



State of Ohio Environmental Protection Agency

STREET ADDRESS:

1800 WaterMark Drive
Columbus, OH 43215-1099

TELE: (614) 644-3020 FAX: (614) 644-2329

MAILING ADDRESS:

P.O. Box 1049
Columbus, OH 43216-1049

Re: Permit to Install
Stark County
Application No: 15-1275
NESHAP

CERTIFIED MAIL

May 14, 1997

MAY 19 1997

UNITED HARD CHROME CORPORATION
ROBERT R. HORGER, PRESIDENT
2202 GILBERT AVENUE, NE
CANTON, OH 44705

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Board of Review pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Board of Review within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Board. An appeal may be filed with the Environmental Board of Review at the following address:

Environmental Board of Review
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

Thomas G. Rigo, Manager
Field Operations & Permit Section
Division of Air Pollution Control

cc: US EPA
CANTON AIR POLLUTION CONTROL

George V. Voinovich, Governor
Nancy P. Hollister, Lt. Governor
Donald R. Schregardus, Director

**Permit to Install
Terms and Conditions**

Application No. 15-1275
APS Premise No. 1576050794
Permit Fee: \$200.00

Name of Facility: UNITED HARD CHROME CORPORATION

Person to Contact: ROBERT R. HORGER, PRESIDENT

Address: 2202 GILBERT AVENUE, NE
CANTON, OH 44705

Location of proposed source(s): 2202 GILBERT AVENUE
CANTON, OHIO

Description of proposed source(s):
HARD CHROME PLATING TANK #10 WITH MIST ELIMINATOR.

Date of Issuance: May 14, 1997

Effective Date: May 14, 1997

The above named entity is hereby granted a permit to install for the above described source(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described source(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described source(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency



Director

TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

CONSTRUCTION OF NEW SOURCES

The proposed source(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed source(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of Ohio Administrative Code (OAC) Rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons)

may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet applicable standards.

PERMIT TO INSTALL FEE

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 30 days of the effective date of this permit to install.

PUBLIC DISCLOSURE

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC Rule 3745-49-03.

APPLICABILITY

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

BEST AVAILABLE TECHNOLOGY

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

PERMIT TO OPERATE APPLICATION

A Permit to Operate application must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be filed no later than thirty days after commencement of operation.

SOURCE OPERATION AFTER COMPLETION OF CONSTRUCTION

This facility is permitted to operate each source described by this permit to install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws and regulations.

AIR EMISSION SUMMARY

The air contaminant sources listed below comprise the Permit to Install for UNITED HARD CHROME CORPORATION located in Stark County. The sources listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
P011	Hard chrome electroplating tank #10, 36"W x 144"L with 10,000 Amps per hour plating current; serviced by a composite mesh pad chromium mist eliminator, Chromax I. The Chromax I pollution control device also services existing emissions units P004, P008 and P009. The United Hard Chrome facility is a large, hard chromium electroplating facility and an area source under Title V for Hazardous Air Pollutants (HAPs).	Compliance with the National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks; use of composite mesh pad pollution control device.	40 CFR Part 63, Subpart N.	0.015 milligrams of total chromium per dry standard cubic meter (mg/dscm) of ventilation air 0.004 lb/hr total chromium 0.00097 TPY total chromium See the Additional Special Terms and Conditions

UNITED HARD CHROME CORPORATION

Application No. 15-1275

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<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
Existing Emissions Unit P004	Existing Hard Chromium Electroplating Tank #4; serviced by Chromax I which also services P011	Not applicable	40 CFR Part 63, Subpart N	0.015 milligrams of total chromium per dry standard cubic meter (mg/dscm) of ventilation air 0.0002 lb/hr total chromium 0.00052 TPY total chromium
Existing Emissions Unit P008	Existing Hard Chromium Electroplating Tank #8; serviced by Chromax I which also services P011	Not applicable	40 CFR Part 63, Subpart N	0.015 milligrams of total chromium per dry standard cubic meter (mg/dscm) of ventilation air 0.00027 lb/hr total chromium 0.00065 TPY total chromium
Existing Emissions Unit P009	Existing Hard Chromium Electroplating Tank #5; serviced by Chromax I which also services P011	Not applicable	40 CFR Part 63, Subpart N	0.015 milligrams of total chromium per dry standard cubic meter (mg/dscm) of ventilation air 0.00031 lb/hr total chromium 0.00073 TPY total chromium

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
New Emissions Unit P011 and existing Emissions Units P004, P008 and P009	For all the Emissions Units [new Emissions Unit P011 and existing Emissions Units P004, P008 and P009] serviced by Chromax I pollution control device operating simultaneously	For P011 - Compliance with the National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks; use of composite mesh pad pollution control device	40 CFR Part 63, Subpart N	0.00118 lb/hr total chromium; 0.00287 TPY total chromium

SUMMARY

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
Total Chromium	0.00287

WASTE DISPOSAL

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

MAINTENANCE OF EQUIPMENT

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

MALFUNCTION/ABATEMENT

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the Canton Air Pollution Control, 420 Market Ave. N. , City Hall, Canton, Ohio 44702-1544.

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

AIR POLLUTION NUISANCES PROHIBITED

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

CONSTRUCTION COMPLIANCE CERTIFICATION

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

A. Additional Emissions Limitations and/or Control Requirements

1. Compliance Date Requirement

This facility, in its construction & operation of emission unit P011, shall comply immediately upon startup with the applicable sections of 40 CFR, Part 63, Subpart N, the chrome plating NESHAP. This facility, in its operation of emissions units P004, P008, P009 shall have complied with the applicable sections of 40 CFR, Part 63, Subpart N by January 25, 1997 unless United Hard Chrome has entered into a federally enforceable compliance order under Section 113 of the Clean Air Act which contains a reasonable delayed compliance date for the chrome plating NESHAP. The compliance date for the chrome plating NESHAP is January 25, 1997.

2. Emissions units P004, P008, P009 & P011 shall be serviced by a composite mesh pad pollution control device, Chromax I, which shall be operated whenever any of the above emissions units are operated, except as indicated above.

3. The 0.015 mg/dscm emission limit shall apply to each of the above emissions units when it is operating and shall apply to any combination of the above emissions units which are operating except during periods of malfunction as noted in the following Additional Special Term & Condition or except as indicated in Additional Special Term and Condition A. 1.
4. The 0.015 mg/dscm emission limit shall apply during startup, normal operation, and shutdown of the emission units listed above. During periods of malfunction, this emissions limitation does not apply, but the work practice standards that address operation and maintenance required under 40 CFR, Subpart N, Section 63.342(f) and spelled out in the required Operation and Maintenance Plan (O & M), must be followed during such periods.
5. Work Practice Requirements
 - a. malfunctions shall be corrected as soon as practicable and in accordance with the O & M;
 - b. if found to be deficient, the O&M shall be revised to the satisfaction of the Ohio EPA, Division of Air Pollution Control or the Canton City Health Department, Air Pollution Control Division;
 - c. the prepared O&M shall be implemented no later than the compliance date and shall include all the applicable elements listed in 63.342 (f) (3) (i). If applicable, the O & M shall be incorporated into the Title V permit;
 - d. the O&M shall be revised if it fails to adequately address a malfunction event within 45 days of its occurrence. If the actions taken during the periods of malfunction were not those specified in the O&M, the operator facility shall record the alternate actions taken and report them to the Administrator of the United States Environmental Protection Agency, the Ohio EPA, Division of Air Pollution Control, and the Canton City Health Department, Air Pollution Control Division within 2 working days after commencing these actions. The report shall be followed by a letter, within 7 working days after the end of the event unless the facility makes alternative reporting arrangements, in advance with the Ohio EPA, Division of Air Pollution Control or the Canton City Health Department, Air Pollution Control Division;
 - e. the O&M shall be retained, to be available for inspection, for the life of the affected source or until it is no longer subject to this rule. If the

O&M is revised, the superseded versions shall be maintained for inspection for 5 years after each revision to the plan; and

- f. the standards that apply to chromic acid baths shall not be met by using a reducing agent to change the form of chromium from hexavalent to trivalent.

B. Operational Restrictions

1. The maximum flow rate of air & pollutants exiting emissions unit P011 and entering the composite mesh pad pollution control device, Chromax I, shall be 7,200 acfm.
2. The maximum flow rate of air & pollutants exiting emissions unit P004 and entering the composite mesh pad pollution control device, Chromax I, shall be 3,870 acfm.
3. The maximum flow rate of air & pollutants exiting emissions unit P008 and entering the composite mesh pad pollution control device, Chromax I, shall be 4,830 acfm.
4. The maximum flow rate of air & pollutants exiting emissions unit P009 and entering the composite mesh pad pollution control device, Chromax I, shall be 5,570 acfm.
5. The maximum flow rate of air & pollutants entering the composite mesh pad pollution control device, Chromax I, shall be 21,470 acfm.

C. Monitoring and/or Recordkeeping Requirements

1. Monitoring Requirements
 - a. this facility shall demonstrate continuous compliance with its emission limits by conducting monitoring according to the type of air pollution control technique used. This facility shall comply with requirements of section 63.343 (c) (1) of subpart N when using a composite mesh-pad system; and
 - b. after the initial performance test is completed, the facility shall monitor and record the pressure drop across the composite mesh pad system, Chromax I, once each day that an affected source is operating, to demonstrate continuous compliance, in accord with 40 CFR, 63.343 (c) (1) (ii).

2. Recordkeeping Requirements

- a. this facility shall fulfill all applicable record-keeping requirements of Subpart A as well as maintain all the applicable records/documents listed in section 63.346 (b) of Subpart N. All records shall be maintained for 5 years; and
- b. this facility shall comply with the recordkeeping requirements associated with the O&M as identified in 63.346 (b).

D. Reporting Requirements

1. This facility shall comply with all applicable reporting requirements of Subpart A as well as those described in section 63.347 (c) of subpart N, Initial Notification Reports; section 63.347 (d) of subpart N, Notification of Performance Test; section 63.347 (e) of subpart N, Notification of Compliance Status; section 63.347 (f) of subpart N, Reports of Performance Test Results; and section 63.347 (g) of subpart N, Ongoing Compliance Status Reports for Area Sources.
2. The facility shall comply with the reporting requirements associated with the O&M as identified in 63.347 (g).
3. The permittee shall submit an annual report of the total hours that each of emissions units P004, P008, P009 & P011 were operated in the previous calendar year. The annual report shall be submitted by January 31st of the current calendar year to the Ohio EPA, Division of Air Pollution Control and the Canton City Health Department, Air Pollution Control Division.
4. Unless otherwise specified, reports required by the Permit to Install shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702, the Ohio EPA, Division of Air Pollution Control, PO Box 1049, Columbus, Ohio 43216-1049, and to George Czerniak, Chief of Air Enforcement Branch, Region V, USEPA AE-17J, 77 W. Jackson Blvd., Chicago, IL 60604-3590.

E. Compliance Methods and Emission Testing Requirements

1. Compliance Methods

Compliance with the emission limitations in the Air Emission Summary and Part A of these Additional Special Terms and Conditions shall be determined in accordance with the following method(s):

Emissions Limitation

Applicable Compliance Methods

0.015 mg total chromium/
dscm of ventilation
air for Emissions Units
P004, P008, P009 and P011

Emissions Testing as per
Additional Special Terms and
Conditions E2

0.004 lb/hr total chromium
for Emission Unit P011

Emissions Testing as per
Additional Special Terms and
Conditions E2

0.00097 TPY total chromium
for Emission Unit P011

Emissions Testing as per
Additional Special Terms and
Conditions E2 and record-
keeping of the annual hours of
operation

0.0002 lb/hr and 0.00052 TPY
total chromium for Emissions
Unit P004

Same compliance method as the
pound/hour and TPY Emission
Limitation for total chromium
for Emissions Unit P011

0.0002 lb/hr and 0.00065 TPY
total chromium for Emissions
Unit P008

Same compliance method as the
pound/hour and TPY Emission
Limitation for total chromium
for Emissions Unit P011

0.00031 lb/hr and 0.00073 TPY
total chromium for Emissions
Unit P009

Same compliance method as the
pound/hour and TPY Emission
Limitation for total chromium
for Emissions Unit P011

0.00118 and 0.00287 TPY
total chromium for Emissions
Units P004, P008, P009 and
P011

Same compliance method as the
pound/hour and TPY Emission
Limitation for total chromium
for Emissions Unit P011

2. Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for emissions units P004, P008, P009 & P011 in accordance with the following requirements:

- a. the emission testing shall be conducted within 180 days after initial startup for emission unit P011, and within 180 days of January 25, 1997, for emissions units P004, P008 and P009;
- b. the emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate of 0.015 milligrams of total chromium per dry standard cubic meter of ventilation air for emissions units P004, P008, P009 & P011. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate of

0.0002 lb/hr of total chromium for emission unit P004, 0.0002 lb/hr of total chromium for emission unit P008, 0.00031 lb/hr of total chromium for emission unit P009 and 0.004 lb/hr. of total chromium for emission unit P011;

- c. the following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Method 306 or Method 306A from Appendix A of Part 63; or CARB Method 425 available from the California Air Resources Board, 1102 Q Street, Sacramento, CA 95814 if the conditions in 40 CFR 63.344 (c) (2) (i) through (iv) are met; or, an alternate test method meeting the requirements in 40 CFR 63.344 (c) (4), and the methods and procedures in 40 CFR 63.7;
- d. during the emission testing, the permittee shall determine the outlet chromium concentration and shall establish, as a site-specific operating parameter, the pressure drop across the composite mesh-pad system, which corresponds to compliance with the allowable mass emissions limitations described in (b) above in accord with 40 CFR 63.343 (c) (1). This pressure drop across the composite mesh-pad system shall be established for emissions units P004, P008, P009 and P011 operating alone and for emissions units P004, P008, P009 and P011 operating simultaneously;
- e. **not later than 30 days prior to the proposed test date(s), this facility shall submit an "Intent to Test" Notification to the Ohio EPA, Division of Air Pollution Control and to the Canton City Health Department, Air Pollution Control Division.**

Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Division of Air Pollution Control and the Canton City Health Department's refusal to accept the results of the emission test(s).

The "Intent to Test" Notification shall include but not be limited to the following proposed items:

1. describe in detail the test methods and procedures;
2. the emissions unit operating parameters;
3. the time(s) and date(s) of the test(s);
4. the person(s) who will be conducting the test(s);
5. section H of the "Intent to Test" Notification;
6. a listing of the Ohio EPA Emissions unit numbers with an identification of which operation, process, or activity corresponds

- to each Ohio EPA Emissions unit number for all operations, processes, or activities that could vent exhaust gases to the test stack;
7. a simple, non-dimensional sketch showing the ducting and stack arrangement including the relative position of all operations, processes, or activities that could vent exhaust gases to the test stack. The sketch shall also show the relative position of all organic compound control device(s), if any; and,
 8. a statement as to whether there are any other emissions, i.e. emissions not being emitted from the test stack but being emitted into the air at other location(s) besides the test stack, for each operation, process or activity that could vent exhaust gases to the test stack.
- f. not later than 60 days prior to the proposed test date(s), this facility shall submit a "Notification of Performance Test" to the Administrator in accord with 40 CFR 63.7. In addition, this "Notification of Performance Test" shall be submitted to the Ohio EPA, Division of Air Pollution Control, and to the Canton City Health Department, Air Pollution Control Division at the same time as to the Administrator;
- g. personnel from the Canton City Health Department, Air Pollution Control Division and/or the Ohio EPA Division of Air Pollution Control, shall be permitted to witness the test(s), examine the testing equipment and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment; and
- h. a comprehensive written report on the results of the emission test(s), including the items indicated in Section K of the "Intent to Test" Notification and the items in 40 CFR 63.344 (a)(1) through (a)(9) shall be signed by the person or persons responsible for the test(s) and submitted to the Canton City Health Department, Air Pollution Control Division and the Ohio EPA, Division of Air Pollution Control within 30 days following completion of the test(s).

F. Miscellaneous Requirements

1. Compliance Term for New or Reconstructed Facilities

(This is for New or Reconstructed Affected Sources that are Subject To, or Become Subject To, Subpart N of 40 CFR, Part 63.)

This facility shall not construct or reconstruct without submitting a notification of construction or reconstruction to the Administrator, the Ohio EPA, Division of Air Pollution Control and the Canton City Health Department, Air Pollution Control Division. This notification shall contain the appropriate information identified in section 63.345 (b) (2) and (3) of Subpart N and shall be submitted as soon as practicable before the commencement of such activity.

2. The owner or operator of an affected source subject to the requirements of 40 CFR, Part 63, Subpart N shall obtain a Title V permit from the Ohio Environmental Protection Agency, Division of Air Pollution Control. The timing of obtaining this Title V operating permit shall be in accord with the current regulations, rules and policies of the United States Environmental Protection Agency and the Ohio Environmental Protection Agency.