Secondary Aluminum NESHAP Applicability Flowcharts

On the following pages, there are flowcharts that are intended to assist you in determining whether you own or operate any equipment that is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Aluminum Production Facilities.

- Begin by answering the first question in the diamond in the upper left corner of diagram 1.
- Follow the arrows corresponding to your answer to each question in order to determine whether the rule applies to your facility.
- For each different type of equipment that you own or operate, you should begin again at the top of diagram 1 to determine whether that piece of equipment is subject to the rule.
- If you operate a secondary aluminum processing unit (SAPU), you will be directed to diagram 2.
- If you operate an aluminum die casting facility, aluminum foundry, or aluminum extrusion facility, you will be directed to diagram 3.
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- Following diagrams 1-3 is a glossary of terms taken directly from the rule to assist you in answering the questions in the flowcharts.

Note: This guidance is based on the final version of the rule as published in the Federal Register on March 23, 2000 (65 FR 15689) as well as amendments published on September 24, 2002 (67 FR 59787) and December 30, 2002 (67 FR 79808). If you are unclear on whether your facility is subject to the rule, read the rule and consult your permitting agency.



1. General Applicability Flow Diagram for Secondary Aluminum Production Facilities



3. Applicability Flow Diagram for Aluminum Die Casters, Aluminum Foundries, and Aluminum Extruders



Glossary

- <u>Aluminum scrap shredder</u>: a unit that crushes, grinds, or breaks aluminum scrap into a more uniform size prior to processing or charging to a kiln or furnace.
- <u>Clean charge</u>: furnace charge materials including molten aluminum; T-bar; sow; ingot; billet; pig; alloying elements; aluminum scrap known by the owner or operator to be entirely free of paints, coatings, and lubricants; uncoated/unpainted aluminum chips that have been thermally dried or treated by a centrifugal cleaner; aluminum scrap dried at 343°C (650°F) or higher; aluminum scrap delacquered/decoated at 482°C (900°F) or higher; and runaround scrap.
- <u>Customer returns:</u> any aluminum product which is returned by a customer to the aluminum company that originally manufactured the product prior to resale of the product or further distribution in commerce, and which contains no paint or other solid coatings (i.e., lacquers).
- <u>Dross-only furnace</u>: a furnace, typically of rotary barrel design, dedicated to the reclamation of aluminum from dross formed during melting, holding, fluxing, or alloying operations carried out in other process units.
- **Group 1 furnace:** a furnace of any design that melts, holds, or processes aluminum that contains paint, lubricants, coatings, or other foreign materials with or without reactive fluxing, or processes clean charge with reactive fluxing.
- <u>Group 2 furnace</u>: a furnace of any design that melts, holds, or processes only clean charge and that performs no fluxing or performs fluxing using only nonreactive, non-HAP-containing/non-HAP-generating gases or agents.
- <u>In-line fluxer</u>: a device exterior to a furnace, located in a transfer line from a furnace, used to refine (flux) molten aluminum.
- <u>Internal scrap</u>: all aluminum scrap regardless of the level of contamination which originates from castings or extrusions produced by an aluminum die casting facility, aluminum foundry, or aluminum extrusion facility, and which remains at all times within the control of the company that produces the castings or extrusions.
- **<u>Rotary dross cooler</u>**: a water-cooled rotary barrel device that accelerates cooling of dross.
- Runaround scrap: scrap materials generated on-site by aluminum casting, extruding, rolling, scalping, forging, forming/stamping, cutting, and trimming operations and that do not contain paint or solid coatings. Uncoated/unpainted aluminum chips generated by turning, boring, milling, and similar machining operations may be clean charge if they have been thermally dried or treated by a centrifugal cleaner, but are not considered to be runaround scrap.
- <u>Scrap dryer/delacquering kiln/decoating kiln</u>: 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.
- <u>Secondary aluminum processing unit (SAPU)</u>: an existing SAPU means all existing group 1 furnaces and in-line fluxers within a secondary aluminum production facility; a new SAPU means any combination of group 1 furnaces or in-line fluxers which are simultaneously constructed after February 11, 1999.
- Secondary aluminum production facility: any establishment using clean charge, aluminum scrap, or dross from aluminum production, as the raw material and performing one or more of the following processes: scrap shredding, scrap drying/delacquering/scoating, thermal chip drying, furnace operations (i.e., melting, holding, sweating, refining, fluxing, or alloying),

recovery of aluminum from dross, in-line fluxing, or dross cooling. A secondary aluminum production facility may be independent of part of a primary aluminum production facility.

- <u>Sweat furnace</u>: a furnace used exclusively to reclaim aluminum from scrap that contains substantial quantities of iron by using heat to separate the low-melting point aluminum from the scrap while the higher-melting point iron remains in solid form.
- <u>Thermal chip dryer</u>: a device that uses heat to evaporate oil or oil/water mixtures from upainted/uncoated aluminum chips. Pre-heating boxes or other dryers which are used solely to remove water from aluminum scrap are not considered to be thermal chip dryers for purposes of this rule.