

Possible Center Scenarios

Scenario 1: Exposures fall below the permissible exposure level (PEL) and action level

A Job Corps center has approximately five students participating in plumbing at the time of the initial sampling. This training includes exposure to pipes coated with an anti-corrosive containing Cr(VI). The instructor and three students are selected for exposure monitoring. The instructor is expected to have the highest Cr(VI) exposure. The sampling pump should be attached to the wearer's belt. The hose and cassette assembly should be positioned across the back in a diagonal, with the cassette positioned in a vertical position within the student or instructor's breathing zone. The sampling pumps are run for 8 hours to simulate the average work shift. Carefully record start and stop times, student and instructor names, and the trade name on the sample cassette and chain of custody.

Note: If the duration of the exposure is less than 8 hours, the sampling pump should be worn during the activity only. At the close of the activity, the sampling pump and cassette assembly should be removed from the wearer and placed on a chair or stool close enough to the exposure source to simulate the position of the wearer during the activity. Tape the hose and cassette to the top of a chair or stool back. Place the chair or stool on or near the wearer's position during the activity. Ensure that the cassette is in a vertical position with the inlet facing down. The cassette inlet should be far enough away from the exposure source to simulate the wearer's breathing zone.

Sampling results and follow-up: Sampling results indicate that the exposures are below the PEL and the action level. These results are representative of the exposures for this group of students and instructor only. The center shall conduct exposure monitoring 7 days later to confirm initial monitoring results. The center is required to provide the National Office of Job Corps with a copy of the exposure monitoring results and an exposure control program as described in Program Instruction No. 06-29. Before new students are added to the program, the center must confirm exposure levels through scheduled monitoring or performance-oriented monitoring as described in Program Instruction No. 06-29, Attachment C, pages 8 and 9.

Scenario 2: Exposures meet or exceed the action level

A Job Corps center has approximately six students participating in collision repair and refinishing at the time of the initial sampling. This training includes exposure to paints containing Cr(VI) as well as some welding fumes. The instructor and three students are selected for exposure monitoring. The instructor and students located closest to the welding operations are expected to have the highest Cr(VI) exposure. The sampling pump should be attached to the wearer's belt. The hose and cassette assembly should be positioned across the back in a diagonal, with the cassette positioned in a vertical position within the student or instructor's breathing zone. The sampling pumps are run for 8 hours to simulate the average work shift. Carefully record start and stop times, student and instructor names, and the trade name on the sample cassette and chain of custody.

Note: If the duration of the exposure is less than 8 hours, the sampling pump should be worn during the activity only. At the close of the activity, the sampling pump and cassette assembly should be removed from the wearer and placed on a chair or stool close enough to the exposure source to simulate the position of the wearer during the activity. Tape the hose and cassette to the top of a chair or stool back. Place the chair or stool on or near the wearer's position during the activity. Ensure that the cassette is in a vertical position with the inlet facing down. The cassette inlet should be far enough away from the exposure source to simulate the wearer's breathing zone.

Sampling results and follow-up: Sampling results indicate that the exposures meet or exceed the action level. These results are representative of the exposures for this group of students and instructor only. The center is required to provide the National Office with a copy of the exposure monitoring results and an exposure control program as described in Program Instruction No. 06-29. The center shall conduct exposure monitoring twice a year or every 6 months. As new students enter the program, be sure to include them in the medical monitoring and exposure monitoring program. Do not sample the same students from the initial monitoring; choose three different students for each monitoring until each student has been monitored within a 12-month period. After 12 months of scheduled monitoring, centers may use the performance-oriented option to determine 8-hour exposure before new students enter the program, as described in Program Instruction No. 06-29, Attachment C, pages 8 and 9.

Scenario 3: Exposures exceed the PEL

A Job Corps center has approximately 15 students participating in welding at the time of the initial sampling. The instructor and five students are selected for exposure monitoring. The instructor is expected to have the highest Cr(VI) exposure. The sampling pump should be attached to the wearer's belt. The hose and cassette assembly should be positioned across the back in a diagonal, with the cassette positioned in a vertical position within the student or instructor's breathing zone. The sampling pumps are run for 8 hours to simulate the average work shift. Carefully record start and stop times, student and instructor names, and the trade name on the sample cassette and chain of custody.

Note: If the duration of the exposure is less than 8 hours, the sampling pump should be worn during the activity only. At the close of the activity, the sampling pump and cassette assembly should be removed from the wearer and placed on a chair or stool close enough to the exposure source to simulate the position of the wearer during the activity. Tape the hose and cassette to the top of a chair or stool back. Place the chair or stool on or near the wearer's position during the activity. Ensure that the cassette is in a vertical position with the inlet facing down. The cassette inlet should be far enough away from the exposure source to simulate the wearer's breathing zone.

Sampling results and follow-up: Sampling results indicate that the exposures exceed the PEL. These results are representative of the exposures for this group of students and

instructor only. The center is required to provide the National Office with a copy of the exposure monitoring results and an exposure control program as described in Program Instruction No. 06-29. The center shall also provide a written description of engineering controls to be used to reduce exposure concentrations to or below the PEL. The center shall conduct exposure monitoring quarterly or every 3 months. As new students enter the program, be sure to include them in the medical monitoring and exposure monitoring program. Do not sample the same students from the initial monitoring; choose five different students for each monitoring until each student has been monitored within a 12-month period as described in Program Instruction No. 06-29, Attachment C, pages 8 and 9.

Scenario 4: Students exposed to multiple Cr(VI)-exposure locations

A Job Corps center has approximately 15 students participating in the auto body collision repair (non-structural analysis and damage repair) training, which also includes welding at the time of the initial sampling. The welding instruction does not take place in the same location as the other training components. The instructor and five students are selected for exposure monitoring. The students are expected to have the highest Cr(VI) exposure because they will be exposed to Cr(VI) from two separate sources, auto body paints and finishes, and welding fumes. The sampling pump should be attached to the wearer's belt. The hose and cassette assembly should be positioned across the back in a diagonal, with the cassette positioned in a vertical position within the student or instructor's breathing zone. The sampling pumps are run for 8 hours to simulate the average work shift. Carefully record start and stop times, student and instructor names, and the trade name on the sample cassette and chain of custody.

Note: If the duration of the exposure from multiple sources is less than 8 hours, the sampling pump should be worn while engaged in each activity. At the close of the last activity, the sampling pump and cassette assembly should be removed from the wearer. If feasible, the pump and cassette assembly should be placed on a chair or stool, where the exposure potential is greatest, and close enough to the exposure source to simulate the wearer's exposure during the activity. Tape the hose and cassette to the top of a chair or stool back. Place the chair or stool on or near the wearer's position during the activity. Ensure that the cassette is in a vertical position with the inlet facing down. The cassette inlet should be far enough away from the exposure source to simulate the wearer's breathing zone.

Sampling results and follow-up: Sampling results indicate that the exposures exceed the PEL. These results are representative of the exposures for this group of students and instructor only. The center is required to provide the National Office with a copy of the exposure monitoring results and an exposure control program as described in Program Instruction No. 06-29. The center shall also provide a written description of engineering controls to be used to reduce exposure concentrations to or below the PEL. The center

shall conduct exposure monitoring quarterly or every 3 months. As new students enter the program, be sure to include them in the medical monitoring and exposure monitoring program. Do not sample the same students from the initial monitoring; choose five more different students for each monitoring until each student has been monitored within a 12-month period as described in Program Instruction No. 06-29, Attachment C, pages 8 and 9.