

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
**ACTIVITY REPORT: On-site Inspection**

E811762280

<b>FACILITY:</b> Crimson Holdings, LLC	<b>SRN / ID:</b> E8117
<b>LOCATION:</b> 1336 E MAUMEE ST, ADRIAN	<b>DISTRICT:</b> Jackson
<b>CITY:</b> ADRIAN	<b>COUNTY:</b> LENAWEE
<b>CONTACT:</b> Dan Hofbauer , Plant Manager 2022	<b>ACTIVITY DATE:</b> 03/24/2022
<b>STAFF:</b> Stephanie Weems	<b>COMPLIANCE STATUS:</b> Non Compliance
<b>SUBJECT:</b> Self-initiated inspection conducted after receiving an odor complaint.	
<b>RESOLVED COMPLAINTS:</b> C-22-00538	

## Self-initiated/Complaint investigation of OvalInnovations LLC. d.b.a. Crimson Holdings (E8117).

### Facility Contacts

Dan Hofbauer – Facility Manager – [dhofbauer@crimsonhldg.com](mailto:dhofbauer@crimsonhldg.com)

Margaret McGill – Sr. Project Manager – [mjmcgill@ovainnovations.com](mailto:mjmcgill@ovainnovations.com)

### Purpose

On March 24, 2022, I conducted a self-initiated inspection/complaint investigation of Crimson Holdings located at 1336 E. Maumee St. in Adrian, Michigan. I was accompanied on this inspection by Chukuemeka (Chuku) Oje, a Permit Engineer with the Air Quality Division (AQD). The purpose of the inspection was to determine the facility's compliance status with applicable federal and state air pollution regulations, particularly with the Michigan Natural Resources and Environmental Protection Act 451 of 1994, Part 55, Air Pollution Control and the administrative rules, and the conditions of Air Use Permit to Install (PTI) number 38-06, issued February 9, 2006.

Additionally, this inspection was conducted in response to a complaint that the Air Quality Division (AQD) received for odors from the facility. This complaint is outlined in greater detail below.

### Facility Location

This facility is located in Adrian, Michigan. It is surrounded by commercial and residential properties. See aerial photos attached.

### Regulatory Applicability

This facility operates under PTI 38-06 issued February 9, 2006. This permit consists of EU-SprayDryer, described in the PTI as a milk spray drying operation consisting of a drying chamber, a powder conveyor, a pneumatic conveyor, a fabric filter product collector, and a cyclonic product collector.

### Facility Background

Historically, this location was owned by Dairy Farmers of America, and they produced a powdered milk product here.

On December 7, 2021 AQD was notified that Crimson Holdings, LLC acquired the assets located at 1336 East Maumee Street in Adrian, Michigan. Crimson Holdings submitted notification that they would be assuming responsibility for the facility's air permit. Additionally, the letter explained that they would be switching from powdered milk to powdered egg production and that the process for producing powdered egg is the same as that of powdered milk.

On March 11, 2022 AQD received a complaint about odors coming from Crimson Holdings. The complainant described the odors as "organic death".

At 10:20AM on March 11th I called the complainant to follow-up. The complainant indicated that there have been odor issues since Crimson Holdings took over.

At 10:48 AM I attempted to call Margaret McGill at Crimson Holdings. There was no answer and the call went to a voicemail box that was full. Therefore, no message could be left. I then emailed Margaret notifying her of the complaint and asking for Crimson to investigate the cause and respond by March 18<sup>th</sup>.

A response was received from Margaret on March 19<sup>th</sup>. In this response, Crimson Holdings states that they are working with their chemical vendor, ChemTreat, on recommendations for deodorants. Additionally, the facility is working with their dryer manufacturer for additional input, and they are working to obtain a control agent for the use in the production of egg protein. The company indicated that they will continue to work with EGLE to resolve the problem and ensure compliance under Rule 901 (R 336.1901).

### **Arrival & Facility Contacts**

We arrived in the area of Crimson Holdings around 11:40AM. Chuku and I both drove around the building a few times trying to locate the entrance. During these drives we both observed odors on Church St. and E. Maumee St. No visible emissions were seen.

Upon arrival, we parked in the back of the building and walked over to the shipping and receiving entrance. There was a sign on the door with a phone number. I called the number and the receptionist kindly explained how to find the front entrance. This main entrance is located on Church Street and there is street parking available near the entrance.

Once we entered through the main entrance, we signed in, completed a COVID screening, and met with Dan Hofbauer, facility manager. We were also joined by Ron Hammon, maintenance manager, shortly after.

### **Pre-Inspection Meeting**

A pre-inspection meeting was held with Dan and Ron. Dan explained that the facility currently employs 23 full-time employees and 2 temporary employees. He states that the facility runs 24 hours/7 days a week, and they run two twelve-hour shifts from 6-6.

I asked about the change in ownership and product. Dan explained that the facility was purchased by Crimson Holdings from Dairy Farmers of America and they made the switch from powdered milk to powdered egg in December of 2021. He explained that the powdered egg is used for pet and shrimp food.

Chuku and I asked if there were any production changes since the switch in product. Dan said that they have seen a decrease in production. He explained that they have not brought in any new process equipment and a lot of the equipment they were using before is no longer being used.

We then discussed the odor complaint that was received. Chuku and I explained that we did observe some odors as we were approaching the facility. Dan agreed that there is an odor with this powdered egg production. He explained that the facility is in the process of reviewing recommendations for deodorizers. He said the one that they are interested in trying first is a deodorizer that is fogged into the dryer system. He explained that they are waiting for a quote from the vendor. Chuku inquired about the chemistry of the deodorizer and Dan provided us a summary sheet and a SDS for the deodorizer for our review. See attached.

### **Onsite Inspection Narrative**

Before heading out onto the facility floor, Chuku and I were provided with hair nets, boot covers, and white coverall jackets. Additionally, we had to wash our hands.

We began the facility walk through in the receiving bay. This is where the egg product is unloaded from tanker trucks. It is then stored in 1 of 3 tanks where it gets pumped to the dryer.

Next, we walked through the area where the pasteurizer process is located. Dan explained that this new process no longer needs to go through the pasteurizers, so they have used some of the pumps and valves from this area on other process equipment.

We then observed the process equipment that was used for reverse osmosis. Dan explained that when the facility was producing powdered milk, they would run the milk through reverse osmosis to remove the water. At this time the facility is not running the egg through this process, but Dan said that they are looking into using it for the powdered egg production in the future. He explained that egg has a lot of water in it and using the reverse osmosis will help with the drying process.

We then observed the maintenance area. There is one parts washer here, and Dan confirmed that this is the only parts washer at the facility. I observed that the lid was closed.

We then walked over to the wastewater room. During our walk Chuku asked if ChemTreat had been able to diagnose the cause of the odor. Ron and Dan said no specific diagnosis was given, but it is their understanding that the odor is just caused by the nature of the egg and drying process.

During the walk we also passed by numerous totes. Dan explained that the facility can also receive the egg in these totes. While near these totes I could lightly detect the same odor that we had observed outside.

We viewed the wastewater room, and Dan explained that the facility pretreats their wastewater before they discharge it to the city.

We then observed the dryer. I was able to observe the control screen where I saw that the inlet temp was 386 degrees F and the exhaust temp was 160 degrees F. Dan explained that the evaporator system that was previously used on the process is no longer being used and there are no plans to use it. We then discussed the dryer's exhaust. Dan explained that the dryer exhausts through the roof where the stack turns East. He said that the facility receives complaints when the weather conditions cause an inversion type event, causing the exhaust to exit the stack and stay lower to the ground. He explained that the plan is to add fogging nozzles into the dryer duct work where the deodorizer can be sprayed in.

Dan explained that once the egg goes through the dryer, the powder is conveyed from the dryer to a tote filler. We observed this process. Dan stated that the facility can fill 13 "super sacks" a day. A "super sack" holds approximately 1500-1600 lbs. of product (net weight). We asked if they plan to increase this production. Dan said that if they start the reverse osmosis system up again, they will likely produce more since this process will remove the water before the egg goes to the dryer, allowing for faster drying times and an increase in production.

We then walked through a lot of warehouse space. Dan explained that the North side of the facility is not currently being used but it might be used in the future. Chuku and I explained the need for applying for a permit before any new processes or expansion could occur.

Next, we observed the facility's boilers. The facility has 3 natural gas boilers. Dan and Ron explained that, since switching to egg they need less steam, so they only run one boiler all the time. At the time of this inspection it appeared that the 1996 boiler was running. A summary of the boilers is outlined below:

- Clever Brooks – 2016 - 20,412,000 Btu/hr
- Clever Brooks – 1975 – 14,645,000 Btu/hr
- Clever Brooks – 1996 – 8,370,000 Btu/hr

After viewing the boilers, we went up onto the roof to try to view the stack. From our viewpoint the stack was not easily visible. Dan explained that it would be easier to see the stack from the ground on Church Street. Chuku and I said that we would look at it on our walk to our vehicles. During our time on the roof, however, Dan explained that the facility did modify their stack in 2018. We reviewed the stack diameter as it's shown in the permit and Dan said that it has definitely changed from what is found in the permit.

During the inspection Dan stated that there are no emergency generators at this facility.

### **Facility Wide Observations**

Overall, the facility appeared to be very well organized and clean. All processes appeared to be well kept. No leaks or spills were observed at any point during the inspection.

## **Post-Inspection Meeting**

After the onsite inspection we returned to the conference room.

I explained to Dan that a permit modification should have been submitted for the change in the stack. Chuku and I explained that any change in a process that emits air contaminants should be evaluated for whether or not a permit application or permit modification is needed. We discussed how the change in production from powdered milk to powdered egg should be evaluated for such a need. Chuku said that, at the very least, the change in product would warrant an administrative permit change to update the process description. Additionally, the possible use of this deodorizer should be evaluated as to the need for a permit application before it is installed. Any process or modification that needs a permit must have the permit approved before construction or installation begins.

Chuku then explained how to submit a permit modification application. Chuku explained about the public comment process and the process for a request for public hearing. Chuku and I both recommended that the facility schedules a pre-application meeting with AQD's Permit Section before submitting any permit application.

Additionally, we discussed the facility's boilers. Chuku mentioned that he believes the 2016 boiler is subject to federal regulations, and that this is something the facility should be aware of. I told Dan I would verify this during my review and report write up. We also discussed AQD's PTI exemptions and that the boilers appeared to be exempt from permitting.

I told Dan that I would send him a copy of the PTI Exemption Handbook as well as information about applying for permits. I also explained to Dan that, upon review of any records and regulations, and after talking with my supervisor, there is the likelihood that a Violation Notice (VN) will be issued for the modification of the stack without a permit. I explained that I would let him know if a VN will be issued and the facility will be given a timeframe to resolve this VN.

After the discussion, Chuku and I thanked Dan and Ron for their time and cooperation.

On our way to our vehicles we stopped to observe the stack from Church Street. Just as Dan had explained, the stack exits the building and turns to the East. See attached photo. During our walk along Church Street we were also able to smell the odor coming from the facility. During this walk it appeared that the odors were strongest near the facility's ventilation openings. It was difficult to determine, however, if the odor was coming from these openings or from the stack directly above this area.

We departed the area at approximately 1:20PM.

## **Record Review**

The facility operates a couple processes under PTI exemption rules.

The facility's parts washer appears to operate under Rule 281(2)(h).

The facility's natural-gas boilers that appear to operate under Rule 282(2)(b)(i)

The boilers all appear to be exempt from 40 CFR Part 63, Subpart JJJJJJ – National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers at Area Sources due to using only natural gas.

The 2016 Clever Brooks boiler is subject to 40 CFR Part 60, Subpart Dc- Standards of Performance for Small Industrial-Commercial-Institutional Steam-Generating Units. The other two boilers are not subject to this standard due to their age and size, respectively.

An initial notification was received by AQD on June 10, 2016 for the 2016 Clever Brooks boiler.

On March 28, 2022, an email was sent to Dan requesting monthly fuel usage records for the 2016 Clever Brooks boiler, as required by Subpart Dc.

These records were received on April 6, 2022. It appears that the facility is in compliance with the NSPS recordkeeping requirements.

### **Compliance Summary**


After a review of the records and the onsite inspection, it appears that Crimson Holdings is not in complete compliance with their permit. The turn in the stack is a violation of special condition 1.3 of their PTI. A VN will be issued for the unpermitted modification of the stack. Additionally, AQD will continue to monitor the facility for odor issues and asks Crimson Holdings to provide updates as they address the odor situation.



**Image 1(1)** : Aerial view



Image 2(2) : Stack/facility side view

 **PRODUCT BULLETIN**

**ODOR CONTROL—ODOR NEUTRALIZER  
OC9118**

**GENERAL DESCRIPTION**  
CHEMTREAT OC9118 is a highly effective concentrated multicomponent blend of odor neutralizing compounds. OC9118 is specifically formulated to eliminate nuisance odors when applied using mist spray technology. Unlike masking agents that overwhelm the malodor and actually increase overall odor intensity, OC9118 decreases overall odor intensity.

**TYPICAL PHYSICAL PROPERTIES**

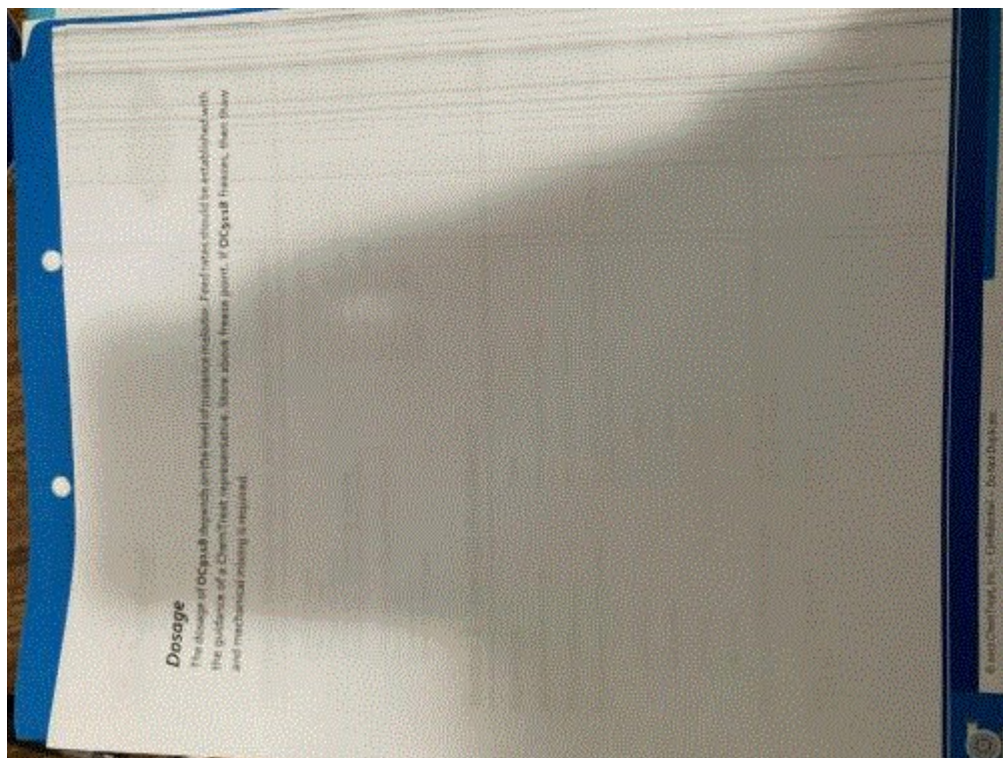
Form:	Clear, pink liquid
Odor:	Moderate
Viscosity:	< 100 CPS @ 20° C
pH:	~7.2
Specific Gravity:	1.003 @ 30°C
Density:	8.37 lb/gal
Freeze Point:	32°F

\*Please see the OC9118 SDS for specifics regarding safety and handling.

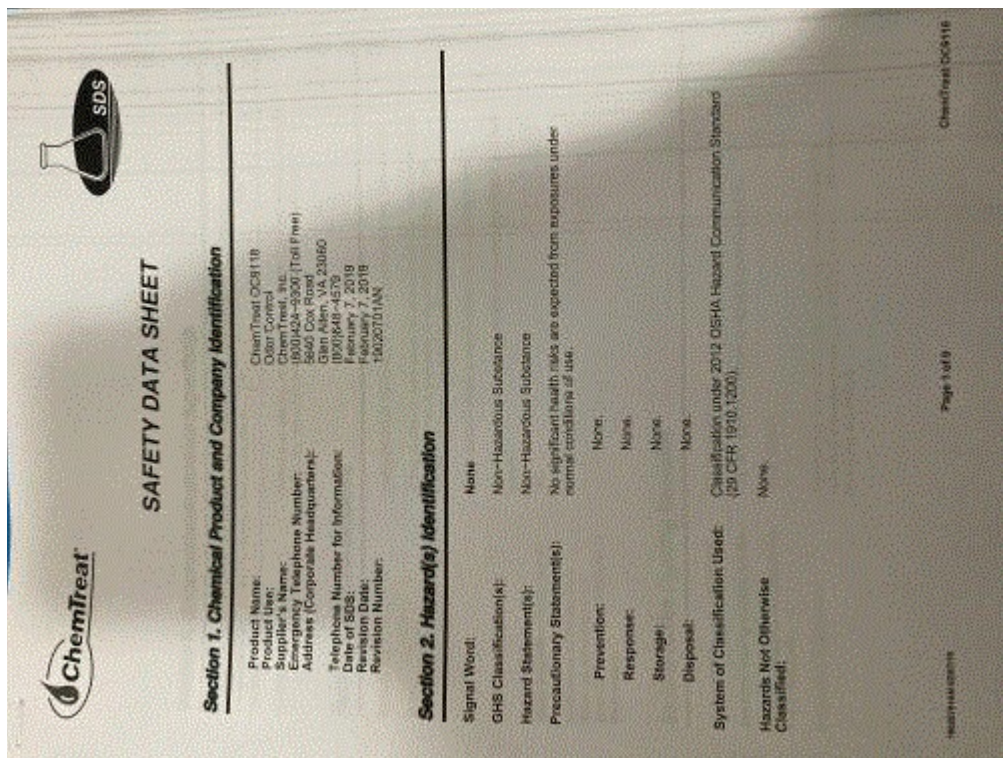
**FEEDING, DOSAGE AND CONTROL**

**Feed System**  
OC9118 is pre-mixed with water and fed at a typical dilution rate of 1 part product to 200-300 parts of water. The solution must be delivered through a properly designed feed system to ensure desired efficacy. Proper atomization of vapor allows intimate and thorough mixing with the malodor. ChemTreat representatives are trained to assist with specific applications.

Image 3(3) : Odor Control summary sheet



**Image 4(4) :** Odor Control summary sheet pg. 2



**Image 5(5) :** Front Page of OC9118 SDS



NAME Steph Weems

DATE 3/24/22

SUPERVISOR 