

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

N173571881

FACILITY: Uniform Color Co		SRN / ID: N1735
LOCATION: 942 Brooks, HOLLAND		DISTRICT: Kalamazoo
CITY: HOLLAND		COUNTY: ALLEGAN
CONTACT: Matt O'Daniels , HSE Specialist		ACTIVITY DATE: 03/14/2024
STAFF: Mariah Scott	COMPLIANCE STATUS: Compliance	SOURCE CLASS:
SUBJECT: Scheduled inspection with Cody Yazzie		
RESOLVED COMPLAINTS:		

On March 14, 2024 Air Quality Division (AQD) staff (Mariah Scott and Cody Yazzie, hereafter Staff) arrived at 942 Brooks, Holland Michigan at 10:40 AM to conduct an unannounced air quality inspection of Uniform Color Co (hereafter UCC). Staff made initial contact with the office receptionist and stated the purpose of the visit. Matt O'Daniels, UCC, HSE Specialist, is the new contact and was out of town for the visit. Staff spoke to Johnny Netzloff, UCC, President, Joseph Shanaa, UCC, Director of Global Operations, Kyle Rich, UCC, Plant Manager, and Robert Field, UCC, Training Coordinator, to discuss the purpose of the inspection and answer their initial questions.

UCC is a stationary source that has an estimated 80 manufacturing staff members, operating some parts of the plant for 3 shifts a day from Monday-Friday and other parts of the plant 24/7. UCC manufactures highly concentrated color pellets for use in the plastics industry. The simplified process is to mix pigments in with plastic resins, extrude the plastic, chop them into small pellets, then package them for shipment. UCC currently holds one permit for their mixing stations. All of the other operations in the plant appear to be operated under exemptions or are noted below.

UCC was last inspected by the AQD on January 26, 2011 and UCC appeared in Compliance at that time with Permit #604-93. The companies initial permits date back to 1993. Staff asked and UCC stated that UCC does not have any boilers.

Joseph Shanaa, Kyle Rich, and Robert Field were present for the walk-through inspection. Required personal protective equipment were steel toe boots, ear protection, and safety glasses. Staff observations and review of records provided during and following the inspection are summarized below:

Mixers – Permit #604-93

The company operates 5 mixers used to mix colorless resin with pigments to the desired ratios. These are all tied into a "Dustar" baghouse. This baghouse is an outside to in, reverse air cleaned, unit. The bags are hung on cages. The circular design has a rotating arm above the tube sheet that reverses the air down a set of bags to knock the dust off into the hopper. UCC informed AQD staff that the bags were checked and changed on March 25, 2022 by Waltz Holst, who they contract with for maintenance and repairs of this baghouse. A record of bags being changed March 25, 2022 from Waltz Holst was provided by UCC, in the form of an

invoice determined to be confidential. UCC informed Staff they perform daily outside inspections of the baghouse grounds for fugitive emissions from their dust collectors and addressed any identified problems in a timely manner. UCC's maintenance and leadership did not recall a time where the dust collector had any major issues, especially with fugitive emissions. Staff were informed the baghouse hopper was emptied every 2-3 months.

UCC informed AQD staff they were working with the Waltz Holst company to do blacklight testing and inspection of the bags and filters within the baghouse on a quarterly basis, unless more inspections appear necessary. A quote, determined to be confidential, for blacklight testing from Waltz Holst to Uniform Color Co on April 5, 2024 was shown to AQD staff.

There were no visible emissions from the discharge point. Nevertheless, the differential pressure gauge was reading 8 inches of water at 11:15 am during the inspection, which would appear outside the normal operating range. UCC said it normally is about 4 inches of water. In 2011, a similar situation of a reading 8 inches of water was noted by AQD staff and they were told the normal was 2 inches. This past issue was caused by the drive chain for the rotating arm falling off the sprockets. This was repaired in 2011 and UCC reported that the differential pressure gauge was again reading 2 inches of water. This new high differential pressure gauge issue in 2024 appears to be with the magnehelic gauges. UCC plans to have an annual recalibration program through Waltz Holst. A quote, determined to be confidential, for this repair was sent on April 5, 2024 from Waltz Holst and was provided to AQD Staff. The repair process proceeded over time.

April 19, 2024 email from Matt O'Daniels informed AQD Staff that Waltz Holst would be at UCC the Thursday of the following week to replace the magnehelic gauges.

April 30, 2024 email from Matt O'Daniels informed AQD Staff Waltz Holst replaced the magnehelic gauges. UCC observed multiple different readings afterwards, so Waltz Holst returned and cleared debris out of the lines that go to the magnehelic gauges. Matt O'Daniels also called AQD Staff with this information.

May 7, 2024: Matt O'Daniels forwarded an email to AQD Staff from Matt Paganelli, informing him the cleaning system was starting and stopping. They planned to replace the sight window to see if something was wrong while it is running that week.

May 8, 2024 phone call with Matt O'Daniels informed AQD Staff the baghouse gauge was steady at 3 inches of water and more repairs were planned.

May 13, 2024 email from Matt O'Daniels to AQD Staff included a photo of the baghouse gauges on May 8, 2024, reading 6.2 inches of water, and May 13, 2024, reading 3.1 inches of water.

May 14, 2024 phone call with Matt O'Daniels informed AQD Staff the gauge lines were cleaned, creating a backlog of dust into the cone. This backlog of dust was removed and the gauge was reading about 3 to 6 inches of water. UCC claimed no visible emissions occurred during this maintenance.

After these repairs and confirmation photographs, the "Dustar" baghouse appears to be in compliance with Permit #604-93.

Extrusion Area

There are 19 extrusion machines that melt the resin – pigment mixture together, and then extrudes it into a ribbon. The ribbon is then run through a water bath to solidify it so that it can be chopped into pellets. These colored pellets are then packaged for shipping or the warehouse. The heat and slight odors from the extrusion process are vented to one of two exhaust header systems to the outside. These exhaust systems appear to be operated under the Rule 286(2)(a) exemption. There were no visible emissions viewed from the exhaust points.

Central Vacuum System

This is a vacuum system used for general housekeeping at various points around the plant. Header systems run over the top of typically messy areas and flexible hoses (elephant trunks) drop down to the work areas. Workers can direct the hoses to manually clean up specific dust accumulations. A smaller size pulse jet cleaned baghouse is used to control the dust emissions. The unit is designed to have a secondary HEPA filter installed downstream from the baghouse. They do not have a differential pressure gauge on this baghouse. Instead, they measure the negative pressure in the duct. When the pressure gets to high (or not negative enough) then they know to perform maintenance on the filter. There were no visible emissions viewed from the exhaust point. This system appears to be exempt under Rule 281(2)(a). There were low amounts of visible dust accumulating in the facility, with UCC workers seen sweeping their work areas during the inspection.

Emergency Generator

This unit is an emergency generator, that uses natural gas fuel. UCC informed Staff that the Maximum Heat Input Capacity Full load is 634,000 Btu/Hr and the Half Load is 353,000 Btu/Hr, with a standard operational temperature of 192°F. These load values were reported in a document from Wolverine Power Systems, which was sent to AQD Staff. The data plate described the generator as Generac Power Systems, Inc., model number as 4812800200, serial number 2081207, type code SG0050-G365.7N18EBSYC, engine number OD3677. The generator was produced January 20, 2005 and installed March 31, 2005. The engine appears to be subject to 40 CFR Part 63 Subpart ZZZZ NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE). Since the engine appears to be constructed and installed prior to June 12, 2006 the engine would be considered an existing stationary RICE.

UCC informed Staff that Wolverine Power Systems does annual inspections on the emergency generator. Every Monday the generator is turned on for a short period to test if it is in working condition. If the generator doesn't turn on, an alarm informs UCC that it needs repair. A series of invoices, determined to be confidential, were provided by UCC to show unit hours and a record of inspections and maintenance by Wolverine Power Systems.

- January 23, 2024 inspection invoice from Wolverine Power Systems, with no issues found and a future recommendation to change the battery was provided. Unit hours were recorded as 415 hours.
- July 14, 2023 inspection invoice from Wolverine Power Systems, with a record of maintenance performed was provided. Unit hours were recorded as 413-415 hours. Unit was run for a two hour load bank by Wolverine Power Systems for their inspection.
- July 21, 2021 inspection invoice from Wolverine Power Systems, with a record of maintenance performed was provided. Unit hours were recorded as 410.8-412.8 hours. Unit was run for a two hour load bank by Wolverine Power Systems for their inspection.
- January 14, 2021 inspection invoice from Wolverine Power Systems, with battery maintenance recorded and no issues found. Unit hours were recorded as 409.8 hours.
- January 6, 2021 maintenance invoice from Wolverine Power Systems, with major repair work recorded. Unit hours were recorded as 409.3.
- June 16, 2020 inspection invoice from Wolverine Power Systems, with a record of maintenance performed was provided. Unit hours were recorded as 406.9-408.9 hours. Unit was run for a two hour load bank by Wolverine Power Systems for their inspection.
- January 22, 2020 inspection invoice from Wolverine Power Systems, with record of major maintenance performed provided. Unit hours were recorded as 401.2 hours.

UCC uses the generator as back up for their server room and their emergency lights for evacuation purposes. The emission unit appears to meet exemption Rule 285(2)(g). The AQD does not have delegation to enforce the NESHAP ZZZZ regulations for minor sources.

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Cold Cleaner

This emission unit was located across the street at the warehouse. Safety-Kleen Premium Solvent is subject to Rule 707. The safety data sheet describes the solvent as 100% hydrotreated light petroleum distillates, lists the safety considerations, and describes the VOC content as 100%. Cold cleaner signage was not posted on the machines, so Staff provided UCC with a copy of the necessary signage stickers. An April 19, 2024 email from Matt O'Daniels included photographs of the installed cold cleaner stickers. The cold cleaner was covered when Staff inspected the facility. UCC informed Staff that Safety Kleen picks up used solvent about once a month.

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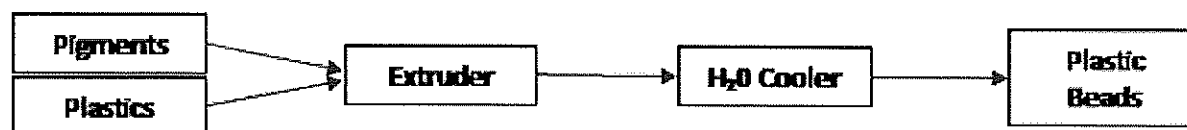
Development Lab Plastic Mixers and Injection Machines

These emission units were located across the street at the warehouse. There are 13 injection molding machines that melt one pound of the resin – pigment mixture together at a time and injects the pigmented resin into a metal molding die. These molds are part of the development process for color matching new material recipes. There were no visible emissions viewed from the machines. The emission unit appears to meet exemption Rules 286 (2)(b).

Plastic Mold Cleaning Oven

This emission unit was located across the street at the warehouse. A natural gas oven used for industrial cleaning of plastic off metal die plates was observed during the inspection, but did not have an existing PTI. This emission unit exhausts outdoors. UCC informed Staff that the emission unit is fired about 1-2 times per week. The maximum operating temperature of the Oven is 1400 °F, as displayed on the machine's signage. The unit is a GUSPRO Inc. Industrial Heat Cleaning Oven, Model Number GP0054GPP2P3S3N AKA GP2013618, Serial Number 96U031, with total maximum input of 515,000 Btu/h. UCC will be sent a Rule 278a Letter, requesting Uniform Color Co demonstrate either the natural gas oven located at 905 Brooks, Holland, Michigan and used to clean plastic off dies from the plastic extruding process is exempt from the requirements of Rule 201 or submit a PTI application for the subject processes at the facility.

At the time of the inspection and based on a review of records obtained during or following the inspection, the facility appears in compliance with Permit #604-93. However, the Plastic Mold Cleaning Oven related Rule 278a letter response will be sent May 17, 2024. Staff stated to Mr. O'Daniels that a report of the inspection would be sent to UCC for their records. Staff concluded the inspection at 12:30 PM. -MWS



GENERATOR SET DATA

MODEL **4812800200** SERIAL **2081207** MADE IN USA

TYPE CODE **SG0050-G365.7N18EBSYC** ENGINE NO. **003877**

RATED KW **50** RATED KVA **63** UPSIZE **NONE**

VOLTS **120/208** AMP S **173.4 / .0 / .0**

PHASE **3 PHA** POWER FACTOR **.8** HERTZ **60**

ALT. R.P.M. **1800** ENG R.P.M. **1800** PROD DATE **01/2002**

GENERAC POWER SYSTEMS, INC.
WALKER, MI

CLASS ☒ ROTOR ☐ STATOR WINDING INSULATION AT 40°C AMBIENT

UNIT CONFIGURED FOR:		
VOLTAGE	HERTZ	PHASE
120/240	60	1
120/208Y	60	3
120/240D	60	3
277/480Y	60	3

Image 1(Emergency Gen Data) : 2024_04_11 photograph from Matt O'Daniels of Emergency Generator Data Plate.



Image 2(Plastic Mold 1 of 2) : 2024_04_11 photograph from Matt O'Daniels of Plastic Mold Cleaning Oven 1 of 2.

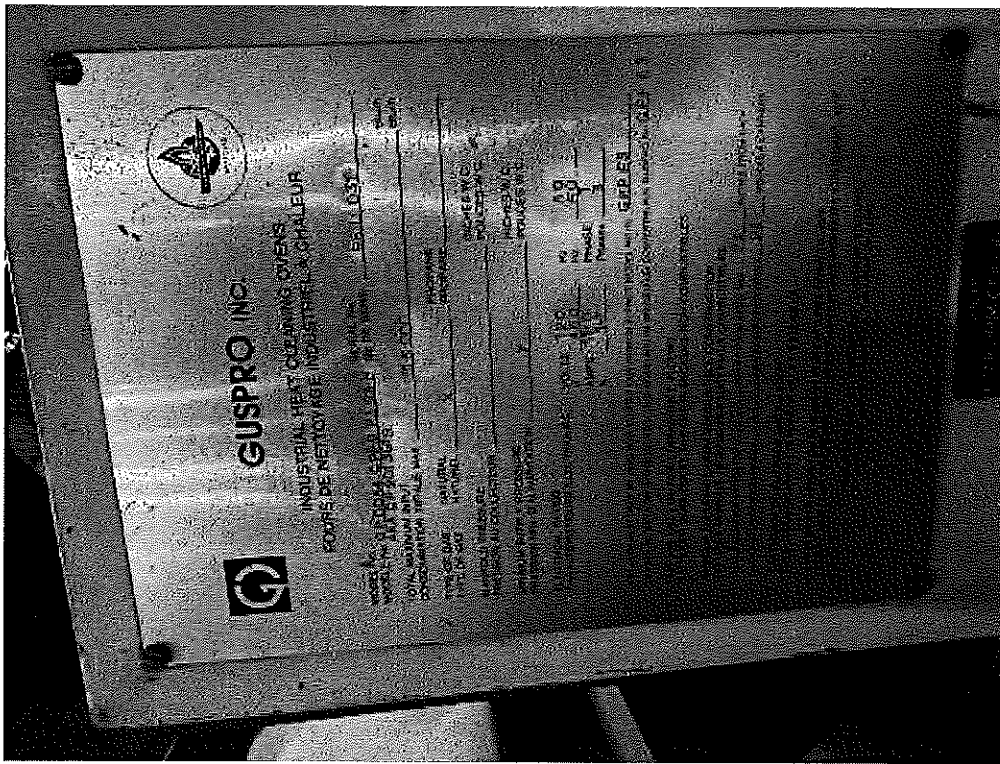


Image 3(Plastic Mold 2 of 2) : 2024_04_11 photograph from Matt O'Daniels of Plastic Mold Cleaning Oven 2 of 2.

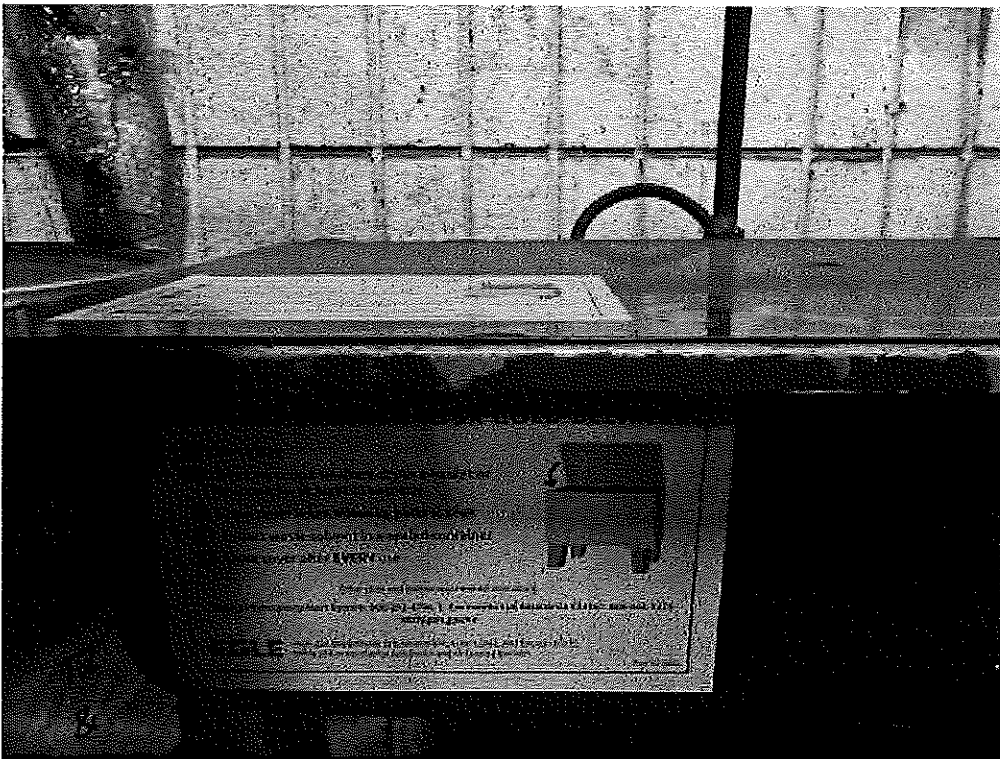


Image 4(Cold Cleaner 1 of 2) : 2024_04_19 photograph from Matt O'Daniels of Cold Cleaner with compliance sticker photograph 1 of 2

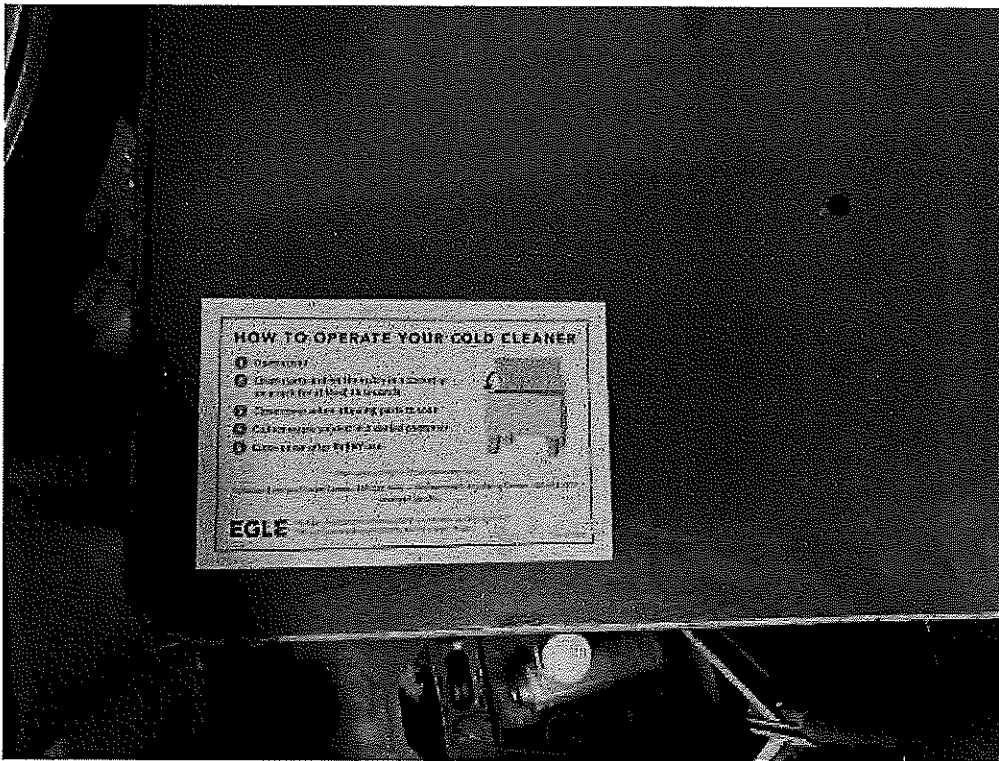


Image 5(Cold Cleaner 2 of 2) : 2024_04_19 photograph from Matt O'Daniels of Cold Cleaner with compliance sticker photograph 2 of 2

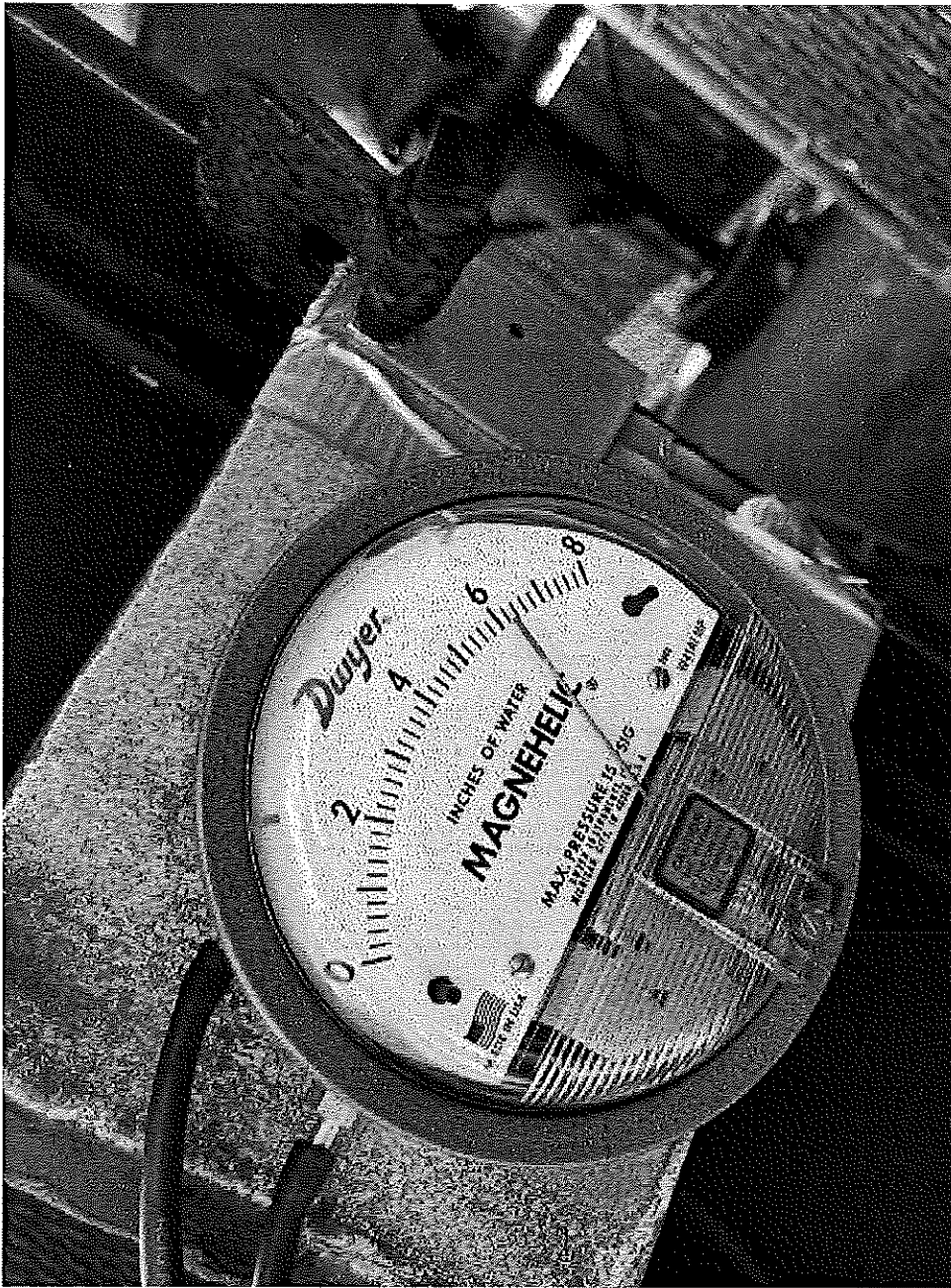


Image 6(Dustar guage May 8) : 2024_05_08 photograph from Matt O'Daniels of Dustar magnehelic gauge

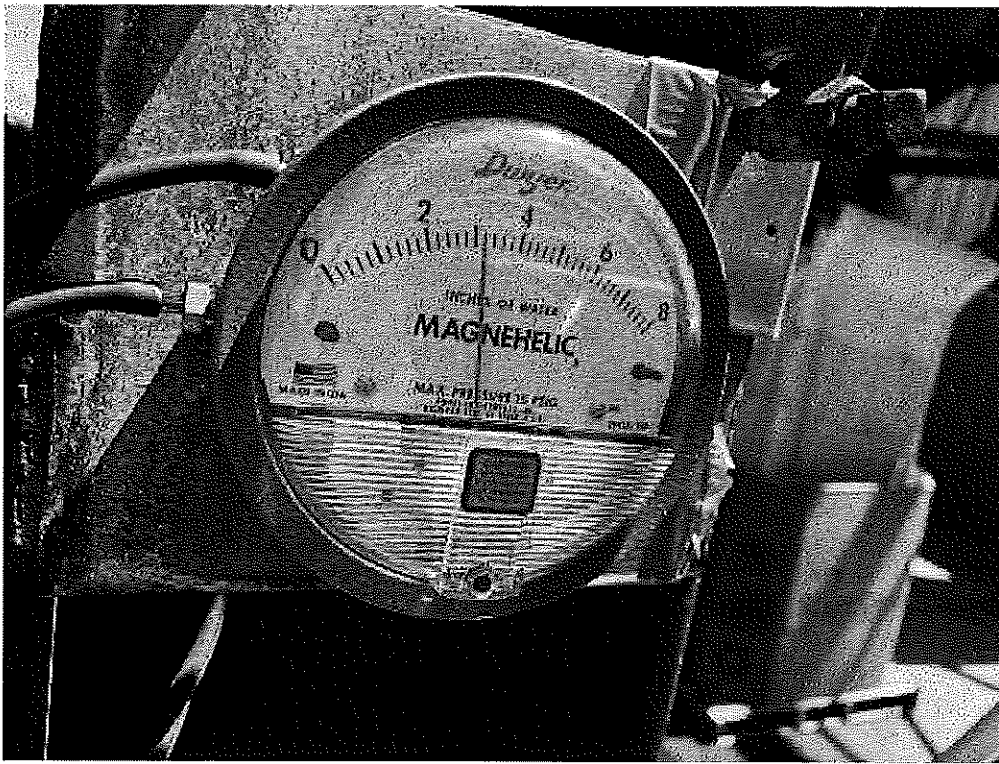


Image 7(Dustar gauge May 13) : 2024_05_13 photograph from Matt O'Daniels of Dustar magnehelic gauge

NAME

[Signature]
Mariah Scott

DATE

May 15, 24

SUPERVISOR

[Signature]