

Navy and Marine Corps Public Health Center
Industrial Hygiene Single Stressor Air Sample Survey Form -
NMCPHC Form 5100/14 Explanations and Definitions
(Version 09/2014)

Industrial Hygiene Single Stressor Air Sample Survey Form - NMCPHC Form 5100/14 - This form is used to record information collected while performing air sampling with air sampling pumps and/or passive monitors. Analytical information is provided by the laboratory. As many as five workers from the same shop may be listed on each form, but only one stressor. Personal breathing zone and area samples may be listed on the same form

Form fields marked in this Explanations and Definitions as “Required” are fields that are thought to be important information. Some of the “Required” fields have conditions listed. If those conditions are not applicable, those fields are either not applicable or optional. Form fields marked in this Explanations and Definitions as “Optional” are fields that provide useful but extra information or are only used by some industrial hygiene groups. On the actual survey form, the “Optional” fields are shaded.

FIELD NAME	DEFINITION
Sample Date (Required)	The date the sample is collected.
Laboratory (Required)	The name and address of the laboratory to which the sample is sent, or enter “in-house” if analysis is performed in-house.
Laboratory Report # (Not Required for IH) – Filled in by laboratory	The report number for the laboratory analysis report.
IH Group (Required)	The complete name (including any particular section) and address of the command requesting the sample analysis.
IH POC (Required)	The industrial hygienist to contact in case there are questions concerning the sample.
IH eMail (Required)	The industrial hygienist’s email address to contact for reporting and in case there are questions concerning the sample.
IH Comm/DSN Phone (Required)	The complete commercial and DSN phone numbers of the IH POC.
IH Fax (Optional)	The fax number of the IH POC.
IH UIC (Required)	The Unit Identification Code (UIC) of the command providing industrial hygiene support to the sampled command.

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FIELD NAME	DEFINITION
Activity (Required)	The name of the sampled command receiving industrial hygiene support.
UIC (Required)	The UIC of the sampled command receiving industrial hygiene support.
Field Office (Optional)	A city or other descriptive identifier of the location of the activity being sampled. This is useful in situations where the command has multiple field locations, and the activity name, UIC and building/location do not provide sufficient detail to discern between different field offices of the command.
Bldg./Hull # (Required)	The building number of the shore command or the hull number of the ship where the individual or shop being sampled is located.
Shop Location (Required)	The room number or ship compartment number of the shop where the individual or shop being sampled is located.
Shop Code/Name (Required)	The number and/or name of the shop for the individual or shop being sampled.
Shift (Required)	The shift that the individual or shop being sampled is working. Mark the appropriate number code box on the form. 1 = Day 2 = Evening 3 = Night
Frequency of Operation (Required)	The frequency of the sampled operation. Mark the appropriate number code box on the form. 1 = Daily 2 = 2-3 Times/Week 3 = Weekly 4 = 2-3 Times/ Month 5 = Monthly 6 = 2-3 Times/Year 7 = Yearly 8 = Special Occasions
Duration of Operation (Required)	The duration of the sampled operation. Mark the appropriate number code box on the form. This is the usual or normal time it takes to perform the operation. 1 = 0 - 15 minutes 2 = 15 - 30 minutes 3 = 30 - 60 minutes 4 = 1 - 2 hours 5 = 2 - 4 hours 6 = 4 - 6 hours 7 = 6 - 8 hours 8 = >8 hours
Personal or Area (Required)	Record whether this is a personal air or general area air sample. Circle "Personal" or "Area".

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FIELD NAME	DEFINITION
Employee Name (Last, First, MI) (Required for personal samples)	The complete name of the individual being sampled.
SEG (Required for personal samples)	Similar Exposure Group (SEG) identification: A number or name of a similarly exposed group as that of the individual being sampled and for the sampled operation. A SEG is defined by the industrial hygienist.
Gender (Required for personal samples)	Record whether the individual being sampled is male or female. Circle "Male" or "Female".
DoD EDI PI (Required for personal samples)	The Electronic Data Interchange Person Identifier (EDI PN) from the common access card (CAC), as a unique personal identifier of the individual being sampled.
Job Title (Required for personal samples)	The job title of the individual being sampled.
Mil/Civ/FN (Required for personal samples)	Record whether individual being sampled is military, civilian or a foreign national. Circle "M" for military, "C" for civilian or "FN" for foreign national.
TAD (Required for personal samples)	Record whether the individual being sampled is at the activity on temporarily assigned duty (TAD). This gives you information so that sampling information, SF600s or other notifications can be sent to the proper (parent) activity.
Parent Activity (Required for personal samples, if TAD is yes)	When an individual being sampled is at an activity on TAD, the parent activity is the name of the command to which an individual normally belongs. This gives you information so that sampling information, SF600s or other notifications can be sent to the proper (parent) activity.
Parent UIC (Required for personal samples, if TAD is yes)	When an individual being sampled is at an activity on TAD, the parent UIC is the UIC of the command to which an individual normally belongs. This gives you information so that sampling information, SF600s or other notifications can be sent to the proper (parent) activity.
SF600 Sent to: (Optional)	The name of the clinic to which the standard form 600 is sent in order to be included in the medical record of the individual being sampled.
Worksite (Optional)	A description of the location inside the room or ship compartment where the sample is actually collected.
Distance from Source (Optional) (Recommended for general area samples)	The distance, in feet, between the source of contamination and the sample collection location.
Boundary (Optional) (Recommended for general area samples)	Record whether the sample is collected inside or outside any boundaries or whether there is no boundary present. Circle "In" for inside the boundary, "Out" for outside the boundary or "No" for no boundary present.

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FIELD NAME	DEFINITION
OPCODE (Optional)	The Navy operation code, which most closely matches the operation being sampled. The list of Navy operation codes and their suggested mappings to the new Defense Occupational Environmental Health Readiness System (DOEHRS-IH) process methods can be found in the Industrial Hygiene Field Operations Manual, Appendix 3-A.
Operation (Required)	The process name defined by the industrial hygienist, and the DOEHRS-IH process method (chosen from the DOEHRS-IH process picklists).
Task (Optional)	A short descriptive identifier that further defines the sampled operation, providing more detail.
Exposure Origin (Required by some computer applications for some sample types)	Record whether the exposure is from ambient conditions or the operator's work. Circle "Ambient" or "Operator".
Related Shop SOP (Optional)	A number or name of any standards of practice (SOP) used during the sampled operation. This field is currently used by only a few IH field activities.
Materials/Products Used (Required)	A description of the materials or products used during the sampled operation that contain the sampled stressors (e.g., welding rod, spray paint, degreaser, etc.). Be specific to include stock number, manufacturer, product name, and product identification number. If no materials/products are used, state "None".
Ventilation Description (Required, if ventilation is present)	The description of the ventilation present, if any, during the sampled operation as defined by the industrial hygienist, and the DOEHRS-IH control class and control name (chosen from the DOEHRS-IH control picklists). The description needs to be sufficient to choose the appropriate DOEHRS-IH ventilation system and component. If no ventilation is present, state "None".
Ventilation Used (Required, if ventilation is present)	Record whether the ventilation present, if any, is actually used during the sampled operation. Circle "Yes" or "No".
Ventilation Meets Specs (Required, if ventilation is present)	Based on measurements, record whether the ventilation present and used, if any, during the sampled operation meets applicable standards or guidelines. Circle "Yes", "No" or "Unknown". Ventilation measurements should be conducted on day of sampling.

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FIELD NAME	DEFINITION
Respirator Description/Respirator # (Required for personal samples, if respirator is used)	A description of the respirator used, if any, by the individual being sampled, during the sampled operation, as defined by the industrial hygienist, and the DOEHRS-IH control class, control name, mask type, facepiece and cartridge type (chosen from the DOEHRS-IH control picklists). If no respirator is used, state “None”. The NIOSH approval number (“TC” number) for the respirator used, if any, by the individual being sampled for the sampled operation.
Respirator Meets Specs (Required for personal samples, if respirator is used)	Record whether the respirator used, if any, by the individual being sampled, during the sampled operation, meets applicable standards or guidelines. Circle “Yes”, “No” or “Unknown”.
PPE Description (Required for personal samples, if PPE is used)	A description of any personal protective equipment (PPE) used, if any, by the individual being sampled, during the sampled operation, as defined by the industrial hygienist, and the DOEHRS-IH control class and control name (chosen from the DOEHRS-IH control picklists). If no personal protective equipment is used, state “None”.
PPE Adequate (Required for personal samples, if PPE is used)	Record whether the PPE used, if any, by the individual being sampled, during the sampled operation, is adequate. Circle “Yes”, “No” or “Unknown”.
Sample Duration (Required)	The length of the sample, in minutes, calculated from the sampling pump or passive monitor “on” and “off” times.
Flow Rate (Required)	The lower of the calibration flow rates of the sampling pump, or the <u>equivalent flow rate of the passive monitor</u> , in liters per minute.
Volume (Required)	The total volume of air collected for the sample, in liters.
Sample # (Required)	The unique number used by the IH group to identify and track the sample internally.
Laboratory # (Not Required for IH) – Filled in by laboratory	The unique number used by the laboratory to identify and track the sample. This information is provided by the laboratory.

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FIELD NAME	DEFINITION
Stressor/CAS # (Required)	<p>The stressor is the chemical, physical or biological contaminant being sampled. Lists of chemical stressors with exposure standards are in the Industrial Hygiene Field Operations Manual, Appendix A, Table Z-1-A and Table Z-2.</p> <p>The Chemical Abstracts Service (CAS) registry number of the stressor being sampled. A list of stressors with CAS numbers and exposure standards is in the Industrial Hygiene Field Operations Manual Appendix A Table Z-1-A and Table Z-2.</p>
Concentration/Unit (Required)	The concentration of the particular stressor of a sample including the appropriate unit.
8-hour TWA (Required for personal samples, if appropriate for combined sample durations and stressor)	The calculated 8-hour time weighted average of a particular chemical stressor sampled for the individual being sampled on the particular sample date (to be calculated by the sampler or reviewing IH).
Calibrator (Mfg, Model, Serial #/Name) (Required, if applicable)	The manufacturer, model and serial number of the calibration device and the DOEHRS-IH equipment name, as defined by the industrial hygienist.
Field Calibrated By (Required)	The printed name and signature of the person performing field calibration on the sampling pump.
Pre Cal Date (Required)	The date the sampling pump is pre calibrated. This must be the same date as the post calibration date and sample date unless sampling is performed across the midnight hour.
Post Cal Date (Required)	The date the sampling pump is post calibrated. This must be the same date as the pre calibration and sample date unless sampling is performed across the midnight hour.
Field # (Optional)	The number used to identify the sample in the field.
Pump Type (Optional)	The type of sampling pump (e.g., high flow, low flow, etc.) or passive monitor.
Pump Mfg. (Required)	The manufacturer of the sampling pump or passive monitor.
Pump Model (Required)	The model of the sampling pump or passive monitor.
Pump Serial #/Name (Required)	The serial number of the sampling pump or passive monitor and the DOEHRS-IH equipment name, as defined by the industrial hygienist.
Pre Cal Flow Rate (Required, if applicable)	The average flow rate during sampling pump pre calibration, in liters per minute.

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FIELD NAME	DEFINITION
Post Cal Flow Rate (Required, if applicable)	The average flow rate during sampling pump post calibration, in liters per minute.
Lower Flow Rate (Required)	<p>The lower of the pre and post sampling pump calibration flow rates, in liters per minute. The lower flow rate is used when calculating sample volume. The difference between pre and post calibration values should not exceed 5% when calculated by the equation:</p> $\% \text{ error} = \frac{\text{high value} - \text{low value}}{\text{low value}} \times 100$ <p>For passive monitors, enter the manufacturer's listed equivalent flow rate, in liters per minute.</p>
Media (Required)	The type of media used to collect the sample (e.g., 37 mm MCEF closed face, CT 100/50, 3M 3500 OVM, etc.).
Media Lot/Tube # (Required)	The manufacturer's lot or tube number for the sampling media.
Media Expiration Date (Required)	The expiration date of the sampling media, if any. . If no expiration date is listed, state "None".
Time Off (Required)	The time the sampling period ended for each sample (i.e., when the sampling pump or passive monitor is turned off or closed, or the sampling media is removed).
Time On (Required)	The time the sampling period began for each sample (i.e., when the sampling pump or passive monitor is turned on or opened, or the sampling media is placed).
Pump Check(s) (Required)	The <u>time(s)</u> when the sampling pump is checked to ensure proper operation.
Calculations (Optional)	Any calculations associated with sample collection, equipment calibration, sample results or time weighted averages.
Exposure during the unsampled period is (Required for personal samples)	The exposure for the individual being sampled during the unsampled period on the sample date. Mark the appropriate box on the form: "Same as sample period", "Zero" or "Other". For "Other", please specify conditions.
Shift Length (Required)	The length of the shift that the individual or shop being sampled works.
Actual Length of Sampled Work (Required for personal samples)	The actual amount of time the operation being sampled is performed on the sample date. This may or may not correspond to the sample duration.

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FIELD NAME	DEFINITION
Time Course of Events/Comments (Required)	A <u>detailed</u> chronological description of the operation being sampled and any other comments or observations about the sample period. Anyone reading this time course of events should be able to develop a mental image of what occurred during the operation.
Sampler (Required)	The printed name and signature of the industrial hygienist, industrial hygiene technician or workplace monitor performing the sampling.
Date Completed (Required)	The date the form is signed by the industrial hygiene technician, workplace monitor or industrial hygienist performing the sampling.
Reviewing IH (Required)	The printed name and signature of the industrial hygienist reviewing the sample form.
Date Reviewed (Required)	The date the form is signed by the industrial hygienist reviewing the sample form.
Data Entered By (Optional)	The printed name and signature of the person entering the sampling form information into the sample database. This only applies if the IH group utilizes a sample database.
Date Entered (Optional)	The date the sampling form information is entered into the sample database. This only applies if the IH group utilizes a sample database.
Sent to Lab By (Required)	The printed name and signature of the person sending the sample to the laboratory.
Date Sent (Required)	The date the command requesting the sample analysis sent the sample to the laboratory.
Received By (Required)	The printed name and signature of the person at the laboratory receiving the sample.
Date Received (Required)	The date the laboratory received the sample.
Privacy Act Statement (Required)	To be read by the individual(s) being sampled.