REGULATION 12 MISCELLANEOUS STANDARDS OF PERFORMANCE RULE 14 METAL RECYCLING AND SHREDDING OPERATIONS

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REGULATION 12 MISCELLANEOUS STANDARDS OF PERFORMANCE RULE 14 METAL RECYCLING AND SHREDDING OPERATIONS

12-14-100 GENERAL

- **12-14-101 Description:** The purpose of this Rule is to require the development of and compliance with Emissions Minimization Plans (EMP) designed to minimize the fugitive emissions of particulate matter and odorous substances from metal recycling facilities operating within the District.
- **12-14-102 Applicability:** This Rule is applicable to any person who owns or operates within the District a metal recycling facility with a metal throughput of 1000 tons or more per rolling twelve month.
- **12-14-103** Exemption, Regulation 12, Rule 13: Emissions Minimization Plan: The requirements of Section 12-14-401 shall not apply to any person subject to the requirements of Regulation 12, Rule 13: Metal Melting and Processing Operations, Section 12-13-401, Emissions Minimization Plan Requirements, provided the provisions of Section 12-13-401 are met and the EMP includes the operations listed under Section 12-14-402.
- **12-14-104 Limited Exemption, Annual Metal Throughput:** Neither the Standards (Sections 12-14-301 et seq.) nor the Administrative Requirements (Sections 12-14-401 et seq.) shall apply to any metal recycling facility with a metal throughput of 50,000 tons per year or less.

12-14-200 DEFINITIONS

- **12-14-201 Alloy**: A solid or molten mixture of two or more metals, or of one or more metals and nonmetallic elements. Examples of alloys include steel, brass, and bronze.
- **12-14-202** Auto Shredder Residue (ASR): The material that remains after scrapped items, such as automobiles and appliances, are shredded and for their metal content; and is a mixture containing scrap metals and non-metallic materials including, but not limited to, plastics, vinyl, sponge, foam, leather, textiles, rubber and glass also known as "fluff."
- **12-14-203 Free Liquid:** Material that fails the paint filter test by EPA Method 9095B, (revision 2, dated November 1994 Section 12-14-601) after accounting for water using a moisture determination test by ASTM Method D2216–05 (Section 12-14-601). If, after conducting a moisture determination test, if any portion of the material passes through and drops from the filter within the 5-minute test period, the material contains free organic liquids.
- **12-14-204 Fugitive Emissions:** For the purpose of this Rule only, the emissions of particulate matter and odorous substances to the atmosphere from man-made sources that are not released through a system of equipment that is designed to capture pollutants at the source, convey them through ductwork, and exhaust them using forced ventilation. Fugitive emissions include particulate emissions from scrap metal handling and management, shredding and segregation operation, wind-blown dust, and track-out.

- **12-14-205 Mercury Switch:** Each mercury-containing capsule or switch assembly that is part of a convenience light switch mechanism installed in a vehicle.
- **12-14-206 Metal:** For the purposes of this Rule, metals include ferrous (iron-based) metals and alloys and non-ferrous (non-iron-based) metals and alloys. Examples of metals include iron, steel, and other iron-based alloys; aluminum, copper, brass, bronze, gold, silver, zinc, tin, lead, platinum, nickel, chromium, cadmium, manganese, mercury, tungsten, and titanium and their alloys.
- **12-14-207 Metal Management:** The transport, receipt, collection, sorting, segregation, separation, compilation, crushing, shredding, and storage of metals, metal-containing materials and non-metallic materials at a metal recycling and shredding facility.
- **12-14-208 Metal Recycling Facility:** Any real property or structure that is used for the receipt, storage, segregation, or separation of scrap metal and mixed materials for reuse or resale.
- **12-14-209 Metal Throughput:** The weight of metal, in tons, collected at a metal recycling facility.
- **12-14-210 Odorous Substance:** Air contaminants or compounds that cause the degradation of air quality and that are discerned by the olfactory senses (sense of smell).
- **12-14-211 Particulate Matter**: Any material that is emitted as liquid or solid particles or gaseous material which becomes liquid or solid at the testing temperatures specified in the referenced test method with an aerodynamic diameter smaller than or equal to a nominal 10 microns, less any uncombined water.
- **12-14-212** Polychlorinated Biphenyl (PCB) Capacitors: A device that stores energy in a static electrical field and that utilizes a polychlorinated biphenyl (PCB) as the dielectric. PCBs (CAS number 1336-36-3) are composed of a biphenyl (two bonded benzene rings)
- **12-14-213 Responsible Manager**: An employee designated by the owner or operator of a facility to take actions required for compliance with this Rule on behalf of that facility.
- **12-14-214** Scrap Dryer / Delacquering Kiln / Decoating Kiln: A unit used primarily to remove various organic contaminants such as oil, paint, lacquer, ink, plastic, and/or rubber from aluminum scrap (including used beverage containers) prior to melting.
- **12-14-215 Scrap Metal:** Any metal or metal-containing material that has been discarded or removed from the use for which it was produced or manufactured and which is intended for reprocessing. "Scrap" does not include sprues, gates, risers, foundry returns, and similar material intended for remelting that has been generated at a facility as a consequence of casting or forming processes but has not been coated or surfaced with any material containing cadmium, arsenic, or nickel.
- **12-14-216 Shredding Operation:** The cutting and crushing of cars and other metallic items into fist-sized metal chunks or smaller that are screened and subsequently separated by machinery that drives rotors that spin hammers.
- **12-14-217 Sorting Operations:** The removal of various contaminants using a scrap dryer, delacquering kiln, or decoating kiln.
- 12-14-218 Visible Emissions: Emissions which are visually perceived by an observer. Restrictions on visible emissions in District Regulations are expressed as numbers on the Ringelmann Chart as published by the United States Bureau of Mines. Emissions may not be as dark or darker than the designated number on the Ringelmann Chart, or cannot be of such opacity as to obscure a trained observer's view to an equivalent or greater degree. Where the presence of uncombined water is the only reason for the failure of an emission to meet District limitations, those limitations shall not apply. (See District Regulation 1: General Provisions &

12-14-300 STANDARDS

12-14-301 Compliance with Emissions Minimization Plan: Effective 90 days from the date that the Emissions Minimization Plan (EMP) is approved by the APCO pursuant to Section 12-14-405.5, the owner or operator of a metal recycling facility shall operate the facility at all times in accordance with its approved EMP.

12-14-400 ADMINISTRATIVE REQUIREMENTS

- **12-14-401 Emissions Minimization Plan Requirements:** The owner or operator of any metal recycling facility subject to the requirements of this Rule shall develop and submit to the APCO in accordance with Sections 12-14-402 through 406 an Emissions Minimization Plan (EMP) that details management practices, measures, equipment and procedures that are employed or will be implemented to minimize fugitive emissions of particulate matter (PM) and odorous substances.
- **12-14-402** Operations Subject to the EMP: The EMP shall address the management of fugitive emissions from all of the following operations that are conducted or areas located at, and the materials that handled at, the metal recycling facility:
 - **402.1** Roadways and other Trafficked Surfaces;
 - 402.2 Scrap Metal:
 - 2.1 Handling and storage Operations,
 - 2.2 Crushing Operations,
 - 2.3 Sorting Operations,
 - 2.4 Shredding Operations;
 - 402.3 Receipt of Scrap Metal from Providers;
 - **402.4** Auto Shredding Residue (ASR) management;
 - 402.5 Lead Batteries;
 - 402.6 Polychlorinated Biphenyl (PCB) Capacitors;
 - 402.7 Mercury Switches;
 - 402.8 Sodium Azide Canisters.
- **12-14-403 Contents of the EMP:** The owner of operator of the metal recycling facility subject to Section 12-14-401 shall prepare a complete and accurate EMP that details the management practices, measures, equipment and procedures that are employed or are scheduled to be implemented to minimize fugitive emissions of particulate matter and odorous substances for all operations subject to the EMP:
 - 403.1 Technical Data: The EMP shall include:
 - 1.1 A detailed process flow diagram that clearly and accurately indicates all operations and flows of materials at the facility, starting from the point of material receipt from offsite to the achievement of the final product. The process flow diagram shall identify all monitoring and control equipment associated with operations that minimize particulate and odorous emissions, including, but not limited to scrubbers, cyclones, baghouses, and baghouse leak detectors. All abatement and control devices should be identified using District Source Numbers according to the District Permit where applicable.
 - 1.2 A facility layout/site plan that clearly and accurately indicates the locations of all items identified in Section 12-14-403.1.1, including all equipment and permitted and exempt sources at the facility, all building walls, partitions, doors, windows, vents, and openings, and indicate all areas that have particulate matter or odor abatement, and any other source(s) that may contribute to particulate and/or odorous emissions. All metal recycling equipment shall be labeled using

- District Source Numbers according to the District Permit where applicable:
- **403.2** Fugitive Emissions Reductions Previously Realized: A description of the equipment, processes and procedures installed or implemented within the last five years to reduce fugitive emissions.
- **403.3** Schedule for the Implementation of the EMP Elements: A listing of each of the following:
 - 3.1 The specific elements of the EMP that are in place as of the initial date of the submission of the EMP to the APCO for approval; and
 - **3.2** The specific elements of the EMP that will be implemented following APCO approval of the EMP and the implementation schedule for each of those specific elements.
- **12-14-404** Compliance Schedule for the EMP: The owner or operator of any metal recycling facility required to develop an EMP submit a complete and accurate EMP in accordance with the following schedule:
 - **404.1 Submission of the Proposed EMP:** Submit the EMP to the APCO no later than [six months following adoption of this Rule] or no later than the last day of the sixth month after becoming subject to the requirements set forth in Section 12-14-401. The Responsible Manager shall certify the EMP as complete and accurate and sign it. The APCO may require the owner or operator to submit additional information to assure the completeness and accuracy of the EMP to ensure the minimization of fugitive emissions of particulate matter, visible emissions, and odorous substances.
 - **404.2 Completeness Determination:** Within 30 days of receipt of the EMP, the APCO will notify the owner or operator in writing whether the EMP is complete. The EMP is complete if the APCO determines that it includes all of the information required by Sections 12-13-402 and 403. If the APCO determines that the proposed EMP is not complete, the notification will specify the basis for this determination and the required corrective action.
 - **404.3 Corrective Action:** Upon receipt of such notification, the owner or operator shall correct the identified completeness deficiencies and resubmit the proposed EMP within 30 days. If the APCO determines that the owner or operator failed to correct any completeness deficiency identified in the notification, the APCO will reject the EMP as incomplete.
- **12-14-405** Review of, Comments on, Recommendations to and Approval of the EMP: The procedures for determining whether each EMP meets the applicable requirements of this Rule are as follows:
 - **405.1 EMP Receipt and File Creation:** Upon receipt of an EMP from a facility subject to the requirements of Section 12-14-401, the APCO shall create a file that shall include the EMP as received, the results of the completeness determination, any comments received during the public comment period, and any recommendations made by the APCO.
 - **405.2 Public Comment:** The APCO shall make the complete EMP (with exception of facility-designated confidential information) available for public comment for 30 days. The APCO will collect and forward all public comments to the facility for consideration at the end of the 30-day comment period.
 - **405.3 APCO Recommendations:** Within 30 days of the close of the public comment period, the APCO shall review the draft EMP and the public comments and notify the owner or operator of the APCO's recommendations, if any, for additional processes and procedures to further reduce or prevent fugitive emissions from the metal recycling facility, based on technical and economic feasibility.
 - **405.4** Revision and Final Submission of the EMP: Within 30 days of receipt of the APCO recommendations, the owner or operator shall:
 - **4.1** Accept all of the APCO's recommendations and submit the certified EMP with the incorporated recommendations to the APCO; or

- **4.2** Specify the APCO recommendations that are accepted, and submit the certified EMP with the incorporated APCO recommendations to the APCO and provide a basis for the rejection of any the APCO's recommendations.
- **405.5 Approval of the EMP**: With 30 days of the receipt of the final submission of the EMP, the APCO will review the EMP.
 - i.1 If the APCO determines that the EMP does not meet the requirements of Sections 12-14-402, 403, 405.3 and 405.4, the APCO will notify the owner or operator in writing. The notification will specify the basis for this determination. Upon receipt of such notification, the owner or operator shall correct the identified deficiencies and resubmit the EMP to the APCO within 30 days. If the APCO determines that the owner or operator failed to correct any deficiency identified in the notification, the APCO will disapprove the EMP.
 - 5.2 If the APCO determines that the EMP meets the requirements of Section 12-14-402, 403, 405.3 and 405.4, the APCO will approve the EMP and shall provide written notification to the owner or operator. This period may be extended if necessary to comply with state law.
- **12-14-406 Designation of Confidential Information:** With each submission of an EMP or any portions thereof or revisions thereto, the owner or operator of a metal recycling facility subject to Section 12-14-401 shall designate as confidential any information claimed to be exempt from public disclosure as trade secrets or by other provisions of law. If a document is submitted that contains information designated confidential in accordance with this Section, the owner or operator shall provide a justification for this designation and shall submit a separate copy of the document marked as "public copy," with the information claimed to be confidential redacted.
- **12-14-407** Reporting Requirements for Planned Fugitive Emissions Reductions and Prevention Measures: The owner of operator of a metal recycling facility subject to Section 12-14-401 shall report to the APCO no later than two years following the adoption of the Rule a description of the equipment and all feasible processes and procedures to be installed or implemented within the next five years to reduce or prevent fugitive emissions, that are not a part of the EMP pursuant to Section 12-14-403.2 with a schedule of implementation.
- **12-14-408 Five-Year Review of the EMP:** The owner or operator of a metal melting and processing facility subject to the requirements of Section 12-14-401 shall update the APCO-approved EMP and submit the updated EMP to the APCO for review within 90 days of the five-year anniversary date of the approval of the original EMP and within 90 days of every five-year anniversary thereafter. Review and approval of the EMP will follow the schedule in Sections 12-14-402 and 403. The updated EMP must be certified by a Responsible Manager.
- **12-14-409** Review and Modification of the EMP: Within 90 days of any of the following events:
 - **409.1** The owner or operator violated Section 12-14-301; or
 - **409.2** The APCO determined that the owner or operator violated Permit to Operate conditions or District Rules 2-1 and 6-1, State or federal air quality regulations; or
 - **409.3** The owner or operator commenced a facility operation, process, equipment, or throughput change that required a modification of the Permit to Operate for that operation, process, equipment or throughput change;

the APCO may notify the owner or operator of a metal recycling facility that is subject to the requirements of Section 12-14-401 to review and submit a complete and accurate revised EMP to the APCO for approval in accordance with schedule set forth in Section 12-14-404.

12-14-500 RECORDS AND MONITORING

- **12-14-501 Recordkeeping Requirements:** The owner or operator of any metal recycling facility subject to the requirements of this rule shall maintain all records that are necessary to determine compliance with the requirements of Sections 12-14-301 and 401 for a minimum of five years and make them available to the APCO or a designee of the APCO upon request the monthly throughput of each type of metal processed, including metal shredded or recycled and the basis for each throughput determination.
- **12-14-502** Annual Scrap Metal Throughput: The owner or operator of any metal recycling facility subject to the requirements of this rule shall maintain records of the annual throughput of scrap metal recycled and the basis for the throughput determination.

12-14-600 MANUAL OF PROCEDURES

12-14-601 Methods for Determining the Presence of a Free Liquid: The presence of a free liquid shall be determined using US EPA Method 9095B, Revision 2, November 1994 after accounting for water using a moisture determination test by ASTM Method D2216-05.