Report of...

Compliance Emission Testing

performed for...

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AUG 18 2016

AIR QUALITY DIVISION GRAND RAPIDS DISTRICT

Plastic Plate, LLC. Kraft Avenue Plant

Kentwood, Michigan

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on the

Chrome Etch Exhaust

July 14, 2016

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Network Environmental, Inc. Grand Rapids, MI

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MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

AIR QUALITY DIV.

REPORT CERTIFICATION

RECENT

Authorized by 1994 P.A. 451, as amended. Failure to provide this information may result in civil and/or criminal light 8s.2016

Reports submitted pursuant to R 336.1213 (Rule 213), subrules (3)(c) and/or (4)(c), of Michig must be certified by a responsible official. Additional information regarding the reports and for at least 5 years, as described in General Condition No. 22 in the RO Permit and be mad Quality, Air Quality Division upon request.	documentation listed ApployAppilis Divis Kellyt on file
Source Name Lacks Enterprises, Inc. (Plastic Plate Kraft)	County Kent
Source Address 5675 Kraft Avenue	City Cascade Township
AQD Source ID (SRN) N7374 RO Permit No. MI-ROP-N7374-2015	RO Permit Section No.
Please check the appropriate box(es):	
Annual Compliance Certification (General Condition No. 28 and No. 29 of the	RO Permit)
Reporting period (provide inclusive dates): From To 1. During the entire reporting period, this source was in compliance with ALL terms each term and condition of which is identified and included by this reference. The mis/are the method(s) specified in the RO Permit. 2. During the entire reporting period this source was in compliance with all terms each term and condition of which is identified and included by this reference, E enclosed deviation report(s). The method used to determine compliance for each the RO Permit, unless otherwise indicated and described on the enclosed deviation	ethod(s) used to determine compliance and conditions contained in the RO Permit, iXCEPT for the deviations identified on the erm and condition is the method specified in
Semi-Annual (or More Frequent) Report Certification (General Condition No.	23 of the RO Permit)
Reporting period (provide inclusive dates): From To 1. During the entire reporting period, ALL monitoring and associated recordkeeping and no deviations from these requirements or any other terms or conditions occurred	g requirements in the RO Permit were met
 2. During the entire reporting period, all monitoring and associated recordkeeping r no deviations from these requirements or any other terms or conditions occurred, Exenciosed deviation report(s). 	
☑ Other Report Certification	
	•
I certify that, based on information and belief formed after reasonable inquiry, the state supporting enclosures are true, accurate and complete.	ments and information in this report and the
Dan Jaracz Manager of Operat	
Name of Responsible Official (print or type) Title	Phone Number
Signature of Responsible Official	7/7/16 Date

^{*} Photocopy this form as needed.



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I. INTRODUCTION

AIR QUALITY DIV.

Network Environmental, Inc. was retained by Lacks Enterprises to perform Total Chromium (Cr) compliance emission sampling on the Chrome Etch (EUCHROMEETCH/SVK2) exhaust located at their Plastic Plate facility in Kentwood, Michigan. The purpose of the study was to quantify the Cr emissions from the exhaust to demonstrate compliance with Renewable Operating Permit MI-ROP-N7374-2015.

The sampling was performed by R. Scott Cargill and Richard D. Eerdmans of Network Environmental, Inc. on July 14, 2016 by employing U.S. EPA Method 306. Assisting in the study was Ms. Karen Baweja of Lacks Industries.

II. PRESENTATION OF RESULTS

II.1 TABLE 1 **CHROMIUM (Cr) EMISSION RESULTS CHROME ETCH EXHAUST** PLASIC PLATE, LLC KENTWOOD, MICHIGAN JULY 14, 2016

Sample Time	Air Flow Rate DSCFM ⁽¹⁾	Concentration Mg/M ³⁽²⁾	Mass Emission Rate Lbs/Hr ⁽³⁾
1 7:00-9:11	53,285	0.0249	0.00497
2 9:38-11:41	53,275	0.0222	0.00444
3 12:21-14:24	53,426	0.0212	0.00424
Average	53,329	0.0228	0.00455

- (1) DSCFM = Dry Standard Cubic Feet Per Minute (STP = 68°F & 29.92 in. Hg)
- (2) Mg/M³ = Milligrams Per Dry Standard Cubic Meter (3) Lbs/Hr = Pounds Per Hour

III. DISCUSSION OF RESULTS

The Cr emission results are presented in Table 1 (Section II.1).

The Total Chromium emission limits for this source is: Chrome Etch = 0.0032 Lbs/Hr and 0.016 Mg/DSCM

IV. SAMPLING AND ANALYTICAL PROTOCOL

The sampling location for the Chrome Etch was on the sixty (60) inch I.D. exhaust stack at a location which met the optimal test location requirements of U.S. EPA Reference Method 1. Twelve (12) sampling points total were used for the testing (6 points per port). The points are as follows:

	Poin	t#	Poin	t Location (In	ches)
	1			2.64	
	2			8.76	
	3			17.76	
	4			42.24	
	5			51.24	
	6			57.36	

IV.1 Chromium (Cr) - The sampling was performed in accordance with U.S. EPA Reference Method 306. Three (3) samples, each 120 minutes in duration, were collected from the exhaust. The samples were collected isokinetically in a 0.1N Sodium Bicarbonate solution as outlined in the method. The samples were analyzed for total chromium (Cr) by ICP - MS. All the quality assurance and quality control procedures listed in the method were incorporated in the sampling and analysis.

A diagram of the sampling train can be seen in Figure 1.

IV.2 Exhaust Gas Parameters - In addition to the Cr sampling, the exhaust gas parameters (air flow rate, temperature, moisture, and density) were determined by employing U.S. EPA Reference Methods 1 through 4. All the quality control and quality assurance requirements listed in the methods were incorporated in the sampling and analysis.

This report was prepared by:

R. Scott Cargill Project Manager This report was reviewed by:

David D. Engelhardt Vice President

