flow rate. If you use a bubble meter or Buck Calibrator or some other Primary Standard, write the Name of the meter here, if not put the serial number of your rotameter here. There are eleven spaces. ( By the way in the old days these rotameters used a complicated rotating finned ball that actually rotated so the word rotameter, the accent is not on the 'tam', but on the first syllable 'rot' and the second syllable is a long but soft a)
- 16) Date Calibrated--Again we assume that you are using a rotameter to measure the flow rate, and that it was calibrated against a Primary Standard within the last six months or less. Put the date that the Rotameter was calibrated against a primary standard. Do not put the date you put the pump on the worker, that is already on the report. If the rotameter is not calibrated, get it calibrated, usually about a two day process. If you used a primary standard you do not need to fill in this date, unless you want to engage in a waste of your time.
- 17) Start Time-- The exact time you put the air sampling pump on the individual or when you started the area sample. Please use twenty four hour time ( the morning hours are the same, but anything from noon to midnight add twelve hours. 1:00 PM becomes 1300, etc.) Please go ahead and enter the minutes. Calculations

are simple do not mind the extra work, you will have plenty of time to do the math. The sample is more credible when the start and stop times are accurate to the minute rather than the hour.

- 18) Start time flow rate--The exact flow rate as you set the air sampling pump with the media that you are using, not a "test" media used for air sampling. The flow rate is defined in the reference method, be careful to stay within the limits for the method. Please enter the milliliters per minute in the blank space. If the sample is a personal sample it must be above the breast line and not more than six inches above the wearers head. Area samples should be about 36 inches above the floor, area samples cannot replace personal samples. Have a careful and well thought out reason for conducting area samples.
- 19) Stop time--The exact time that you took the pump off the individual. If you stopped the pump for lunch deduct the time the pump was stopped. There are two sections for those who wish to stop the pump at lunch time.
- 20) Stop time flow rate--this is the flow rate that you measure with a rotameter with the media you used in line, make this measurement just before you turn off the pump, many personal pumps will recover if you turn them off for a few minutes. Usually the pumps will drop some during a work day. Again the report has more credibility if you have an accurately measured end flow rate, we use milliliters so that you can estimate more easily the flow rate with more accuracy. Use the rotameter curve to estimate the end flow rate.
- 21) Environmental conditions that could affect the measurements. Depending on the test it could be buckets of rain, or just a windy dry day. Put the temperature and relative humidity and note the wind condition. Blowing like a banshee etc. Note if it was raining light, heavy, monsoon etc.
- 22) Check if EL. This is to tell if the test was an Excursion Limit, sometimes required for specific methods. For example asbestos has an excursion limit, so sometimes OSHA wants us to measure the EL, it is not necessary if the total daily exposure is below the one sixteenth of the STEL of one fiber/cubic centimeters. 0.0625 f/cc.
- 23) Technician taking this sample--Here it is **your name**. We know that your signature is a powerful statement of you individualism and flair and we appreciate that, but please clearly print your name so we have a chance to recognize the letters. Your name will become a part of the permanent records and often a persons signature is so individualized that it is a code that even the NAZI'S couldn't crack. Please print your name clearly, no matter how well you are known, the poor slob in the lab could be a new guy and he or she won't have a clue.
- 24) The bottom of the form has a set of lines for the names of the other people at the site who are represented by the person who wore the air sampling pump. This item if completed should be photocopied for your records. The original will be returned to you and must be maintained for a minimum of thirty years.
- 25) The form along with the sampling media should now be placed in a ziplock bag with the blanks and taken to the nearest AIHA accredited Laboratory. Review the method to ascertain the correct method of handling the media during shipping. When you get the results the lab report along with the Sample Sheet should be posted for the workers. The information that has been collected is all that is required to post, and all the information needed for record keeping requirements under OSHA. The original records should be maintained for thirty years.

AIR SAMPLE SUBMISSION SHEET

P. O. # \_\_\_\_1\_\_\_\_ Date: \_\_\_\_2\_\_\_\_ Sample # \_\_\_\_3\_\_\_\_

Method # \_\_\_\_4\_\_\_\_ Collection Media \_\_\_\_\_5\_\_\_\_\_

Area of Sample: \_\_\_\_\_6\_\_\_\_\_

Person: \_\_\_\_\_7\_\_\_\_\_ Ssno#last Four \_\_\_\_

Company: \_\_\_\_\_9\_\_\_\_\_

Address: \_\_\_\_\_10\_\_\_\_\_ City: \_\_\_\_\_11\_\_\_\_\_ State \_\_\_\_\_

Operation: \_\_\_\_\_12\_\_\_\_\_

Personal Protection Used: \_\_\_\_\_13\_\_\_\_\_

Pump Manufacturer: \_\_\_\_14\_\_\_\_ Serial Number: \_\_\_\_14\_\_\_\_

Rotameter #: \_\_\_\_15\_\_\_\_ Date Compared to Primary Standard : \_\_\_\_16\_\_\_\_

Start Time: \_\_\_\_17\_\_\_\_ Flow Rate: \_\_\_\_18\_\_\_\_ Ml/minute

Stop Time: \_\_\_\_19\_\_\_\_ Flow Rate: \_\_\_\_20\_\_\_\_ Ml/minute

Please Use Military Time. Please Express Volume in Milliliters. Check If El 21

Environmental Conditions \_\_\_\_\_22\_\_\_\_\_

TECHNICIAN TAKING THIS SAMPLE: \_\_\_\_\_23\_\_\_\_\_

PERSONS REPRESENTED BY THIS SAMPLE      Space For Drawing

\_\_\_\_\_24\_\_\_\_\_

\_\_\_\_\_24\_\_\_\_\_

\_\_\_\_\_24\_\_\_\_\_

\_\_\_\_\_24\_\_\_\_\_