

Facility ID: 1318226096 Issuance type: Final State Permit To Operate

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part II" and before "A. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

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Facility ID: 1318226096 Emissions Unit ID: K001 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Binks paint spray booth with a dry filtration system	OAC rule 3745-31-05(A)(3) (PTI #13-00709) OAC rule 3745-21-09(U)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U). See A.2.a below.

2. Additional Terms and Conditions

- (a) Although the requirements of OAC rule 3745-21-09(U) allow for an exemption from applicable VOC content limitations, the daily usage exemption allowed in accordance with OAC rule 3745-21-09(U)(2)(e)(ii) is not part of the federally-approved SIP (for the Cleveland/Akron ozone area). The rule has been revised to reflect an exemption level (3 gallons per day) that will be acceptable to USEPA. The Ohio EPA has received confirmation of USEPA's acceptance in writing; therefore, the 3 gallons per day usage restriction will apply as the exemption level while OAC rule 3745-21-09(U) is being approved by USEPA, as well as after USEPA approval.

B. Operational Restrictions

1. The maximum daily coating usage for this emissions unit shall not exceed 3 gallons per day.
2. The permittee shall operate the dry filtration system whenever this emissions unit is in operation.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information on a daily basis for this emissions unit: the name and identification number of each coating employed; the volume, in gallons, of each coating employed; and the total volume, in gallons, of all of the coatings employed.
2. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.

D. Reporting Requirements

1. The permittee shall notify the Cleveland Division of Air Quality in writing of any daily record showing that this emissions unit employs more than the applicable maximum daily usage limit. This notification shall include a copy of such record and shall be sent to the Cleveland Division of Air Quality within 30 days after the exceedance occurs.
2. The permittee shall notify the Cleveland Division of Air Quality in writing of any daily record showing that the dry filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent within 30 days after the exceedance occurs.

E. Testing Requirements

1. None

F. Miscellaneous Requirements

1. None

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Part II - Special Terms and Conditions

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1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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paint spray booth equipped with two manual HVLP spray guns	OAC rule 3745-31-05(A)(3) (PTI # 13-3288)	70.9 lbs/day of VOC 12.94 tpy of VOC including cleanup
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The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U).
See A.2.a below.

OAC rule 3745-21-09(U)

2. Additional Terms and Conditions

- (a) Although the requirements of OAC rule 3745-21-09(U) allow for an exemption from applicable VOC content limitations, the daily usage exemption allowed in accordance with OAC rule 3745-21-09(U)(2)(e)(ii) is not part of the federally-approved SIP (for the Cleveland/Akron ozone area). The rule has been revised to reflect an exemption level (3 gallons per day) that will be acceptable to USEPA. The Ohio EPA has received confirmation of USEPA's acceptance in writing; therefore, the 3 gallons per day usage restriction will apply as the exemption level while OAC rule 3745-21-09(U) is being approved by USEPA, as well as after USEPA approval.

B. Operational Restrictions

1. The maximum daily coating usage for this emissions unit shall not exceed 3 gallons per day.
2. The permittee shall operate the dry filtration system whenever this emissions unit is in operation.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information on a daily basis for this emissions unit: the name and identification number of each coating employed; the VOC content of each coating and cleanup material, in pounds per gallon, as applied; the number of gallons of each cleanup material employed; the number of gallons of each coating employed; and the total VOC emissions from all coatings and cleanup materials employed, in pounds [summation of (b*d) for all coatings + summation of (b*c) for each cleanup material];
2. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.
3. The permittee shall collect and record the annual VOC emissions from all coatings and cleanup material employed (i.e., the sum of the daily VOC emissions for all coatings and cleanup materials recorded in C.1.e for the calendar year.)

D. Reporting Requirements

1. The permittee shall notify the Cleveland Division of Air Quality in writing of any daily record showing that this emissions unit employs more than the applicable maximum daily usage limit. This notification shall include a copy of such record and shall be sent to the Cleveland Division of Air Quality within 30 days after the exceedance occurs.
2. The permittee shall notify the Cleveland Division of Air Quality in writing of any daily record showing that the dry filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of the record and shall be sent within 30 days after the event occurs.
3. The permittee shall submit quarterly deviation (excursion) reports to the Cleveland Division of Air Quality for each day during which the VOC emissions from the coating and clean-up material exceeded 70.9 lbs of VOC emissions. This report shall be submitted in accordance with the general terms and conditions.

- 4. The permittee shall submit to the Cleveland Division of Air Quality an annual emissions report including the VOC emissions for both the coating line and clean-up material by January 31 of each year.

E. Testing Requirements

- 1. Compliance with the emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:
 Emission Limitation:
 70.9 lbs/day of VOC

 Applicable Compliance Method:
 Compliance with the above VOC limitations shall be determined by the recordkeeping requirements in C.1.e.
 Emission Limitation:
 12.94 tpy of VOC

 Applicable Compliance Method:
 Compliance with the above VOC limitations shall be determined by the recordkeeping in C.3.

F. Miscellaneous Requirements

- 1. None

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

- 1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
- 2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. Applicable Emissions Limitations and/or Control Requirements

- 1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Decorative chrome plating line with packed-bed scrubber/composite mesh pad (PBS/CMP) system	OAC rule 3745-31-05(A)(3) (PTI #13-02514)	0.000543 tpy of chromium emissions.
		There shall be no visible particulate emissions exhausted from the stack.
		There shall be no objectionable odors in any exhaust gases.
		The requirements of this rule also include compliance with the requirements of 40 CFR Part 63 - Subpart N.
	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	40 CFR Part 63 - Subpart N	The permittee shall control chromium emissions discharged to the atmosphere by not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.01 mg/dscm (4.4 x 10 E-6 gr/dscf).
	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 63, Subpart N.
	OAC rule 3745-15-07	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-31-05(A)(3).

- 2. **Additional Terms and Conditions**
 - (a) None

B. Operational Restrictions

1. At all times, including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain any chromium electroplating or anodizing tank, including associated air pollution control devices and monitoring equipment, in a manner consistent with the operation and maintenance plan required by these terms and conditions.
 2. Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the operation and maintenance plan.
 3. Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Cleveland Division of Air Quality, which may include, but is not limited to, monitoring results; review of the operation and maintenance plan, procedures, and records; and inspection of the emission unit. Based on this information, the Cleveland Division of Air Quality may require that the permittee make changes to the operation and maintenance plan if that plan:
 - does not address a malfunction that has occurred;
 - fails to provide for the operation of the emission units, the air pollution control techniques, or the control system and process monitoring equipment during a malfunction in a manner consistent with good air pollution practices; or
 - does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, or monitoring equipment as quickly as practicable.
 4. The permittee shall prepare an operation and maintenance plan to be implemented no later than the startup of the emission unit. The plan shall include the following elements:
 - The plan shall specify the operation and maintenance criteria for the affected source, the add-on air pollution control device (if such a device is used to comply with the emissions limits), and the process and control system monitoring equipment, and shall include a standardized checklist to document the operation and maintenance of the equipment.
 - The O/M plan shall incorporate the following work practice standards:
 - i. Visually inspect the device at least once per quarter to ensure there is proper drainage, no chronic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the device.
 - ii. Visually inspect at least once per quarter the back portion of the mesh pad closet to the fan to ensure there is no breakthrough of the chromic acid mist.
 - iii. Visually inspect at least once per quarter the ductwork from tank to the control device to ensure there are no leaks.
 - iv. Perform washdown of the composite mesh-pads in accordance with the manufacturer's recommendations. If a pitot tube is used for monitoring, the O/M plan shall incorporate the following work practice standards to be performed at least once per quarter:
 - i. Backflush with water, or remove from the duct and rinse with fresh water.
 - ii. Replace in the duct and rotate 180 degrees to ensure that the same zero reading is obtained.
 - iii. Check pitot tube ends for damage. Replace pitot tube if cracked or fatigued.
 - The plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur.
 - The plan shall include a systematic procedure for identifying malfunctions of process equipment, add-on air pollution control devices, and process and control system monitoring equipment, and for implementing corrective actions to address such malfunctions.
 - If the operation and maintenance plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the permittee shall revise the operation and maintenance plan within 45 days after such an event occurs.
 - If actions taken by the permittee during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan, the permittee shall record the actions taken for that event and shall report such actions within 2 working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within 7 working days after the end of the event, unless the permittee makes alternative reporting arrangements, in advance, with the Cleveland Division of Air Quality.
 - The permittee shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by the Cleveland Division of Air Quality for the life of the emissions unit.
 - If the operation and maintenance plan is revised, the permittee shall keep previous versions of the plan on record to be made available for inspection, upon request, by the Cleveland Division of Air Quality for a period of five years after each revision to the plan.
 - The permittee may use applicable standard operating procedure (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans to meet the operation and maintenance plan requirements as long as the alternative plans meet the requirements.
- C. Monitoring and/or Record Keeping Requirements**
1. Based on the initial performance test done on October 9 & 12, 1998, the permittee determined the outlet chromium concentration using the methods as described in the "Testing Requirements" section of this permit to comply with the emission limitations through the use of a composite mesh-pad system. The permittee established as a site-specific operating parameter for the pressure drop across the system, setting the value that corresponds to compliance with the applicable emission limitation, using the procedures in the "Testing Requirements" section of this permit.
 2. The permittee may conduct multiple performance tests to establish a range of compliant pressure drop values, or may set as the compliance value the average pressure drop measured over the three test runs of one performance test and accept + or - 1 inch of water column from this value as the compliant range.
 3. On and after the date on which the initial performance test is required to be completed under Section 63.7 of 40 CFR Part 63, Subpart A, the permittee shall monitor and record the pressure drop across the composite mesh-pad system once each day that the emission unit is operating. To be in compliance, the composite mesh-pad system shall be operated within + or - 1 inch of water column of pressure drop value established during multiple performance tests.

4. The permittee shall fulfill all recordkeeping requirements in the General Provisions to 40 CFR Part 63, according to the applicability of subpart A.
 5. The permittee also shall maintain the following records:
 - Inspection records for the add-on air pollution control device, if such a device is used, and monitoring equipment, to document that the inspection and maintenance required by the work practice standards of this permit have taken place. The record can take the form of a checklist and should identify the device inspected, the date of inspection, a brief description of the working condition of the device during the inspection, and any actions taken to correct deficiencies found during the inspection.
 - Records of all maintenance performed on the emissions unit, add-on air pollution control device, and monitoring equipment.
 - Records of the occurrence, duration, and cause (if known) of each malfunction of process, add-on air pollution control device, and monitoring equipment.
 - Records of actions taken during periods of malfunction when such actions are inconsistent with the operation and maintenance plan.
 - Other records, which may take the form of checklists, necessary to demonstrate consistence with the provisions of the operation and maintenance plan.
 - Test reports documenting results of all performance tests.
 - All measurements as may be necessary to determine the conditions of performance tests.
 - Records of monitoring data that are used to demonstrate compliance with the standard including the date and time the data are collected.
 - The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, add-on air pollution control device, or monitoring equipment.
 - The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the process, add-on air pollution control device, or monitoring equipment.
 - The total process operating time of the emissions unit during the reporting period.
 - All documentation supporting the notifications and reports as outlined in the Reporting Requirements of this permit and 63.9 and 63.10 of 40 CFR Part 63, subpart A; and
 - Records of the occurrence, duration, and cause (if known) of any objectional odors from any exhaust gases.
 - Records of actions taken during the periods of objectionable odors from the exhaust gases.
 6. All records shall be maintained for a period of five years.
- D. Reporting Requirements**
1. The permittee shall fulfill all reporting requirement as outlined in 40 CFR Part 63 Subpart A. These reports shall be made to the Cleveland Division of Air Quality and shall be sent by U.S. mail, fax or by another courier. Submittals sent by U.S. mail shall be postmarked on or before the specified date. Submittals sent by other methods shall be received by the Cleveland Division of Air Quality on or before the specified date.
 2. If a performance test is required, the permittee shall submit a Notification of Compliance Status to the Cleveland Division of Air Quality, signed by the responsible official who shall certify its accuracy, attesting to whether the affected emissions unit is in compliance. The notification shall list for each affected emissions unit:
 - The applicable emission limitations and the methods that were used to determine compliance with this limitation.
 - If a performance test is required, the test report documenting the results of the performance test, which includes the elements required in the Test Requirements section of this permit, including measurements and calculations to support special compliance provisions for multiple emissions units controlled by a common add-on air pollution control device.
 - The type and quantity of hazardous air pollutants emitted by the emissions unit reported in mg/dscm or mg/hr if the emissions unit is using the special provisions for multiple emissions units controlled by a common add-on air pollution control device (For emissions units not required to conduct a performance test, the surface tension measurement may fulfill this requirement.)
 - For each monitored parameter for which a compliant value was established, the specific operating parameter value, or range of values, that corresponds to compliance with the applicable emission limit.
 - The methods that will be used to determine continuous compliance.
 - A description of the air pollution control technique used for each emission point.
 - A statement that the permittee has completed and has on file the operation and maintenance plan as required by the work practice standards.
 - A statement by the owner or operator as to whether the emissions unit is in compliance.
 3. The permittee shall report to the Cleveland Division of Air Quality the results of any performance test conducted. The report shall be submitted no later than 90 days following the completion of the performance test, and shall be submitted as part of the notification of compliance status report required by this section.
 4. The permittee shall prepare an ongoing compliance status report annually (unless a request to reduce frequency of ongoing compliance status reports has been approved) to the Cleveland Division of Air Quality to document the ongoing compliance status of the emissions unit. This report shall include the following:
 - The company name and address of the emissions unit.
 - An identification of the operating parameter that is monitored for compliance determination.
 - The relevant emission limitation for the emissions unit, and the operating parameter value, or range of values, that correspond to compliance with this emission limitation as specified in the Notification of Compliance Status required by this section.
 - The beginning and ending dates of the reporting period.
 - The total operating time of the emissions unit during the reporting period.
 - A summary of operating parameter values, including the total duration of excess emissions during the reporting period as indicated by those values, the total duration of excess emissions expressed as a percent of the total emissions unit operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to process upsets, control equipment malfunctions, other known causes, and unknown causes.
 - A certification by a responsible official that the work practice standards in this permit were followed in accordance with the operation and maintenance plan for the emissions unit.
 - If the operation and maintenance plan required by this permit was not followed, an explanation of the reasons for not following the provisions, an assessment of whether any excess emission and/or parameter monitoring

- exceedances are believed to have occurred, and a copy of the reports required by the work practices in this permit.
- A description of any changes in monitoring, processes, or controls since the last reporting period.
 The name, title, and signature of the responsible official who is certifying the accuracy of the report.
 The date of the report.
 The report shall be completed annually and retained on site, and made available to the Cleveland Division of Air Quality upon request.
5. The permittee shall submit semiannual reports if the following conditions are met:
 - The total duration of excess emissions is one percent or greater of the total operating time for the reporting period; and
 - The total duration of malfunctions of the add-on air pollution control device and monitoring equipment is 5 percent or greater of the total operating time.
 6. Once the permittee reports an exceedance, ongoing compliance status reports shall be submitted semiannually until a request to reduce reporting frequency is approved.
 7. The Cleveland Division of Air Quality may determine on a case-by-case basis that the summary report shall be completed more frequently and submitted, or that the annual report shall be submitted instead of being retained on site, if these measures are necessary to accurately assess the compliance status of the emissions unit.
 8. The permittee who is required to submit ongoing compliance status reports on a semiannual (or more frequent) basis, or is required to submit its annual report instead of retaining it on site, may reduce the frequency of reporting to annual and/or be allowed to maintain the annual report on site if all of the following conditions are met:
 - For 1 full year (e.g., 2 semiannual or 4 quarterly reporting periods), the ongoing compliance status reports demonstrate that the affected emissions unit is in compliance with the relevant emissions limit.
 - The permittee continues to comply with all applicable recordkeeping and monitoring requirements of 40 CFR Part 63, subpart A and this permit.
 - The Cleveland Division of Air Quality does not object to a reduced reporting frequency. The frequency of submitting ongoing compliance status reports may be reduced if the following requirements are met:
 - i. The permittee notifies the Cleveland Division of Air Quality in writing of its intentions to make such a change. The Division of Air Quality may review information concerning the facility's previous performance history during the 5-year recordkeeping period prior to the intended change, or the recordkeeping period since the emissions unit's compliance date, whichever is shorter. Records subject to review include performance test results, monitoring data, and evaluations of the permittee's conformance with emission limitations and work practice standards. If the permittee's request is disapproved, the Cleveland Division of Air Quality will notify the permittee in writing within 45 days after receiving notice. This notification will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
 - ii. If monitoring data show that the emissions unit is not in compliance with the relevant emission limit, the frequency of reporting shall revert to semiannual, and the permittee shall state this exceedance in the ongoing compliance status report for the next reporting period. After demonstrating ongoing compliance with the relevant emission limit for another full year, the permittee may again request approval to reduce the reporting frequency.
 9. The permittee shall submit a notification of construction or reconstruction as soon as practicable before the construction or reconstruction has commenced to the Cleveland Division of Air Quality which includes the following:
 - the permittee's name, title, and address;
 - the address (i.e., physical location) or proposed address of the affected emissions unit if different from the permittee's;
 - a notification of intention to construct or make any physical or operational changes to an affected emissions unit that may meet or has been determined to meet the criteria for a reconstruction as defined in 40 CFR part 63.2;
 - an identification of 40 CFR Part 63, subpart N as the basis for the notification;
 - the expected commencement and completion dates of the construction or reconstruction;
 - the anticipated date of (initial) startup;
 - the type of process operation to be performed (decorative chromium electroplating);
 - a description of the air pollution control technique to be used to control emissions, such as preliminary design drawings and design capacity if an add-on air pollution control device is used; and
 - an estimate of emissions based on engineering calculations and vendor information on control device efficiency, expressed in units consistent with emissions limits of 40 CFR Part 63, subpart N. Calculations of emission estimates should be in sufficient detail to permit assessment of the validity of the calculations.
 10. If a reconstruction is to occur, the permittee shall submit as soon as practicable the following information to the Cleveland Division of Air Quality:
 - a brief description of the affected emissions unit and the components to be replaced;
 - a brief description of the present and proposed emission control technique;
 - an estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new emissions unit;
 - the estimated life of the affected emissions unit after the replacements; and
 - a discussions of any economic or technical limitations the emissions unit may have in complying with relevant standards or other requirements after proposed replacements. The discussion shall be sufficiently detailed to demonstrate to the Cleveland Division of Air Quality satisfaction that the technical or economic limitations affected the emissions unit ability to comply with the relevant standard and how they do so.
- E. Testing Requirements**
1. Performance test results shall be documented in complete test reports that contain the following information:
 - a brief process description;
 - sampling location description(s);
 - a description of sampling and analytical procedures and any modifications to standard procedures;
 - test results;
 - quality assurance procedures and results;
 - records of operating conditions during testing, preparation of standards, and calibration procedures;
 - raw data sheets for field sampling and field and laboratory analyses;
 - documentation of calculations; and

any other information required by the test method.

2. The test plan shall be made available to the Cleveland Division of Air Quality prior to testing, if required.
3. All monitoring equipment shall be installed such that representative measurements of emissions or process parameters from the affected emissions unit are obtained. For monitoring equipment purchased from a vendor, verification of the operational status of the monitoring equipment shall include execution of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system.

Specifications for differential pressure measurement devices used to measure pressure drop across a control system shall be in accordance with the manufacturer's accuracy specifications.
4. The permittee shall measure the pressure drop across the add-on air pollution control device in accordance with the following guidelines:

Pressure taps shall be installed at any of the following locations:

 - i. At the inlet and outlet of the control system. The inlet tap should be installed in the ductwork just prior to the control device and the corresponding outlet pressure tap should be installed on the outlet side of the control device prior to the blower or on the downstream side of the blower.
 - ii. On each side of the packed bed within the control system or on each side of each mesh pad within the control system.
 - iii. On the front side of the first mesh pad and back side of the last mesh pad within the control system.

Pressure taps shall be sited at locations that are:

 - i. As free from pluggage as possible and away from any flow disturbances such as cyclonic demisters.
 - ii. Situated such that no air infiltration at the measurement site will occur that could bias the measurement.

Pressure taps shall be constructed of either polyethylene, polybutylene, or other nonreactive materials. Nonreactive plastic tubing shall be used to connect the pressure taps to the device used to measure pressure drop.
Any of the following pressure gauges can be used to monitor pressure drop: a magnehelic gauge, an included manometer, or a "U" tube manometer.
Prior to connecting any pressure lines to the pressure gauge(s), each gauge shall be zeroed. No calibration of the pressure gauges is required.
5. The permittee shall measure the velocity pressure at the inlet to an add-on air pollution control device to establish the site-specific velocity pressure as follows:

Locate a velocity traverse port in a section of straight duct that connects the hooding on the plating tank or tanks with the control device. The port shall be located as close to the control system as possible, and shall be placed a minimum of 2 duct diameters downstream and 0.5 diameter upstream of any flow disturbance such as a bend, expansion, or contraction. If 2.5 diameters of straight duct work does not exist, locate the port 0.8 of the duct diameter downstream and 0.2 of the duct diameter upstream from any flow disturbance.

A 12-point velocity traverse of the duct to the control device shall be conducted along a single axis according to Method 2 (40 CFR part 60, appendix A) using an S-type pitot tube measurement of the barometric pressure and duct temperature at each traverse point is not required, but is suggested. Mark the S-type pitot tube as specified in Method 1 (40 CFR part 60, appendix A) with 12 points. Measure the velocity pressure (Δp) values for the velocity points and record. Determine the square root of the individual velocity point Δp values and average. The point with the square root value that comes closest to the average square root value is the point of average velocity. The Δp value measured for this point during the performance test will be used as the reference for future monitoring.
6. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:
0.01 mg/dscm (4.4×10^{-6} gr/dscf) of chromium emissions.

Applicable Compliance Method:
Compliance with the mass emission limitation shall be demonstrated by using Methods 1-4; and the following test methods:

 - i. Method 306 or Method 306A, "Determination of Chromium Emissions From Decorative and Hard Chromium Electroplating and Anodizing Operations" shall be used to determine the chromium concentration from decorative chromium electroplating tanks.
 - a. The sampling time and sample volume for each run of Methods 306 and 306A shall be at least 120 minutes and 1.7 dscm (60 dscf), respectively.
 - b. Methods 306 and 306A allow the measurement of either total chromium or hexavalent chromium emissions. Emissions units using chromic acid baths can demonstrate compliance with the emission limits by measuring either the total chromium or hexavalent chromium concentration. Hence, the hexavalent chromium concentration measured by these methods is equal to the total chromium concentration for the affected operations.
 - ii. The California Air Resources Board (CARB) Method 425 may be used to determine the chromium concentration from decorative chromium electroplating tanks and chromium anodizing tanks if the following conditions are met:
 - a. If a colorimetric analysis method is used, the sampling time and volume shall be sufficient to result in 33-66 micrograms of catch in the sampling train.
 - b. If an Atomic Absorption Graphite Furnace (AAGF) or Ion Chromatography (with a Post-column Reactor (ICPCR) analyses) is used, the sampling time and volume should be sufficient to result in a sample catch that is 5 to 10 times the minimum detection limit of the analytical method (i.e., 1.0 microgram per liter of sample for AAGF and 0.5 microgram per liter of sample for ICPCR).

c. A minimum of three separate runs must be conducted. The other requirements of Section 63.7 of 40 CFR Part 63, subpart A must also be met.

Emission Limitation:

0.000543 tpy of chromium emissions.

Applicable Compliance Method:

Compliance with the annual emission limitation shall be demonstrated by dividing the grain per dry standard cubic foot emission rate by 7,000 grains per pound and multiplying by the average gas flow rate (197,400 dry standard cubic feet per hour) and multiplying by 8,760 hours of operation per year and dividing by 2,000 pounds per ton.

Emission Limitation:

No visible particulate emissions from the exhaust stack.

Applicable Compliance Method:

If required, compliance with the above visible emission limitation shall be determined using USEPA Method 22 of 40 CFR, Part 60, Appendix A.

F. **Miscellaneous Requirements**

1. None