

Report of...

Compliance Emission Testing

performed for...

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SEP 22 2016

Plastic Plate, LLC.
Kraft Avenue Plant
Kentwood, Michigan

AIR QUALITY DIV.

on the

Chrome Etch Exhaust

August 26, 2016

021.26

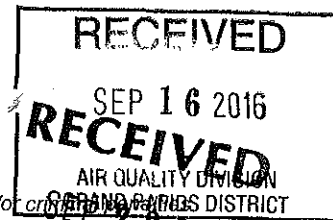
Network Environmental, Inc.
Grand Rapids, MI



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

**RENEWABLE OPERATING PERMIT
REPORT CERTIFICATION**

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



Reports submitted pursuant to R 336.1213 (Rule 213), subrules (3)(c) and/or (4)(c), of Michigan's Renewable Operating (RO) Permit program must be certified by a responsible official. Additional information regarding the reports and documentation listed below must be kept on file for at least 5 years, as described in General Condition No. 22 in the RO Permit and be made available to the Department of Environmental Quality, Air Quality Division upon request.

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 and conditions contained in the RO Permit, each term and condition of which is identified and included by this reference. The method(s) used to determine compliance is/are the method(s) specified in the RO Permit.

2. During the entire reporting period this source was in compliance with all terms and conditions contained in the RO Permit, each term and condition of which is identified and included by this reference, **EXCEPT** for the deviations identified on the enclosed deviation report(s). The method used to determine compliance for each term and condition is the method specified in the RO Permit, unless otherwise indicated and described on the enclosed deviation report(s).

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 requirements in the RO Permit were met and no deviations from these requirements or any other terms or conditions occurred.

2. During the entire reporting period, all monitoring and associated recordkeeping requirements in the RO Permit were met and no deviations from these requirements or any other terms or conditions occurred, **EXCEPT** for the deviations identified on the enclosed deviation report(s).

Other Report Certification

Reporting period (provide inclusive dates): From 7/1/2016 To 12/31/2016

Additional monitoring reports or other applicable documents required by the RO Permit are attached as described:
Total Chromium Emissions Testing Report on the Chrome Etch (K2) exhaust.

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this report and the supporting enclosures are true, accurate and complete.

<u>Dan Jaracz</u>	<u>Manager of Operations</u>	<u>616-455-5551</u>
Name of Responsible Official (print or type)	Title	Phone Number
		<u>9/15/16</u>
Signature of Responsible Official		Date

I. INTRODUCTION

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 August 26, 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
AUGUST 26, 2016**

Sample	Time	Air Flow Rate DSCFM ⁽¹⁾	Concentration Mg/M ³ ⁽²⁾	Mass Emission Rate Lbs/Hr ⁽³⁾
1	7:13-9:16	53,007	0.0078	0.00156
2	9:41-11:44	52,848	0.0015	0.00030
3	12:07-14:10	52,595	0.0035	0.00070
Average		52,817	0.0043	0.00085

(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:

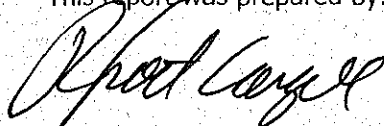
Point #	Point Location (Inches)
1	2.64
2	8.76
3	17.76
4	42.24
5	51.24
6	57.36

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.

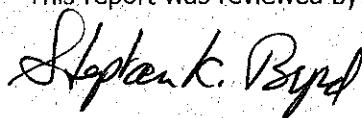
IV.2 Exhaust Gas Parameters - In addition to the Cr sampling, the exhaust gas parameters (air flow rate, temperature, moisture, and density) were determined by employing U.S. EPA Reference Methods 1 through 4. All the quality control and quality assurance requirements listed in the methods were incorporated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

This report was prepared by:



R. Scott Cargill
Project Manager

This report was reviewed by:



Stephan K. Byrd
President