REPORT OF RCRA COMPLIANCE EVALUATION INSPECTION

At

New Heaven Chemicals Iowa LLC
1585 380th Street
Manly, Iowa 50456
(507) 402-7256

EPA ID Number: Administrative

On

November 30, 2021

By

U.S. ENVIRONMENTAL PROTECTION AGENCY
Region 7
Enforcement and Compliance Assurance Division (ECAD)

1.0 INTRODUCTION

At the request of the Enforcement and Compliance Assurance Division, I conducted a Resource Conservation and Recovery Act (RCRA) compliance evaluation inspection (CEI) at New Heaven Chemicals Iowa LLC (New Heaven) located in Manly, Iowa, on November 30, 2021. The CEI was conducted under the authority of Section 3007(a) of RCRA, as amended. During the CEI, I collected the informationand data necessary to determine compliance with the applicable regulatory and statutory requirements. The inspection report and attachments present the results of the CEI.

2.0 PARTICIPANTS

New Heaven:
Paul Katzenberger, Plant Manager, approximately six years with the company.

Safety Professionals (Consultant):
Marc McClure, Safety Consultant, approximately six years working for the company.

U.S. Environmental Protection Agency (EPA):
H. D. “Doug” Bryant, CPP, PCI, Civil Investigator, NOWCC/SEE, ECAD/Chemical Branch/RCRA Section

3.0 INSPECTION PROCEDURES

Due to the COVID-19 pandemic, I contacted the facility via telephone November 19, 2021, prior to the intended onsite inspection. The purpose of the initial contact was to identify the appropriate facility representative, ensure the representative would be available during the CEI, and to discuss protocols, procedures, and other requirements adopted by the facility to mitigate the spread of COVID-19.

I arrived at New Heaven at approximately 0815 hours, November 30, 2021. New Heaven is located on leased land within the perimeter of the Manly Terminal facility. I reported to the Manly Terminal administrative office, as required for all visitors to the Manly Terminal facility. I was directed to the New Heaven facility that is accessed through Gate #3. Manly Terminal and New Heaven have no business relationship, apart from the land lease arrangement. I proceeded through Gate #3 into the interior of the Manly facility to the New Heaven area, located in the southeast quadrant of the Manly Terminal facility. I parked in front of a building identified as the New Heaven Administrative Office. I was greeted by Mr. Katzenberger as I exited my vehicle. He directed me to a conference room located inside a building attached to the administrative office. We entered a large conference room where Mr. McClure was waiting. This conference room was used throughout the inspection. I presented my EPA credentials to Messrs. Katzenberger and McClure and we exchanged business cards (Attachment 1). Messrs. Katzenberger and McClure participated throughout all facets of the CEI.

I next presented Messrs. Katzenberger and McClure with a copy of RCRA section 3007(a), which provides inspection authority. I explained my need to collect accurate information and presented them with a copy of Title 18 U.S. Code, Sections 1001 and 1002. They were made aware of their confidentiality rights and were informed that a Confidentiality Notice would be provided at the end of the inspection to make or not to make any claims. Mr. Katzenberger acted as the official facility representative during the inspection.

The inspection consisted of an entry briefing, a discussion of facility operations, waste generation and waste management, a review of waste management records, and a visual inspection of the waste generation and management areas.

Document photocopies and one photograph were collected as inspection documentation (Attachments 1-13). A site map of the facility provided by Mr. Katzenberger is attached (Attachment 2). Information collected during the CEI was recorded on a checklist and in field notes which are referenced in the report. I followed the inspection procedures discussed in the RCRA Compliance Evaluation Inspection Standard Operating Procedure (No. 2321.1C), unless noted differently.

At the conclusion of the inspection, I conducted an exit briefing, during which I summarized my findings and recommendations with Messrs. Katzenberger and McClure. I provided Mr. Katzenberger a *Confidentiality Notice,* which he signed, indicating no confidentiality claims were made by the facility (see Attachment 3). I provided

Mr. Katzenberger a *Receipt of Documents and Samples* and a *Notice of Preliminary Findings* which he signed acknowledging receipt (Attachments 4 and 5 respectively).

The following inspection documents and compliance assistance handouts were left with the facility:

Section 3007 Inspections Sheet (EPA Handout)
RCRA Facility Access Information Sheet (EPA Handout)
United States Code Annotated (EPA Handout)
Notice Regarding Proprietary/Confidential Business Information Submitted to or Collected by EPA in Connection with Inspections (EPA Handout)
Notice of Preliminary Findings (NOPF) (EPA Handout)
Instructions for Responding to a Notice of Preliminary Findings (NOPF) (Reverse of NOPF)
U.S. EPA Small Business Resource Information Sheet (EPA Handout)
Solvent-Contaminated Wipes Final Rule Chart (EPA Handout)
Lead-Based Paint Activities (IDNR Handout)
Excluded Solvent-Contaminated Wipe Rule (IDNR Handout)
Battery Recycling/Disposal (IDNR Handout)
Universal Wastes Including Aerosol Cans (IDNR Handout)
TCLP Waste Determination Testing (IDNR Handout)
Industry Sector Notebooks (EPA Handout)
Environmental Compliance Assistance Centers (EPA Handout)
e-Manifest Fact Sheet (EPA Handout)
RCRA Online A Quick Reference Guide (EPA Handout)
Emergency Response Program (EPA Handout)
Security Awareness (EPA Handout)
Managing Your Hazardous Waste: A Guide for Small Business (EPA Handout)

4.0 FINDINGS AND OBSERVATIONS

4.1 Facility Information and Operations

New Heaven is a wholly owned subsidiary of New Heaven Incorporated in India. The New Heaven facility is newly constructed and became operational in August of 2016. New Heaven occupies approximately two acres located inside the Manly Terminal located in Manly, Iowa. The facility has a small storage tank farm, a processing unit, and a cooling tower shown in Attachment 2. Small structures house administrative offices, storage, a boiler room, process wastewater treatment, well pump, and truck loadout. A small quality assurance laboratory is housed inside the administrative office area. The facility manufactures liquid Sodium Methylate (SMO) (Attachment 6) by combining 50% liquid sodium hydroxide (Attachment 7) and 100% methanol (Attachment 8) in a continuous process. The facility is operated by 10 personnel, working twelve-hour shifts (06:00-18:00 hours; 18:00-06:00 hours), twenty-four hours a day, seven days a week. The facility receives rail cars of methanol. This methanol is pumped from the rail cars to tanks 501 and 502 located in the storage tank farm (Attachment 2). From there, the methanol is pumped

to two 7,000-gallon mixing tanks where the methanol and liquid sodium hydroxide are mixed. After mixing for approximately two hours, the product is moved to a feed tank. The product is pumped to the reaction and distillation columns and then to the finishing tanks. Finished product is pumped to the SMO storage tanks and then loaded into trucks at the truck loadout rack. Any excess methanol from this process is pumped back to recovery tank 503. The North American Industry Classification System (NAICS) code for this facility is 325199-All Other Basic Organic Chemical Manufacturing.

4.2 RCRA Status

This is the first RCRA compliance inspection of this facility. The facility has not notified the EPA that it generates any hazardous waste (HW). However, I determined that the facility was operating as a non-generator of known HW at the time of this inspection (Attachment 9). Lighting fixtures in the boiler building and warehouse were changed from fluorescent lighting to light emitting diode (LED) in the fall of 2019, as the result of a nearby lightning strike. Mr. Katzenberger stated that the facility has not generated any waste fluorescent lamps from other buildings since site construction in 2016. He added that any future generation of spent fluorescent lamps would be handled as universal waste (UW). The facility generates used oil resulting from manufacturing equipment preventive maintenance.

4.3 Facility Waste Streams and Management

New Heaven has recently contacted Safety-Kleen, 4704 NE 22nd Street, Des Moines, Iowa, to assist with the disposition of used oil that may have been contaminated with methanol, as discussed below.

The following waste streams are managed by New Heaven:

General Trash: Mr. Katzenberger stated that New Heaven generates approximately eight cubic yards of general trash weekly. The general trash consists of miscellaneous paper waste, food waste, packing materials, cardboard, etc. Mr. Katzenberger stated that Waste Management (WM)), 521 3rd Street, Mason City, Iowa, picks up and transports the waste to the Landfill of North Iowa, 15942 Killdeer Avenue, Clear Lake, Iowa, for land disposal. Mr. Katzenberger stated that the general trash had been determined to be non-RCRA hazardous, by virtue of product and process knowledge.

Process Wastewater: Mr. Katzenberger started that New Heaven draws water from a well located near the well pump building "Building F" shown on Attachment 2. Mr. Katzenberger explained that New Heaven filters the water pumped from the well in "Building E" using large green sand filters. The water is then used in the cooling tower to cool the distillation columns. He continued by stating that New Heaven generates two process wastewater streams.

Non-Contact Process Wastewater: One process wastewater stream is generated

by non-contact wastewater that is used to cool the distillation columns. This process wastewater waste stream is discharged to the publicly owned treatment works (POTW) in accordance with Iowa Department of Natural Resources (IDNR) Permit #9800114. Mr. Katzenberger stated that this permit had expired, and New Heaven was working with a consulting firm and the IDNR to submit an updated permit. He did not know how much non-contact process wastewater is discharged.

***Contact Process Wastewater*:** Condensed process wastewater generated during the distillation process is collected in a large tank and stored prior to loading onto a tanker truck. The contact process wastewater is hauled to the Des Moines Metropolitan Wastewater Reclamation Authority (WRA) as documented by Attachment 10. Mr. Katzenberger stated that the contact process wastewater stream is substantially water with contaminants amounting to a few percent at most and is non-RCRA hazardous, based upon his product and process knowledge. According to Mr. Katzenberger, this waste stream was last tested by New Heaven in January 2021 (Attachment 11) and is routinely tested by the WRA each time a load of process wastewater is received by the WRA (Attachment 12). Mr. Katzenberger stated that the facility would generate approximately 8.000 gallons of this waste stream weekly, when fully operational.

Used Oil: Mr. Katzenberger stated that the facility was originally outfitted with components that were manufactured in India. These components were used to reduce construction and startup costs. He added that valves, gaskets, seals, and pumps manufactured in India were being regularly replaced with components believed to be of higher quality as components failed. Pumps containing hydraulic fluid were regularly taken out of service and rebuilt because the pump seals failed and allowed methanol to leak into the hydraulic fluid inside the pump motor. This contaminated oil was removed from the pumps and collected in a large plastic tote as discussed below in section 4.4. Mr. Katzenberger stated that he is working with Safety-Kleen to pick up and transport the used oil off site. I asked Mr. Katzenberger if New Heaven has conducted a HW determination on the used oil, to which he responded he had not and was waiting for assistance from Safety-Kleen. **New Heaven must conduct an adequate HW determination of the used oil that has possibly been contaminated with methanol in accordance with the provisions of 40 CFR §262.11 (NOPF #1).**

4.4 Visual Inspection of Facility Waste Stream Management

A visual inspection of the facility was conducted to observe waste stream management practices and document regulatory compliance. A photograph was taken, a checklist was completed, and field notes were used to document observations made during the visual inspection. A Photo Log was created, and the photo taken during the inspection appears in Attachment 13.

I observed a full plastic tote, capable of containing approximately 330 gallons of used oil, sitting atop a secondary container collection unit, located on the west side of the

Boiler Building (Photo 1 and Attachment 2). The tote was closed, labeled as "WASTE OIL" and appeared to be in good condition. I did not observe any leaks or discoloration of the gravel surrounding the base of the tote. Mr. Katzenberger stated that the oil has been collected over time, since approximately 2018, when pumps and components began to fail. He stated that used oil was last poured into the tote "sometime last fall" and was less than five gallons. He added that a routine preventive maintenance program will be implemented when all pumps and components have been replaced. Going forward, Mr. Katzenberger anticipates that New Heaven will annually generate approximately 55-gallons of used oil that is not contaminated with methanol. I did not observe any HW inside the quality assurance laboratory.

4.5 Discussions/Questions/Answers

Mr. Katzenberger stated that New Heaven does not routinely generate any known HW. He stated that they do not generate any distillation still bottoms. He stated that residue from the distillation column and condensate is drained and pumped into a secondary unit where steam is added, and the condensate stream is pumped back into the column for distillation. He stated that filters originally installed to treat process wastewater have never been used and the facility does not generate any sludge. He added that the facility does not generate any waste methanol or sodium hydroxide. He explained that the facility switched from using flake sodium hydroxide to liquid sodium hydroxide in August 2021, due to supply chain shortages. He stated that sulphuric acid is used to treat process wastewater; however, no sulphuric acid waste has been generated to date.

5.0 SUMMARY

The following NOPF was documented during the CEI:

NOPF #1: 40 CFR §262.11: Conduct an adequate HW determination of the used oil that has possibly been contaminated with methanol.

Other than the items specifically noted in this narrative, I observed no additional issues or potential findings. However, further EPA review may change or add to my findings.

HURLEY BRYANT (Affiliate) Digitally signed by HURLEY BRYANT (Affiliate) Date: 2021.12.13 09:49:38 -06'00' Date: 12/09/2021

H. D. "Doug" Bryant, CPP, PCI
Civil Investigator, NOWCC/SEE

AMBER WHISNANT Digitally signed by AMBER WHISNANT Date: 2021.12.30 17:19:21 -06'00' Date: _____

Amber Whisnant
Chief, RCRA Section, Chemical Branch
Enforcement and Compliance Assurance Division

Attachments:

1) Business Cards (1 page)
2) Site Map (2 pages)
3) Confidentiality Notice (1 page)
4) Receipt of Document and Samples (1 page)
5) Notice of Preliminary Findings (2 pages)
6) Safety Data Sheet (SDS), Sodium Methylate Solution 30% (10 pages)
7) SDS, 50% Sodium Hydroxide (8 pages)
8) SDS, Methanol (11 pages)
9) Hazardous Waste Site Info Verification Report for Inspector (1 page)
10) Letter, Des Moines Metropolitan Wastewater Reclamation Authority, dated August 15, 2018, RE: Hauled Waste Discharge Permit No. B10156 (6 pages)
11) Eurofins/Environment Testing America Analytical Report, Laboratory Job ID: 310-197996-1, dated 1/5/2021 (13 pages)
12) WRR Invoice-Sample Analysis Fees, dated 8/31/2021 (3 pages)
13) Photo Log (1 page) and Visual Inspection Photo (1 page)

Notice of Preliminary Findings

(For Contractor Use Only)

Facility Name: New Haven Chemicals of Iowa, LLC

Facility Address: 1585 380th Street
Manly, IA 50456

EPA ID#: Administrative **Date:** 11/30/2021

Notice: I am not an employee of the Environmental Protection Agency ("EPA"). I am a contractor for the EPA retained to conduct compliance evaluation inspections. The following is a list of observations/recommendations found during this inspection which will be reported back to the EPA. This is not to be construed as a complete list of observations/recommendations. The EPA will be evaluating the report prepared as a result of this inspection and will make determinations as to what violations may have occurred at your facility.

Citation	Description of Finding
40 CFR 262.11	Conduct a HW determination on waste oil possibly contaminated with methanol

If you have any questions about this Notice or wish to discuss your response, you may call me at (913) 551-7120, or Kevin Snowden (913) 551-7022 (Compliance Officer) at (913) 551-7022.

This Notice prepared by H. D. "Doug" Bryant Date: 11/30/2021

The undersigned person hereby acknowledges receipt of this Notice and has read the same.

Printed Name: Paul Ratzenberger Date: 11-30-21

Signature: Paul Ratz

Title: Plant Manager

(Rev: 2/25/2020) White Original/ EPA • Yellow/ Facility

Instructions for Responding to a Notice of Preliminary Findings (NOPF)

Note: The instructions below are being provided to assist you if you choose to submit a written response to the preliminary findings identified in the EPA's NOPF. This is an opportunity for you to provide to the EPA any and all information that you believe is relevant to these preliminary findings and your efforts to return to compliance with the regulatory requirements. The EPA will consider information submitted by you in determining our enforcement response to the preliminary findings identified at your facility, but please be advised that any information you submit may be used in a subsequent enforcement action.

1. Identify the person(s) responding to the NOPF authorized to make statements for the facility, including the person's name, title, and telephone numbers, if different from the facility's telephone number. For each numbered preliminary finding, identify all persons consulted in the preparation of the answer.
2. Your answers should address and reference each numbered preliminary finding separately.
3. Each of your answers should identify all documents consulted, examined, or referred to in the preparation of the response, or that contain information responsive to the preliminary finding. Please provide legible copies of all such documents. For each document provided, indicate on the document (or in some similar manner) the number of the preliminary finding to which it responds.
4. Describe all actions taken by you to correct the preliminary findings identified in the NOPF and/or a schedule for completing the necessary corrective actions for each numbered preliminary finding. If the preliminary finding has been corrected, please provide the date the preliminary finding was corrected.
5. Your responses should include documentation, photographs, drawings, etc. of corrected preliminary findings where applicable (for example, photographs of properly labeled containers). The information submitted should indicate the number of the preliminary finding to which it corresponds.
6. If information responsive to a preliminary finding is not in your possession, identify the person(s) from whom the information may be obtained.
7. If different or new procedures are put in place to prevent the same or similar preliminary findings, provide a description of those procedures.
8. If you want to make a confidentiality claim pursuant to 40 C.F.R. Part 2, Subpart B covering part or all of the information submitted, identify the material with words such as "trade secret," "proprietary," or "company confidential." Refer to the Confidentiality Notice provided to you at the time of the inspection.
9. If you choose to respond, and plan to submit your response after 14 calendar days, please discuss your plans with the compliance officer noted on the NOPF.

RCRA Inspected Facilities:

If your facility was cited for hazardous waste determination preliminary findings, provide the following information for each waste stream and/or each waste unit listed:

a. specify the waste name;

b. indicate whether the waste is hazardous, non-hazardous, used oil, universal waste, or exempt from regulation (if you claim the waste is exempt from regulation, include the regulatory reference that you believe is applicable to the exemption for the waste);

c. state whether process knowledge or analytical testing was used to make the determination (attach all supporting documentation, i.e., the specific documents (e.g., Safety Data Sheets) used as process knowledge);

d. if the waste is a hazardous waste, list all applicable RCRA waste code(s) and the hazardous properties (Ignitable, Reactive, Corrosive, Toxic);

e. if the waste is a hazardous waste, used oil, or universal waste,

   i. indicate the quantity or monthly generation rate of this waste at your facility;

   ii. indicate the length of time the waste has been generated at your facility, and how long the waste has been stored at your facility;

   iii. state how you plan to handle or manage the waste at your facility;

   iv. if applicable, describe your facility' s plans for disposing the waste (attach all supporting documentation, e.g., any shipping documents or arrangements made for shipping documents); and,

f. if the waste is non-hazardous or if you believe it is exempt from regulation, provide information on how it will be disposed, recycled, or used, and where these activities will occur.