US EPA RECORDS CENTER REGION 5
513190

CYANAMID

C. NG

201
LaPorte Co.

MAY 7 10 35 AM '84

American Cyanamid Company
P.O. Box 262
Michigan City, IN 46360
(219) 874-6211

May 1, 1984

Mary Janet Ruzicka
Indiana State Board of Health
Division of Land Pollution Control
1330 West Michigan Street
Indianapolis, Indiana 46206

Re: March 23, 1984 plant visit

Ms. Ruzicka:

Enclosed are the analytical results, as reported by Environmental Instrument Systems, Inc., on four (4) typical American Cyanamid Catalyst Products produced at the Michigan City, Indiana plant. (RCRA EP toxicity)

In addition to the metals normally run with this test cobalt, molybdenum, and nickel were also determined from the extracted solutions.

Please respond when you have determined if a special permit is or is not required for disposal in a landfill.

D.L. Weik

D.L. Weik

DLW:lkn Enclosure
cc: R.V. Toloso MI
J. Jerome NA

EIS ENVIRONMENTAL ENGINEERS, INC.
1701 North Ironwood Drive • South Bend, Indiana 46635 • Telephone (219) 277-5715

ANALYTICAL REPORT SHEET

CLIENT: American Cyanamid

ANALYSIS NO: 689D - 692D

DATE SAMPLED:

DATE RECEIVED: 3-30-84

DATE FORWARDED: 4-26-84

SAMPLE IDENTIFICATION:

P.O. # MC3093

Parameter	T-HDS 20 (DR IMP)	T-H CH (CSI)	HD S2 (MULLER)	HD S9 (DR IMP)
Cobolt (ppm)	350.	0.98	155.	1.6
Molybdenum (ppm)	960.	1800.	63.	1100.
Nickel (ppm)	3.1	560.	4.6	375.

The results presented above are from the three additional metals which were requested on the EP Toxicity extracts but have no RCRA concentration limit. They were analyzed by the Method of Standard Additions as is required for all EP Toxicity metals.

APR 27 1984

LABORATORY DIRECTOR

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This report presents results of Resource Conservation and Recovery Act Solid Waste analysis for the parameters specified below. The methods employed in this analysis were per "Test Methods for Evaluating Solid Waste-Physical/Chemical Methods" SW-846, July 1982, 2nd Edition.

EP Toxicity METALS	X	Reactivity	
EP Toxicity ORGANICS		Ignitability	
Corrosivity		Volatile Organics	

Other:

If this report contains results for EP Toxicity METALS, the following Quality Assurance data is presented if performed on this sample(s). Other test Quality Assurance data is presented on the individual test result sheets if such data was obtained for this sample(s).

Parameter	Precision (%RSD)	Accuracy (%Recovery-EPA QC Sample)
Arsenic	0 (689D)	85.
Barium	0 (690D)	116.8
Cadmium	0 (690D)	100.
Chromium	0 (690D)	101.3 : 108.1
Lead	0 (691D)	123. : 113.8
Mercury		102.4
Selenium	0 (689D)	92.9
Silver	0 (691D)	105.8

Andrew Rozite
LABORATORY DIRECTOR

ANALYTICAL REPORT SHEET
EXTRACTION PROCEDURE TOXICITY TEST
METALS ANALYSIS

EIS Inc Lab #	689 D	690 D	691 D
Client Description	T-HDS 20	T-HCH (CSI)	HDS 2 (MULLER)
Sample Appearance	(DR. IMP)		
% Solids	100.	100.	100.
Weight Raw Sample (g)	100.2	100.0	100.0
Filters Used	HAWP	HAWP	HAWP
Initial Extract pH	5.3	4.4	5.6
Final Extract pH(24hr)	5.45	5.0	5.2
Acid Added (24hr)(ml)	19.8	0	33.
Final Extract pH(28hr)	5.1	—	—
Acid Added (4hr)(ml)	16.0	—	—
Total Acid Added (ml)	35.8	0	33
Total DI Water Added(ml)	1968.	2000.	1967.
Final Extract Volume(ml)	2003.8	2000.	2000.

				RCRA Limit
ARSENIC (PPM)	<0.2	<0.2	<0.2	5.0
BARIUM (PPM)	<0.5	<0.5	<0.5	100.
CADMIUM (PPM)	<0.05	<0.05	<0.05	1.0
CHROMIUM (PPM)	<0.05	0.08	<0.05	5.0
LEAD (PPM)	<0.01	<0.01	<0.01	5.0
MERCURY (PPM)	<0.001	<0.001	<0.001	0.2
SELENIUM (PPM)	<0.05	0.26	<0.05	1.0
SILVER (PPM)	<0.05	<0.05	<0.05	5.0

Structural Integrity Test Required: Yes_____ No_____
Organics: Not Requested_____ See Report Sheet Attached_____
Corrosivity: Not Requested_____ See Report Sheet Attached_____
Reactivity: Not Requested_____ See Report Sheet Attached_____
Flash Point: Not Requested_____ See Report Sheet Attached_____

ANALYTICAL REPORT SHEET
EXTRACTION PROCEDURE TOXICITY TEST
METALS ANALYSIS

EIS Inc Lab #	692 D			
Client Description	HD59 (DE IMP.)			
Sample Appearance				
% Solids	100.			
Weight Raw Sample (g)	100.0			
Filters Used	HAWP			
Initial Extract pH	4.1			
Final Extract pH(24hr)	5.0			
Acid Added (24hr)(ml)	0			
Final Extract pH(28hr)	—			
Acid Added (4hr)(ml)	—			
Total Acid Added (ml)	0			
Total DI Water Added(ml)	2000.			
Final Extract Volume(ml)	2000.			
				RCRA Limit
ARSENIC (PPM)	<0.2			5.0
BARIUM (PPM)	<0.5			100.
CADMIUM (PPM)	<0.05			1.0
CHROMIUM (PPM)	<0.05			5.0
LEAD (PPM)	<0.01			5.0
MERCURY (PPM)	<0.001			0.2
SELENIUM (PPM)	0.31 1/3			1.0
SILVER (PPM)	<0.05			5.0

Structural Integrity Test Required: Yes_____ No_____
Organics: Not Requested_____ See Report Sheet Attached_____
Corrosivity: Not Requested_____ See Report Sheet Attached_____
Reactivity: Not Requested_____ See Report Sheet Attached_____
Flash Point: Not Requested_____ See Report Sheet Attached_____