Report of...

DCP Compliance Emission Testing

performed for...

Lacks Enterprises, Inc.
Barden Street Plant
Kentwood, Michigan

RECEIVED
SEP 07 2017
AIR QUALITY DIVISION

On the

Conditioner Exhaust

July 18, 2017

021.31

Network Environmental, Inc.
Grand Rapids, MI

I. INTRODUCTION

Network Environmental, Inc. was retained by Lacks Industries to perform 1,3 Dichloro-2-propanol (DCP) compliance emission sampling on the SVK1 stack located at the Barden Avenue facility in Kentwood, Michigan. The purpose of the study was to document compliance with Michigan Department of Environmental Quality, Air Quality Division, Renewable Operating Permit MI-ROP-N2079-2012 and Source-Wide Permit to Install MI-PTI-N2079-2012.

The following is a list of the applicable emission limit and the compound tested:

Stack ID	Emission Limits	Compound Sampled
SVK1	DCP : ~~0.48~~ 0.70 Lbs/Hr	1,3 Dichloro-2-propanol

The sampling was performed by R. Scott Cargill and Richard D. Eerdmans of Network Environmental, Inc. on July 18, 2017. Assisting in the study was Ms. Karen Baweja of Lacks Industries and the operating staff of the facility. Ms. April Lazzaro of the Michigan Department of Environmental Quality, Air Quality Division, was present to observe the testing and source operation.

The following test method was used to conduct the testing:

DCP – U.S. EPA Reference Method 308

II. PRESENTATION OF RESULTS

II.1 TABLE 1
DCP EMISSION RESULTS
CONDITIONER (SVK1) EXHAUST
BARDEN FACILITY
KENTWOOD, MICHIGAN
JULY 18, 2017

Sample	Time	Air Flow Rate DSCFM	Concentration Mg/M^3	Mass Emission Rate Lbs/Hr
1	9:20-10:20	4,718	13.96	0.2466
2	10:27-11:27	4,750	14.72	0.2618
3	11:31-12:31	4,678	13.68	0.2396
Average		**4,715**	**14.12**	**0.2493**

III. DISCUSSION OF RESULTS

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

IV. SAMPLING AND ANALYTICAL PROTOCOL

The sampling location met the optimum requirements of U.S. EPA Reference Method 1. The exhaust stack dimensions and all of the point locations can be seen in Appendix E. Twelve points (six per port) were used for the air flow traverses.

IV.1 DCP -The DCP determinations were performed in accordance with EPA Method 308. Teflon probes were used to extract the exhaust gas from the exhaust. Three midget impingers were used prior to the silica gel tubes. The first two contained 15 mls of DI water and the third impinger was empty. Silica Gel sorbent tubes were used to collect the samples. The sampling train was operated with vacuum pumps with calibrated critical orifices. The orifices were calibrated at approximately 1000 cc/min. Three sixty minute samples were collected from the exhaust.

The silica gel tubes and water were recovered and refrigerated until they were analyzed. The water and tubes were analyzed by GC/FID in accordance with the method for DCP. All quality assurance and quality control requirements specified in the method were incorporated in the sampling and analysis.

IV2 Exhaust Gas Parameters - 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:

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This report was reviewed by:

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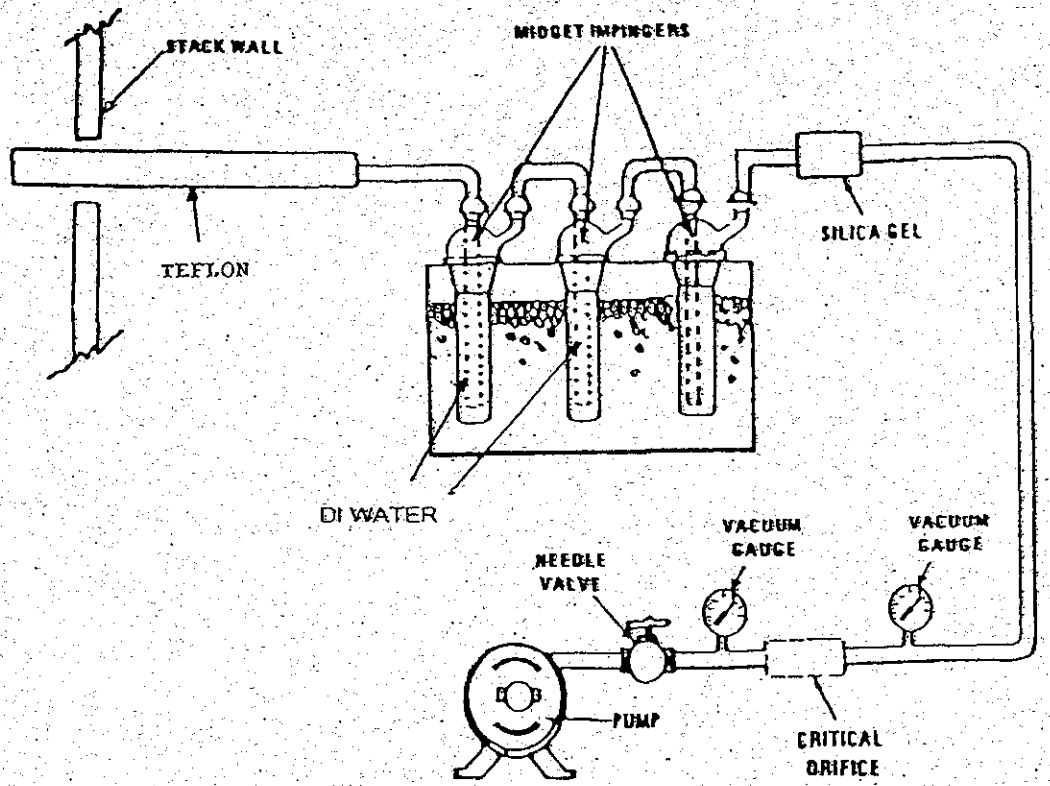

FIGURE 1

DCP SAMPLING TRAIN