



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
RESEARCH TRIANGLE PARK, NC 27711

JUN 3 2004

OFFICE OF  
AIR QUALITY PLANNING  
AND STANDARDS

**MEMORANDUM**

SUBJECT: Request to Approve CARB Method 428 as an Alternative to EPA Method 23

FROM: Conniesue B. Oldham, Ph.D., Group Leader  
Source Measurement Technology Group (D205-02)

*Robin L. Seyall for CBO*

TO: Stanley Tong  
Rulemaking Office (Air-4), Region IX

You notified us by your memorandum dated April 23, 2004, that the EPA Region IX Office had received a request to allow secondary aluminum plants in California to use California Air Resources Board (CARB) Method 428 as an alternative to EPA Method 23 (40 CFR 60, Appendix A) in determining compliance with the dioxin/furan emission limit in 40 CFR 63, Subpart RRR, "National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production." Both Method 23, "Determination of Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans from Stationary Sources", and CARB Method 428, "Determination of Polychlorinated Dibenzo-p-Dioxin, Polychlorinated Dibenzofuran, and Polychlorinated Biphenyl Emissions from Stationary Sources", are designed to measure dioxins/furans. There are many minor differences between the two methods, but the two major differences are as follows:

1. CARB Method 428 requires the tester to recover the contents of the impingers and analyze them for dioxins/furans while EPA Method 23 does not.
2. CARB Method 428 allows the analyst the alternative of identifying and measuring the dioxins/furans using either low resolution or high resolution mass spectrometry while EPA Method 23 requires the use of high resolution mass spectrometry.

Besides the requirements of Subpart RRR to use EPA Method 23 to determine compliance with the limit on dioxin/furan emissions, the secondary aluminum facilities in California are subject to a statewide air toxics inventory program that requires CARB Method 428 to measure dioxin/furan emissions. Because CARB Method 428 requires the tester to save and analyze the impinger contents, CARB is not willing to accept EPA Method 23 as an alternative to CARB Method 428. Although testers could use EPA Method 23 and simply add the requirement to save the impinger contents and analyze them according to the procedures in CARB Method 428, testers in California have been using the CARB method for many years and

both the testers and regulators are more familiar with it than with Method 23. If we do not allow CARB Method 428 as an alternative to Method 23, the secondary aluminum producers in California will likely be required to perform two separate source tests for the same pollutant to satisfy both State and Federal requirements.

We believe the effects of the minor differences in the two methods are insignificant. The use of low resolution mass spectrometry to perform the analysis; however, is unacceptable for our purposes. Based on data collected from other sources, we believe that analyzing the impinger solutions will have a very small effect on the final results; it should at most result in a slight increase in total measured dioxins/furans. Considering these technical comparisons, we approve the use of CARB Method 428 as an alternative to Method 23 for measuring dioxin/furan emissions from the secondary aluminum facilities in California specified in the attached list, provided they only use high resolution mass spectrometry for sample analysis.

Attachment

cc: John Higuchi, South Coast AQMD  
Scott Wilson, South Coast AQMD

List of Secondary Aluminum Facilities in California

ALRAYCO, LLC  
10774 Primrose Rd  
Adelanto, CA 92301

Commonwealth Aluminum Corp  
2211 East Carson St  
Long Beach, CA 90819

Custom Alloy Light Metals, Inc  
13329 Ector St  
City of Industry, CA 91746

Custom Alloy Sales  
2805 Los Flores Blvd  
Lynwood, CA 90262

Custom Alloy Scap Sales  
2730 Peralta St.  
Oakland, CA 94607

Indalex West Inc  
18111 E Railroad Street  
City of Industry, CA 91749

Kaiser Aluminum and Chemical Corporation  
6250 East Bandini Blvd  
Commerce, CA 90040

Liston Brick of Corona  
3710 Temescal Canyon Road  
Corona, CA 92882

Pechiney Cast Plate  
3200 Fruitland Ave  
Vernon, CA 90058

Timco Standard Tandem  
11601 Etiwanda Ave  
Fontana, CA 92337

Thorock Metals Company  
435 East Weber Ave  
Compton, CA 90222

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Tri Alloy Group LLC  
10653 Ramona Ave  
Montclair, CA 91763

United States Marine Corp  
Twentynine Palms, CA 92277

Vista Metals Corp  
13425 Whittram Ave.  
Fontana, CA 92335