

Hexavalent Chromium Air Monitoring Checklist

Items and issues to take into account (*and document*) when conducting air monitoring for hexavalent chromium during welding operations:

- 1.0** Date of Air Monitoring: _____
Employee (subject): Name _____
Employee Number (or last four SS#) _____
Job Title _____

2.0 Air Monitoring Specifics

- 2.1 Name of person (consultant) performing air monitoring: _____
- 2.2 Time of Air Monitoring: (480 minutes total recommended)
start time _____ end time _____
(split sample?) start time _____ end time _____
- 2.3 Sample numbers (s) _____
- 2.4 Pump number (s) _____
- 2.5 Type of sample media used _____
- 2.6 Sample media should be placed within the welder's helmet, if possible.
- 2.7 Was sample media placed inside welding helmet? Yes No
Flow rate used _____ (i.e., 2.0 L/min)
- 2.8 Actual time spent welding: _____
(i.e., 2 hours, 45 minutes)
- 2.9 Analytical method to be used? _____
(i.e., OSHA 215 method)
- 2.10 "Activity Diary" of workday kept? (to record non-welding activities)
Yes No
(pay special attention to record activities such as cutting, grinding, and sanding)

3.0 Location

- 3.1 Provide a verbal description and diagram of the welding area/room on separate sheet or in activity diary. Description / Sketch Provided? Yes No
- 3.2 Estimated size of the welding area/room: _____ square feet
_____ cubic feet
- 3.3 Is the area identified as a "confined space"? Yes No
- 3.4 Number of welders (actively welding) in the welding area: _____

- 3.5 Barriers obstructing ventilation and air flow in the air monitoring area:
(if applicable, list and describe on separate sheet or in "activity diary")

3.6 Description of adjacent welding/burning/cutting activities
(if applicable, list and describe):

4.0 Personal Factors

4.1 Body position of the welder relative to the welding point (proximity and orientation):
(i.e., head positioned within the plume, head away from the plume, etc.)

4.2 Type of personal protective equipment worn by the welder (check all that apply):

Respirator Yes No (if yes, model name and type)

Helmet Yes No (if yes, model name and type)

Gloves Yes No

5.0 Air Movement and Air Movers (make notes on sketch, if needed)

- 5.1 Is point of operation ventilation available? Yes No
If yes, is it used properly? Yes No
- 5.2 Is natural ventilation occurring? Yes No
If yes, describe ventilation
(including direction relative to welders breathing zone):
- 5.3 Is mechanical general ventilation being used? Yes No
If yes, describe ventilation
(including exhaust rate and/or number of room air changes per hour, if known):
- 5.4 Are cooling fans or makeup air units being used? Yes No
If yes, describe air flow (including direction relative to welders breathing zone):

6.0 Welding Process

- 6.1 Type of welding process being used (check one):
Shielded Metal Arc Welding (SMAW) Gas Tungsten Arc Welding (GTAW)
Gas Metal Arc Welding (GMAW) Flux-core Arc Welding (FCAW)
Plasma Arc Welding (PAW) Submerged Arc Welding (SAW)
Other (list):
- 6.2 Type of base metal being used (check one):
Stainless steel Mild steel Carbon steel Chrome-coated metal
Other (list):
- 6.3 Description of welding activities / processes (use separate sheet or activity diary):
(i.e., What was being welded? Was it fillet, groove or flange welding?, etc.)
- 6.4 Thickness of the base metal: _____ (i.e., 18 ga., 10 ga., etc.)
- 6.5 Reported ingredients of the base metal: _____
(i.e., x % chrome, x % nickel, etc.)
- 6.6 AWS electrode/wire classification and reported ingredients of the consumable:

(% chromium)