

15A NCAC 02D .0529 FLUORIDE EMISSIONS FROM PRIMARY ALUMINUM REDUCTION PLANTS

(a) For the purpose of this Rule, the following definitions apply:

- (1) "Fluoride" means elemental fluorine and all fluoride compounds as measured by the methods specified in 15A NCAC 02D .2616 or by equivalent or alternative methods approved by the Director or his delegate. The Director may approve equivalent or alternative methods on an individual basis for sources or pollutants if equivalent or alternative methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
- (2) "Prebake cell" is an aluminum reduction pot which uses carbon anodes that are formed, pressed, and baked prior to their placement in the pot.
- (3) "Primary aluminum reduction plant" means any facility manufacturing aluminum by electrolytic reduction.

(b) This Rule shall apply to prebake cells at all primary aluminum reduction plants not subject to Rule .0524 of this Section.

(c) An owner or operator of a primary aluminum reduction plant subject to this Rule shall not cause, allow, or permit the use of the rebake cells unless:

- (1) 95 percent of the fluoride emissions are captured; and
- (2) 98.5 percent of the captured fluoride emissions are removed before the exhaust gas is discharged into the atmosphere.

(d) The owner or operator of a primary aluminum reduction plant subject to this Rule shall:

- (1) ensure that hood covers are in good repair and positioned over the prebake cells;
- (2) minimize the amount of time that hood covers are removed during pot working operations;
- (3) if the hooding system is equipped with a dual low and high hood exhaust rate, use the high rate whenever hood covers are removed and return to the normal exhaust rate when the hood covers are replaced;
- (4) minimize the occurrence of fuming pots and correct the cause of a fuming pot as soon as practical; and
- (5) if the tapping crucibles are equipped with hoses which return aspirator air under the hood, ensure that the hoses are in good repair and that the air return system is functioning properly.

*History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. June 1, 1981;
Amended Eff. June 1, 2008; July 1, 1988; January 1, 1985.*