

Working Group Meeting #4

**Proposed Amended
Rule (PAR) 1426 –
Emissions from
Metal Finishing
Operations**

South Coast AQMD

November 4, 2020

Zoom meeting link:

<https://scaqmd.zoom.us/j/94652310451>

Join via teleconference:

Dial-in Number: (669) 900-6833

Meeting ID: 946 5231 0451

Passcode: 654246



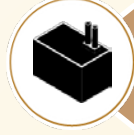
Agenda



Summary of Working Group #3



Responses to Comments



Rule Concepts: Building Enclosures



Rule Concepts: Recordkeeping and Reporting



Rule Concepts: Exemptions



Facility Survey – Additional Results



Next Steps



Summary of Working Group #3

- Rule concepts: Housekeeping
 - Approved cleaning methods
 - Routine cleaning
 - Cleaning spills
- Rule concepts: Best management practices
 - Tank solution containment
 - Tank labeling practices
 - Transport and storage
 - Prohibitions
- Initial responses from facility surveys

Response to Comments





Comment

Prohibition of Heating of Non-Chromium Tanks above 140°F Should Not be Based on Emissions Testing for Rule 1469

Staff Response:

- PAR 1426 will not include a prohibition for heated tanks
- PAR 1426 will focus on fugitive emissions
- Emissions from heated tanks is considered a point source
 - Chromium point source emissions at non-Rule 1469 facilities will be addressed under Proposed Rule 1426.1
 - Other metal toxic air contaminants will be addressed under Proposed Rule 1426.X



Comment

Concern for Potential Conflicts with Proposed Revisions to CARB's Chrome Plating ATCM and PAR 1426 Rule Development

Staff Response:

- South Coast AQMD rules that implement state Air Toxics Control Measures (ATCM) must be equal or more stringent than the corresponding ATCM
- Most of the overlap with CARB's Chrome Plating ATCM will be with Rule 1469 that regulates chromium emissions from plating and anodizing operations
- CARB currently does not have an ATCM that is similar to PAR 1426
- South Coast AQMD staff is following the rulemaking for CARB's Chrome Plating ATCM to identify possible differences between the revisions to the ATCM and PAR 1426 and Rule 1469

Overview of Proposed Amended Rule 1426

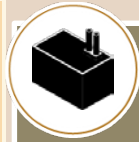
Proposed Amended Rule 1426



Housekeeping



Best Management Practices



Building Enclosures



Recordkeeping and Reporting

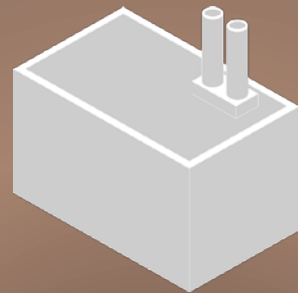


Exemptions

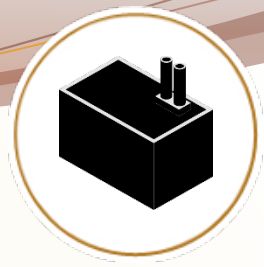
Presented rule concepts at last Working Group Meeting

Presenting rule concepts at today's Working Group Meeting

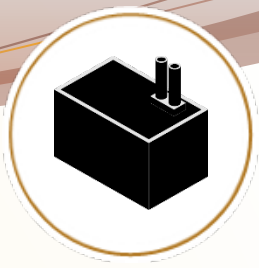
Rule Concepts: Building Enclosures



Building Enclosures – Introduction

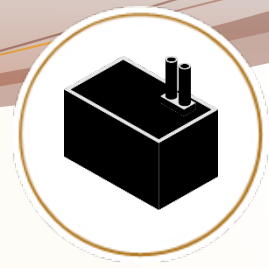


- Currently Rule 1426 has no requirements for building enclosures
- Building enclosure is a permanent building, structure, or portion of building enclosed with a floor, walls, and a roof
- Building enclosure requirements can minimize the release of fugitive emissions by:
 - Reducing cross drafts that create fugitive emissions and affect the collection efficiency of air pollution control devices
 - Eliminating openings for fugitive emissions to escape
- Due to similarities between Rule 1469 and PAR 1426 facilities, proposed building enclosure requirements are generally based on building enclosure requirements under Rule 1469



Comparison of Building Enclosure Requirements of PAR 1426 and Rule 1469

- Rule 1469 addresses both fugitive and point source emissions through building enclosure requirements
- PAR 1426 would not have building enclosure requirements to minimize point source emissions such as a specified percent allowable openings in a building enclosure or prohibiting roof openings above the tank
- PAR 1426 would incorporate the requirements from Rule 1469 to minimize fugitive emissions from tank solutions outside tanks

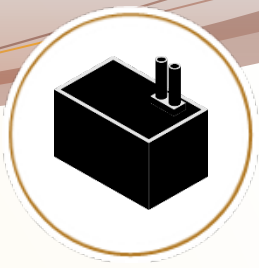


PAR 1426 Initial Recommendations

– Approach

- PAR 1426 will focus on three requirements for building enclosures
 - Operation inside building enclosure
 - Prohibit concurrent openings at opposite ends of building
 - Prohibit openings facing sensitive receptors
- Following slides will discuss these three requirements for PAR 1426 in more detail

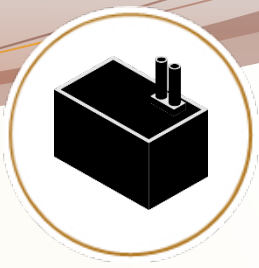
Requirements	Rule 1469 Anodizing and Plating (Hexavalent Chromium)	Rule 1426 Metal Finishing Operations (Multiple Metals)	Controlling Fugitive or Point Sources?	Will be included in PAR 1426?
Require operating in a building enclosure	Yes	No	Fugitive	Yes
Prohibit concurrently openings at opposite ends of building	Yes	No	Fugitive	Yes
Prohibit openings facing sensitive receptors	Yes	No	Fugitive	Yes
In lieu of APCD, building enclosures with 3.5% opening requirements	Yes	No	Point	No
Prohibit roof openings within 15 ft of tank	Yes	No	Point	No



PAR 1426 Initial Recommendations

– Building Enclosures

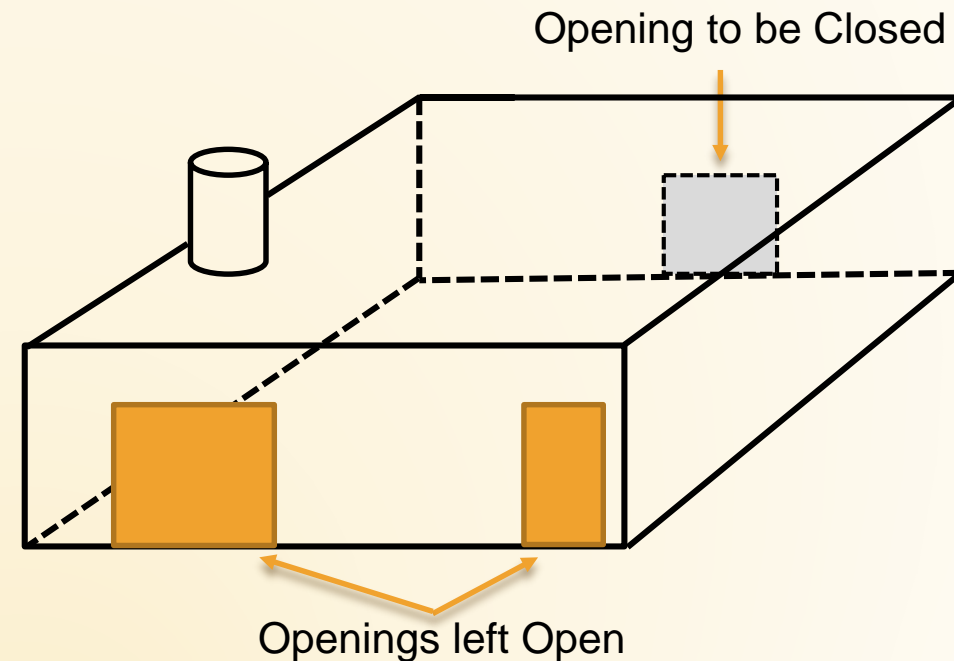
- Require process tanks to be operated within a building enclosure within six months of rule amendment
- Building enclosure openings required to be closed must use an acceptable method
 - A building enclosure opening is any permanent opening such as passages, doorways, bay doors, vents, roof openings, and windows
 - Acceptable methods to close openings
 - Door that automatically closes
 - Overlapping plastic strip curtains
 - Vestibule
 - Airlock system
 - Permanent construction to close opening

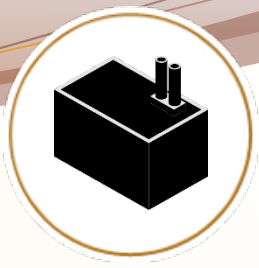


PAR 1426 Initial Recommendations

– Opening Restrictions

- Building enclosure openings on the exterior and on opposite ends of the building cannot be simultaneously open except for passage of equipment and people
- Allows for openings on one side to be open, provided it is not facing a sensitive receptor within a 1,000 feet

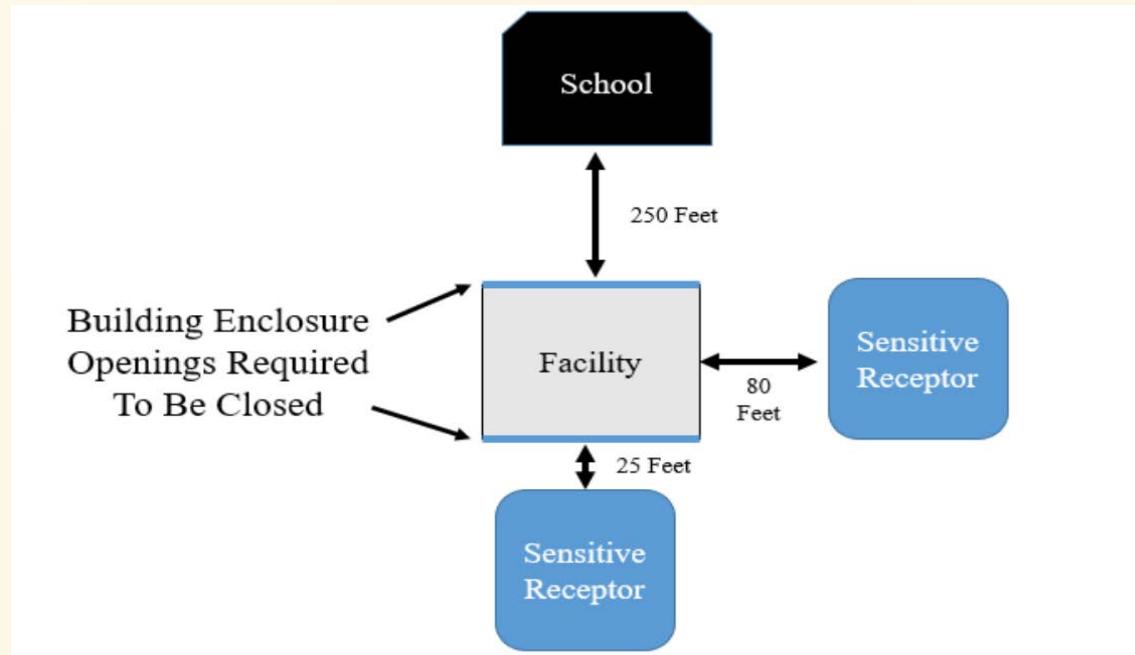




PAR 1426 Initial Recommendations

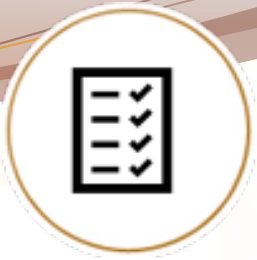
– Openings Near Sensitive Receptors

- Close building enclosure openings within 1,000 feet of the property lines that directly face and open toward nearest:
 - Sensitive receptor (excluding schools); and
 - School



Rule Concepts: Recordkeeping and Reporting





Recordkeeping – Existing Rule 1426 (e)

- Cumulative rectifier usage recordkeeping
- Lacks best management practice recordkeeping
- Need to amend to account for housekeeping changes
- Lacks records of amp-hr meter replacements
- Retain records for five years

Recordkeeping

(1) Monitoring Data Records

The owner or operator shall maintain records of all required monitoring data including the date the data are collected.

(A) Cumulative Rectifier Usage Records

The owner or operator of electroplating operations with dedicated ampere*hour meters shall record the actual cumulative rectifier usage for each calendar month, and the total for each calendar year.

(2) Housekeeping Measures

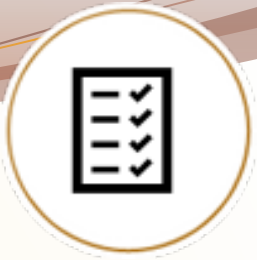
The owner or operator shall maintain records demonstrating compliance with housekeeping practices, as required by paragraph (c)(5), including the name of the person performing specified activities, the dates on which specific activities were completed, and records showing that wastes containing chromium, nickel, cadmium, lead or copper have been stored, disposed of, recovered, or recycled.

(3) Records Retention

All records shall be maintained for at least five years; at least the two most current years shall be kept on site.

Recordkeeping needs to be amended based on proposed changes to housekeeping and BMP

PAR 1426 Recordkeeping – Initial Recommendations



Retain Existing Requirements

1

Require cumulative rectifier usage records each month and sum of monthly totals expended to date for calendar year

2

Maintain records for five years, last two years on site

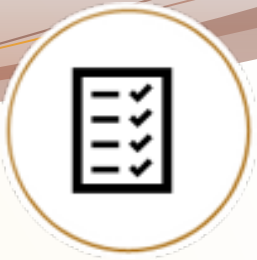
Proposed Amended Requirements

3

Maintain records related to housekeeping practices and best management practices

4

Require recordkeeping for replacement of amp-hr meter of process tanks



Reporting – Existing Rule 1426 (c)

- One-time data collection of 2003 year
- Follow up report for any changes 2004 year
- Data collection for the above reports

Amendments needed to remove 2003/2004 reporting and data collection rule language and add a Tank Inventory Report

Requirements

- (1) Initial Compliance Report
The owner or operator of a metal plating facility subject to this rule shall submit an initial compliance report to the Executive Officer by February 1, 2004 to report process and receptor information. The report shall contain the information identified in Appendix 1.
- (2) Compliance Report
The owner or operator of a metal plating facility subject to this rule shall submit a report to the Executive Officer by February 1, 2005 to report information on process activity and significant changes since the initial report was filed. The report shall contain the information identified in Appendix 2.
- (3) Data Collection
The owner or operator of a metal plating facility subject to this rule shall begin collecting data required under subparagraphs (c)(1) and (c)(2) within 60 days after May 2, 2003.



PAR 1426 Reporting

– Initial Recommendations (Reports)

Remove

- Initial Compliance Report for 2003 year
- Follow up report for changes in 2004 year
- Data collection for above reports

Add

- Submit an initial Tank Inventory Report and maintain a Tank Inventory Report on site for tanks with metals
 - Tank name and number
 - Permit and application number
 - Metal finishing operation (e.g. plating, electroless plating, stripping)
 - Metal and concentration (e.g. hexavalent chromium - 2000 ppm)

Rule Concepts: Exemptions





Exemptions – Inventory Submittals

- Existing Rule 1426
 - Facilities were required to submit emission inventory information pursuant to either Rule 1402 or Rule 1426
 - Submission of emission inventory information for Rule 1426 was only for the first few years after the date of adoption
- Recommendation
 - Remove provisions for emission inventory submittals
 - Provisions are obsolete and no longer needed

Exemptions – Potential Conflicts Between PAR 1426 and Rule 1469



- There are three general areas where staff looked at potential conflicts between PAR 1426 and Rule 1469:
 - Housekeeping requirements
 - Building enclosure requirements
 - Best management practices
- Staff compared the provisions under PAR 1426 and Rule 1469 to assess:
 - If there is a conflict between PAR 1426 and Rule 1469 requirements; or
 - If an additional requirement is appropriate for processes, areas, or tanks that do not have an equivalent requirement under Rule 1469
- If a conflict was identified, staff is recommending to build in exemptions to provide clarity to the operator



Exemptions – Evaluation of Building Enclosure Requirements

- PAR 1426 and Rule 1469 building enclosure requirements are different for Rule 1469 Tier I, II, and III tanks
- In general, the Rule 1469 building enclosure requirements are more stringent than PAR 1426

Rule 1469 Building Enclosure Requirements		
Rule 1469 Tanks	Building Enclosure?	Additional Building Enclosure Requirements?
Tier I Tank	Yes	No
Tier II Tank	Yes	Yes
Tier III Tank	Yes	Yes

Exemptions – Evaluation of Building Enclosure Requirements



- Tier II and III tanks are required to be in a building enclosure with additional requirements (e.g. cross-draft, 3.5% allowed opening)
- To eliminate any conflict, staff is recommending:
 - Buildings that house Rule 1469 Tier II or III tanks would be exempt from PAR 1426 building enclosure requirements
- Buildings that house Rule 1469 Tier I tanks would need to meet PAR 1426 building enclosure requirements

Exemptions – Evaluation of Housekeeping Requirements



- In general, PAR 1426 housekeeping requirements are equivalent or build upon the requirements in Rule 1469
- PAR 1426 would extend Rule 1469 housekeeping requirements to PAR 1426 tanks
- PAR 1426 would exempt housekeeping for processes, areas, or tanks where Rule 1469 and PAR 1426 requirements are the same

Exemptions – Evaluation of Best Management Practice Requirements



- In general, PAR 1426 best management practice requirements are equivalent or build upon the requirements in Rule 1469
- PAR 1426 requirements would extend on the requirements in Rule 1469 to include:
 - Tanks and areas not addressed in Rule 1469
 - Other areas
 - Non-chromium metals
- PAR 1426 would exempt best management practices for processes, areas, or tanks where Rule 1469 and PAR 1426 requirements are the same



PAR 1426 – Air Sparging

Existing Rule 1426

- Facilities are prohibited from air sparging except:
 - When tank is in use
 - One hour prior to parts being placed in tank
 - One hour after parts are removed from tank
- Staff is recommending to amend the air sparging restriction to be similar to Rule 1469

Rule 1426 (c)(4):

Air Sparging of Tanks Containing Chromic Acid

Tanks containing chromic acid shall not be air sparged when the tank is not in use, and shall only be air sparged up to one hour prior to parts being placed in the tank, and one hour after parts are removed from the tank.

Rule 1469 (d)(3):

Not air sparge a hexavalent chromium electroplating or chromic acid anodizing tank when electroplating or anodizing is not occurring, or while chromic acid is being added;

Recommendation

- Remove allowance for air sparging up to one hour prior to parts being placed in the tank and one hour after parts removed from the tank
- PAR 1426 air sparging restriction would not extend to non-chromium tanks (i.e. nickel, cadmium, lead, and copper)
- PAR 1426 would exempt Rule 1469 chromium electroplating and chromic acid anodizing tanks as the requirement already exists in Rule 1469



Exemptions – Best Management Practice Requirements for Tanks

PAR 1426 Best Management Practice Requirements	Equivalent Rule 1469 Requirement	Impact of PAR 1426 for Rule 1469 Facilities
Minimize drag-out	Yes – For Chromic Acid Anodizing and Chromium Electroplating Tank	Add PAR 1426 requirements for other chromium tanks and non-chromium tanks
Install barriers from tanks to separate polishing, buffing, and grinding		
Prohibit air sparging of tanks with chromic acid when not in operation	Yes – For Chromic Acid Anodizing and Chromium Electroplating Tank	Add PAR 1426 requirement for other chromium tanks
Spray rinsing	Yes – For Tier II and Tier III Tanks	Add PAR 1426 requirements for Tier I tanks and non-chromium tanks
Prohibit compressed near tanks		
Tank labeling	Yes – Within tank process area	Add PAR 1426 requirements for non-chromium tanks



Exemptions – Best Management Practice Requirements at a Rule 1469 Facility

PAR 1426 Best Management Practice Requirements	Equivalent Rule 1469 Requirement	Impact of PAR 1426 for Rule 1469 Facilities
Conduct buffing and grinding within enclosures	Yes – Applies to entire facility	Equivalent
Eliminate fabric flooring	Yes – Hexavalent Chromium	Add PAR 1426 requirements for non-hexavalent chromium metals
Storage of metals		
Use of closed containers during transport		
Store, dispose of, recover, or recycle metal-containing wastes in closed containers	None	Add requirement for PAR 1426 metals
Store equipment potentially contaminated with metals in closed containers or enclosed storage area when not in use		

PAR 1426 Exemptions

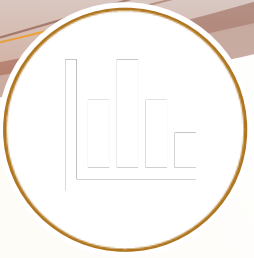


– Initial Recommendation Summary

- Remove exemptions for past Initial Compliance Report and Rule 1402 specified in Rule 1426 subdivisions (f) and (g)
- Exempt buildings that house Rule 1469 Tier II or III tanks from PAR 1426 building enclosure requirements
- Exempt housekeeping for processes, areas, or tanks where Rule 1469 and PAR 1426 requirements are the same
- Exempt best management practices for processes, areas, or tanks where Rule 1469 and PAR 1426 requirements are the same

Facility Survey – Additional Results





Additional results from facility surveys

- Approximately 350 potential PAR 1426 facilities
- Received 41 survey responses
- 3 survey responses received since last Working Group Meeting

Rule 1426 Survey Form Version 7/28/2020

A. Facility Information

A1. Facility ID	A2. Facility Name		
A3. Facility Contact	A4. Title		
A5. Phone #	A6. Email		
A7. Street Address	A8. City	A9. Zip Code	
A10. Mailing Address <input type="checkbox"/> Same as above or specify:	A11. City	A12. Zip Code	
A13. Industries Served <input type="checkbox"/> Aerospace <input type="checkbox"/> Military <input type="checkbox"/> Other	A14. Physical Size of Property (Square feet)		
A15. Operating Schedule* (e.g., 8 hr/day, 5 days/week)	A16. # Of Shifts*	A17. # of Employees at the Facility*	

A18. Of all employees, what percentage work on part-time basis (less than 35 hours per week)?* _____%

A19. Do you claim trade secret of data? (If Yes, see instructions below) YES NO
Under the California Public Records Act, disclosures are presumed public records and may be disclosed to a third party except unless limited information or exempt from disclosure is claimed in a timely and appropriate manner in the form's questionnaires or responses to the California Public Records Act. You must make such claim on the line of disclosure in the Record Sheet. "Yes" plus claim that data from an attachment system trade secret information.

B. Tank Process Area

B1. What material is used for walkways around tanks? (e.g., wood, steel, concrete, other (specify))	<input type="checkbox"/> YES <input type="checkbox"/> NO	Frequency drained:
B2. Does the walkway collect liquid (e.g., sumps)? If yes, how often is it drained?	<input type="checkbox"/> Automatic <input type="checkbox"/> Manual <input type="checkbox"/> Combination	<input type="checkbox"/> Cart <input type="checkbox"/> Rack <input type="checkbox"/> Hoist <input type="checkbox"/> Drip Trays
B3. Is the plating line automatic or manual?	<input type="checkbox"/> Other	
B4. Are treated parts transferred to other tanks not immediately adjacent to each other? If so, what method is used to capture drag-out during transfer?	<input type="checkbox"/> Rinse Tank <input type="checkbox"/> Spraying <input type="checkbox"/> Spraying with splash guards <input type="checkbox"/> Other	
B5. Describe how treated parts are rinsed? (Check all that apply)		



Next Steps

- Release initial draft of PAR 1426 before the next Working Group Meeting
- Next Working Group Meeting will focus on PAR 1426 rule language
- Public Workshop January 2021

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