just the FACTS

40 CFR Part 63.340
Chromium Electroplating and Anodizing Processes:
NESHAP Work Practice Standards

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The Federal National Emission Standard for Hazardous Air Pollutants (NESHAP) affects all facilities that use chromium electroplating or anodizing tanks, regardless of size. What your facility must do to comply with the NESHAP depends on the size of your operation, what type of process you use (hard, decorative, or anodizing), and what control technique you use.

This fact sheet provides a general overview of the federal work practice standards that chromium electroplating and anodizing operations must comply with; state and local regulatory agencies may have additional requirements.

Work Practice Standards

The NESHAP requires chromium operations to follow specific work practice standards to ensure that the control equipment you use to comply with the regulation is properly maintained. Poor maintenance may result in system degradation over time, and eventually lead to an increase in emissions. In most cases, the work practice standards must be performed quarterly. The requirements vary, depending on what type of control technique you are using. (If you operate a decorative chromium electroplating tank using a trivalent chromium bath and you can document on-going purchase and use of bath chemicals containing a wetting agent, you do not have to comply with any work practice standards.)

The tables on the reverse summarize these work practice standards for both the control equipment and the monitoring equipment.

O&M Plan

In addition to these work practice standards, you must also develop an operation and maintenance (O&M) plan for your facility. (Decorative chromium electroplating operations that use a trivalent chromium bath do not have to develop an O&M plan.) You must keep this plan on-site and make it available during an inspection. This O&M plan must include:

- descriptions of your control device and monitoring equipment
- a checklist to document the operation and maintenance of the equipment
- procedures for identifying malfunctions and implementing corrections
- procedures to follow to prevent equipment or process malfunctions due to poor maintenance
- a list of the work practice standards from the table on the back that apply to your facility

The SBAP can provide sample checklists to use as part of your O&M.

Need more facts?

For technical assistance and for help with permitting, call the Small Business Assistance Program (SBAP) of the New York State Environmental Facilities Corporation
(800) 780-7227

For information about regulations, compliance financing assistance, and assistance resolving regulatory difficulties, contact the Environmental Ombudsman Unit of Empire State Development
(800) 782-8369

Both offer free and confidential assistance to small businesses.

The New York State Small Business Stationary Source Technical and Environmental Compliance Assistance Program

Summary of Work Practice Standards for Control Techniques, Under the NESHAP

Control Technique	Work Practice Standards	Frequency
Packed-bed scrubber	Visually inspect the device to ensure there is proper drainage, no chromic acid buildup on the packed beds, and no evidence of chemical attack on the structural integrity of the device.	Quarterly
	Visually inspect the back portion of the chevron-blade mist eliminator to ensure that it is dry and there is no breakthrough of chromic acid mist.	Quarterly
	Visually inspect the ductwork from the tank or tanks to the control device to ensure that there are no leaks.	Quarterly
	Add fresh makeup water to the top of the packed bed.[a,b]	Whenever scrubber water is drained
Composite mesh-pad system	Visually inspect the device to ensure there is proper drainage, no chromic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the device.	Quarterly
	Visually inspect the back portion of the mesh pad closest to the fan to ensure there is no breakthrough of chromic acid mist.	Quarterly
	Visually inspect the ductwork from the tank or tanks to the control device to ensure that there are no leaks.	Quarterly
	Perform washdown of the composite mesh-pads in accordance with the manufacturer's recommendations.	Per manufacturer
Combined packed-bed scrubber/ composite mesh-pad system	Same as for composite mesh-pad system	Same as for composite mesh-pad system
Fiber-bed mist eliminator[c]	Visually inspect the fiber-bed unit and prefiltering device to ensure there is proper drainage, no chromic acid buildup in the units, and no evidence of chemical attack on the structural integrity of the devices.	Quarterly
	Visually inspect the ductwork from the tank or tanks to the control device to ensure there are no leaks.	Quarterly
	Perform washdown of fiber elements in accordance with the manufacturer's recommendations.	Per manufacturer
Other air pollution control device	To be proposed by the source for approval by the New York State Department of Environmental Conservation (DEC).	Proposed by the source for approval.

[a] If more than 50% of the scrubber water is drained (e.g., for maintenance purposes), makeup water may be added to the scrubber basin.

[b] For horizontal-flow scrubbers, top is defined as the section of the unit directly above the packing media such that the makeup water would flow perpendicular to the air flow through the packing. For vertical-flow units, the top is defined as the area downstream of the packing material such that the makeup water would flow countercurrent to the air flow through the unit.

[c] Work practice standards for the control device installed upstream of the fiber-bed mist eliminator to prevent plugging do not apply, provided the work practice standards for the fiber-bed unit are followed.

Summary of Work Practice Standards for Monitoring Equipment, Under the NESHAP

Monitoring Equipment	Work Practice Standards	Frequency
Pitot tube	Backflush with water, or remove from the duct and rinse with fresh water. Replace in the duct and rotate 180° to ensure that the same zero reading is obtained. Check pitot tube ends for damage. Replace pitot tube if it is cracked or shows other signs of fatigue.	Quarterly
Stalagmometer[a]	Follow manufacturer's recommendations.	Per manufacturer

[a] A *stalagmometer* is a device that is used to measure the surface tension of the bath.