



**COMPANY  
HEALTH & SAFETY  
PROGRAM**

Issue: A  
Date: 4/20/2009  
Rev: 2  
Date: 5/5/2014  
Authorized:

**Title: Hexavalent Chromium Compliance  
Program**

Section No. 21

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## **1.0 PURPOSE**

The purpose of this hexavalent chromium compliance program is to help ensure Power Process Piping, Inc. (PPP) worker exposure levels to hexavalent chromium are accurately assessed, and workers are not exposed to hexavalent chromium at levels that are above the Permissible Exposure Limit (PEL) of 5 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ). It is also the intent of PPP to be in compliance with 29 CFR 1910.1026 and 1926.1126.

## **2.0 SCOPE**

Where hexavalent chromium is present in concentrations above the Action Level or PEL, the applicable procedures described in this program will be implemented as required.

## **3.0 INDEX TO SECTION**

- 1.0 Purpose
- 2.0 Scope
- 3.0 Index to Section
- 4.0 Hexavalent Chromium Emitting Activities
- 5.0 Exposure Determination (with attached data records, Exhibits 'A', 'B' and 'C')
- 6.0 Means of Achieving Compliance **and Training**
- 7.0 Procedures for Multi-Employer Job Sites
- 8.0 MIOSHA Hexavalent Chromium Fact Sheet

## **4.0 HEXAVALENT CHROMIUM EMITTING ACTIVITIES**

Activities where PPP employees may be exposed to hexavalent chromium are as follows:

- Tungsten/inert gas (TIG) welding of stainless steel pipe;
- Coated electrode welding of stainless steel pipe;
- Abrasive disk grinding of stainless steel welds; and
- Abrasive disk cutting of stainless steel pipe.



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## **5.0 EXPOSURE DETERMINATION**

Exposure determinations have been made by appropriate monitoring of PPP employees performing typical activities as listed in **4.0**, with specified ventilation conditions and sample placement locations. Samples have been laboratory tested. To date, monitoring indicates that PPP employees are not typically exposed to concentrations of hexavalent chromium at or above the action level of  $2.5 \text{ ug/m}^3$ . These findings are supported by attached data reports: Exhibit 'A'; Exhibit 'B'; and Exhibit 'C'.

The PPP safety director shall be informed of all projects where there is potential for PPP employees to be exposed to hexavalent chromium. The safety director shall determine if employee activities are other than typical (exposure determination below the action level). If so, additional monitoring and testing shall be conducted to determine exposure levels and appropriate action shall be implemented.

## **6.0 MEANS OF ACHIEVING COMPLIANCE AND TRAINING**

The means PPP will use to achieve compliance with the OSHA/MIOSHA Chrome VI standards include:

- The applicable OSHA/MIOSHA standard and this program shall be reviewed by all affected employees;
- Training will be provided to all effected employees on chromium hazards, control methods and medical surveillance.
- Documentation of training shall be kept by each Job Site Superintendent; copies of trainings shall forwarded to PPP's Safety Director for record retention compliance.
- The standard, this program and all related monitoring data shall be made available to employees;
- All coated electrode (stick) welding of stainless steel at the PPP Plymouth, MI Fabrication Shop shall be performed utilizing portable filtering ventilators as used during monitoring that resulted in exposures below the PEL. Other S.S. stick welding shall be evaluated.
- During S.S. TIG welding activities, mechanical ventilation shall be utilized where feasible, even though such activities have proven typically not to expose employees above the PEL;
- Affected employees shall be directed to work up-wind of fumes and to use other work techniques to avoid exposure; and
- If PPP employee activities change (e.g., change in weld process and/or procedures) to where exposure limits may meet the action



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level or exceed the PEL, this program will be modified to protect employees and comply with government standards.

- Regulated areas must be established when an employee's exposure is or is expected to be in excess of the PEL. Regulated areas shall be marked with warning signs to alert employees. Access is restricted to "authorized persons".
- Respirators must be used when engineering controls and work practices cannot reduce employee exposure, during work operations where engineering controls and work practices are not feasible, and emergencies.
- Where exposure limits may meet the action level or exceed the PEL PPE will be provided when there is a hazard from skin or eye contact. Gloves, aprons, coveralls, goggles, foot covers etc. Contaminated PPE will be removed at the end of the work shift. PPP will clean, launder, repair and replace protective clothing as needed. All PPE will be provided at no cost to employees.
- All work surfaces shall be maintained as free as practicable of accumulation of chromium. All spills and releases of chromium shall be cleaned promptly. Methods of cleaning include HEPA filtered vacuums, dry or wet sweeping, shoveling or other methods to minimize exposure.
- Medical surveillance will be provided to employees who are exposed above the PEL for 30 days or more per year, exposed in an emergency or experiences signs and symptoms of the adverse health effects of Hexavalent Chromium (dermatitis, asthma, bronchitis, etc).
- Medical surveillance/evaluations will be provided at no cost to employees. Examinations will be performed by or under the supervision of a physician or other licensed health care professional.
- Medical records will be kept for a minimum of 30 years from last day of employment.
- Where hexavalent chromium is present in concentrations above the Action Level or PEL, Provisions will be made to provide change rooms for decontamination and ensure facilities prevent cross-contamination. Washing facilities shall be readily accessible for removing chromium from the skin. Workers must wash their hands and face or any other potentially exposed skin before eating, drinking or smoking

**7.0 PROCEDURES FOR MULTI-EMPLOYER JOB SITES**



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All contractors on job sites whose employees could be exposed to hexavalent chromium should receive a written notice from the owner or managing contractor. The notice shall include:

- The location of the hexavalent chromium;
- The materials in which hexavalent chromium is present;
- A brief summary of the hazards associated with exposure;
- A description of protective measures to be implemented; and
- A description of warning signs to be posted.

Contractors shall report to the owner or managing contractor any materials they are to use containing hexavalent chromium prior to bringing them on site.

**8.0 MIOSHA HEXAVALENT CHROMIUM FACT SHEET**

See attached [MIOSHA Fact Sheet](#).

**REVISION HISTORY**

Revision number	Description of change	Written by	Checked by	Effective date
1	Revised to meet current standards	George Newton	Safety	1/11/2011
	Program reviewed and Revision History added		GMN	4/16/2014
2	Section #6 revised to clarify PPE cost responsibilities.	George Newton		5/5/2014