Century ALUMINUM
Hawesville
Operations

February 26, 2016

US Environmental Protection Agency
Office of Federal Activities
International Compliance Assurance Division (2254A)
Ariel Rios Building
1200 Pennsylvania Avenue, NW
Washington, DC 20460

RE: Hazardous Waste Exporter Annual Report

Enclosed please find the Hazardous Waste Exporter Annual Report for 2015 for:

Century Aluminum of KY
1627 State Route 3543
Hawesville, KY 42348
EPA ID #: KYD 049 062 375

If you have any questions or concerns, please feel free to contact me at **(270) 685-2493 ext 2818**.

Sincerely,

Jamie Coomes
Environmental Superintendent
Century Aluminum of Kentucky, LLC

Century Aluminum of Kentucky
Post Office Box 500
Hawesville, KY 42348

(270) 685-2493 Phone
(270) 852-2883 Fax

A Century Aluminum Company

received
SDII Mar 3/2016

Exporter of Hazardous Waste Annual Report 2015

Exporter EPA ID # : KYD 049 062 375
Exporter Name: Century Aluminum of Kentucky
Mailing Address: 1627 State Route 3543
Site Address: 1627 State Route 3543
City: Hawesville, Kentucky 42348

Report Year: 2015

	AOC #	Waste Description	EPA Code	DOT Hazard Class	Transporter Name	Transporter EPA ID #	Total Waste Shipped (tons)	Number of Shipments
Consignee EPA ID # : MIR 000 035 204	009356/3E/14	spent potlining from aluminum reduction cell demolition	K088	4.3	Clean Harbors Environmental Services	MAD 039 322 250	1,822.00	108
Consignee: Clean Harbors Canada, Inc. **Site Address:** 4090 Tefler Side Road Corunna, Ontario N0N 1G0	010976/12E/14	spent potlining from aluminum reduction cell demolition	K088	4.3	Clean Harbors Environmental Services	MAD 039 322 250	2,112.00	116
						Totals:	3,934.00	224

Reduction Efforts: Century Aluminum of Kentucky continually strives to reduce the volume and toxicity of the spent potlining we generate. Spent potlining (K088) is generated when aluminum electrolysis cells (pots) fail and the cathode lining requires replacing. During aluminum production cyanide, which is the reason spent potlining was listed as a hazardous waste, forms in the cathode lining of the pot. Century Aluminum modifies the pot construction design to increase pot life, thus reducing the frequency of failure and therefore the quantity of spent potlining produced. Century Aluminum has also attempted to reduce the toxicity of the waste by reducing the cyanide formation in the cathode. Efforts to seal the cathode opening in the pot shell prevents air from reaching the cathode. The nitrogen in the air is necessary for the formation of the cyanide, therefore reducing the air entering the pot reduces the quantity of cyanide produced.

Reduction Results: Records are kept for each pot showing the date the pot was put in service and the date of removal from service. Average days of pot life are calculated for the pots removed from service.

Years	Avg. Days of Pot Life	% Increase over 1980 - 1983	% Increase over previous period
1980 - 1983	2004		
1984 - 1987	2140	6.79%	6.79%
1988 - 1991	2336	16.57%	9.16%
1992 - 1995	2632	31.34%	12.67%
1996 - 2000	2834	41.42%	7.67%

The above table shows a continuous increase in pot life and therefore a reduction in spent potlining produced. The increased pot life resulted in a 41.42% reduction in spent potlining production in 1996 through 2000 compared to what it would have been without improved pot design based on 1980 through 1983 data.

Concerning toxicity, analysis of samples of spent cathode taken in 1986 indicate an average cyanide concentration of 1,300 mg/kg. After efforts to seal the pots better, a sample taken in 1998 revealed a reduced cyanide level of 654 mg/kg. A 49.69% reduction in toxicity.

Certification: I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Signature	Name	Title	Date
Jamie Coomes	Jamie Coomes	Environmental Manager	2/26/2016

Century Aluminum
627 St
Hawesville, [illegible]

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