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

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FACILITY: Sekisui Voltek LLC.		SRN / ID: B8786	
LOCATION: 17 ALLEN AVE., COLDWATER		DISTRICT: Kalamazoo	
CITY: COLDWATER		COUNTY: BRANCH	
CONTACT: Heath Gillette, QEHS Dir	ector	ACTIVITY DATE: 08/09/2024	
STAFF: Mariah Scott COMPLIANCE STATUS: Non Compliance		SOURCE CLASS: MAJOR	
(SRN) facility. The facility appears out	uality Division staff conducted an unannounced air of compliance with Permit MI-ROP-B8786-2020a, of years, as well as their agitated cold cleaner not h	due to the infrequent and incomplete maintenance	

On August 9, 2024 Air Quality Division (AQD) staff (Mariah Scott, hereafter Staff) conducted an unannounced air quality inspection of the Sekisui Voltek, LLC (B8786) 17 Allen Avenue, Coldwater, Michigan 49036 facility (hereafter Sekisui). Staff arrived at 12:55 pm, made initial contact with Heath Gillette, and stated the purpose of the visit. In the facility driveway of Sekisui, no odors were detected. The weather was a sunny day, around 73°F, with a 13 mph wind from the WNW. During the inspection, Staff observed no visible emissions. During the inspection, Staff were accommodated by Heath Gillette, the Director of QEHS. Staff observed the emission units and pollution control equipment at the facility as part of the onsite inspection.

Sekisui is a manufacturing facility that produces plastic foam sheet material by mixing raw polypropylene, polyethylene, and other ingredients, extruding it into a sheet, crosslinking the molecular structure, and then expanding the material into foam. The foam material is produced in a variety of thicknesses and colors for various needs of industry. The facility has an estimated 180 staff, operating 24 hours a day and 7 days a week.

The walk-through inspection required a hard hat, safety glasses, hearing protection, and steel-toed boots. Staff was also asked to read and sign a safety, health, and environmental facility guidance. Staff observations, information stated by Sekisui, and review of the records provided by Sekisui during and following the inspection are summarized below:

Sekisui was last inspected by the AQD on March 7, 2022, and appeared in compliance at that time with Permit MI-ROP-B8786-2020.

#### **FGOVENS Conditions**

Twelve natural gas fired vertical ovens used to expand extruded plastic into foam, and three natural gas fired jet preheater ovens each with a nominal heat input rating of 1.2 MM BTU/hr. The vertical ovens are controlled by catalytic oxidizers.

Emission Unit IDs	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Catalytic Oxidizer Temperature at time of inspection (°F)
	Natural gas fired vertical ovens used to expand extruded plastic into foam,		Unit was off at time
	controlled by catalytic oxidizers.	06-02-1994	828
EUOVEN03		00-02-1334	796
EUOVEN04			886

Emission Unit IDs  (Including Process Equipment & Control Device(s))  EUOVEN05  EUOVEN06  EUOVEN06  EUOVEN07  EUOVEN07  EUOVEN08  EUOVEN09  EUOVEN09  EUOVEN10  EUOVEN10  EUOVEN11  Natural gas fired vertical ovens used to expand extruded plastic into foam, controlled by catalytic oxidizers.  EUOVEN09  EUOVEN09  EUOVEN10  EUOVEN11  Natural gas fired vertical ovens used to expand extruded plastic into foam, controlled by catalytic oxidizers.  EUOVEN13  Natural gas fired vertical ovens used to expand extruded plastic into foam, controlled by catalytic oxidizers.  EUOven6Preheat  Natural gas fired jet preheater for Oven 6 with a nominal heat input rating of 1.25 MMBTU/hr.  EUOven10Preheat Natural gas fired jet preheater for Oven 10 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven11Preheat Natural gas fired jet preheater for Oven 11 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven13Preheat Natural gas-fired Jet preheater for Oven 13 with a nominal heat rating of 1.2 MM BTU/hr.  EUOven13Preheat Natural gas-fired Jet preheater for Oven 13 with a nominal heat rating of 1.2 MM BTU/hr.				
to expand extruded plastic into foam, controlled by catalytic oxidizers.  EUOVEN07  EUOVEN08  EUOVEN09  EUOVEN10  EUOVEN11  CUOVEN11  CUOVEN11  CUOVEN11  CUOVEN13  CUOVEN13  CUOVEN13  CUOVEN14  CUOVEN15  CUOVEN16  CUOVEN16  CUOVEN17  CUOVEN17  CUOVEN18  CUOVEN18  CUOVEN19  CU	Emission Unit IDs	(Including Process Equipment &	Date/ Modification	time of inspection
EUOVEN07 EUOVEN08 EUOVEN09 EUOVEN10 EUOVEN11  EUOVEN11  EUOVEN11  Natural gas fired vertical ovens used to expand extruded plastic into foam, controlled by catalytic oxidizers.  EUOven6Preheat Natural gas fired jet preheater for Oven 6 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven11Preheat Natural gas fired jet preheater for Oven 11 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven13Preheat Natural gas fired jet preheater for Oven 11 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven13Preheat Natural gas fired jet preheater for Oven 11 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven13Preheat Natural gas-fired Jet preheater for Oven 13 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven13Preheat Natural gas-fired Jet preheater for Oven 13 with a nominal heat rating of 02-05-2020 NA  O2-05-2020 NA	EUOVEN05		06-14-1993	939
EUOVEN09 EUOVEN10 EUOVEN11  EUOVEN11  Date of the problem of the p	EUOVEN06		03-01-1989	830
EUOVEN10  EUOVEN11  Natural gas fired vertical ovens used to expand extruded plastic into foam, controlled by catalytic oxidizers.  EUOven6Preheat Natural gas fired jet preheater for Oven 6 with a nominal heat input rating of 1.25 MMBTU/hr.  EUOven10Preheat Natural gas fired jet preheater for Oven 10 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven11Preheat Natural gas fired jet preheater for Oven 11 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven13Preheat Natural gas fired jet preheater for Oven 11 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven13Preheat Natural gas-fired Jet preheater for Oven 13 with a nominal heat rating of 02-05-2020  NA  O2-05-2020  NA  O2-05-2020  NA  O2-05-2020  NA	EUOVEN07	:	12-01-1990	812
EUOVEN10  EUOVEN11  Natural gas fired vertical ovens used to expand extruded plastic into foam, controlled by catalytic oxidizers.  EUOven6Preheat Natural gas fired jet preheater for Oven 6 with a nominal heat input rating of 1.25 MMBTU/hr.  EUOven10Preheat Natural gas fired jet preheater for Oven 10 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven11Preheat Natural gas fired jet preheater for Oven 11 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven13Preheat Natural gas-fired jet preheater for Oven 11 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven13Preheat Natural gas-fired Jet preheater for Oven 13 with a nominal heat rating of 02-05-2020  NA  O1-01-1996  Unit was off at tim  10-19-2015  NA  NA  NA  NA  NA  EUOven10Preheat Natural gas fired jet preheater for Oven 11 with a nominal heat input rating of 1.2 MM BTU/hr.	EUOVEN08		07-01-1994	870
EUOVEN11  Natural gas fired vertical ovens used to expand extruded plastic into foam, controlled by catalytic oxidizers.  EUOven6Preheat Natural gas fired jet preheater for Oven 10 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven11Preheat Natural gas fired jet preheater for Oven 10 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven11Preheat Natural gas fired jet preheater for Oven 11 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven13Preheat Natural gas-fired Jet preheater for Oven 13 with a nominal heat rating of 02-05-2020  NA  O2-05-2020  NA  O2-05-2020  NA  O2-05-2020  NA	EUOVEN09		11-01-1995	745
EUOVEN13 Natural gas fired vertical ovens used to expand extruded plastic into foam, controlled by catalytic oxidizers.  EUOven6Preheat Natural gas fired jet preheater for Oven 6 with a nominal heat input rating of 1.25 MMBTU/hr.  EUOven10Preheat Natural gas fired jet preheater for Oven 10 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven11Preheat Natural gas fired jet preheater for Oven 11 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven13Preheat Natural gas-fired Jet preheater for Oven 13 with a nominal heat rating of 02-05-2020 NA	EUOVEN10		01-01-1996	962
EUOVEN13 Natural gas fired vertical ovens used to expand extruded plastic into foam, controlled by catalytic oxidizers.  EUOven6Preheat Natural gas fired jet preheater for Oven 6 with a nominal heat input rating of 1.25 MMBTU/hr.  EUOven10Preheat Natural gas fired jet preheater for Oven 10 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven11Preheat Natural gas fired jet preheater for Oven 11 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven13Preheat Natural gas-fired Jet preheater for Oven 11 with a nominal heat input rating of 1.2 MM BTU/hr.	EUOVEN11		04-19-1996	Unit was off at time
EUOVEN13  Natural gas fired vertical ovens used to expand extruded plastic into foam, controlled by catalytic oxidizers.  EUOven6Preheat  Natural gas fired jet preheater for Oven 6 with a nominal heat input rating of 1.25 MMBTU/hr.  EUOven10Preheat  Natural gas fired jet preheater for Oven 10 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven11Preheat  Natural gas fired jet preheater for Oven 11 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven11Preheat  Natural gas fired jet preheater for Oven 11 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven13Preheat  Natural gas-fired Jet preheater for Oven 13 with a nominal heat rating of			10-19-1915	
to expand extruded plastic into foam, controlled by catalytic oxidizers.  EUOven6Preheat Natural gas fired jet preheater for Oven 6 with a nominal heat input rating of 1.25 MMBTU/hr.  EUOven10Preheat Natural gas fired jet preheater for Oven 10 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven11Preheat Natural gas fired jet preheater for Oven 11 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven13Preheat Natural gas-fired Jet preheater for Oven 13 with a nominal heat rating of 02-05-2020 NA			11-01-2016	
Oven 6 with a nominal heat input rating of 1.25 MMBTU/hr.  EUOven10Preheat Natural gas fired jet preheater for Oven 10 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven11Preheat Natural gas fired jet preheater for Oven 11 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven13Preheat Natural gas-fired Jet preheater for Oven 13 with a nominal heat rating of	EUOVEN13	to expand extruded plastic into foam,	02-05-2020	Unit was off at time
Oven 10 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven11Preheat Natural gas fired jet preheater for Oven 11 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven13Preheat Natural gas-fired Jet preheater for Oven 13 with a nominal heat rating of	EUOven6Preheat	Oven 6 with a nominal heat input		NA
Oven 11 with a nominal heat input rating of 1.2 MM BTU/hr.  EUOven13Preheat Natural gas-fired Jet preheater for Oven 13 with a nominal heat rating of	EUOven10Preheat	Oven 10 with a nominal heat input		NA
Oven 13 with a nominal heat rating of	EUOven11Preheat	Oven 11 with a nominal heat input		NA
1.25 WWW D1 G/H1.	EUOven13Preheat		02-05-2020	NA

- I. Emission Limits (Hourly emission limits were not assessed during this inspection)
- II. Material Limits (NA)
- III. Process/operational restriction(s)

Permit requirement	Appear Compliant?
	Yes

1. The pemittee shall not operate a foam production oven unless its respective catalytic oxidizer is installed maintained and operated in a satisfactory manner.	
unless a minimum temperature of 600°F at the inlet of the catalyst bed of the associated catalytic oxidizer is maintained.	Yes, see the catalytic oxidizer temperatures at time of inspection described above

IV. Design/equipment parameter(s) (Records provided included Verification of CAT Low Temperature Alarm at 650°F Oven 8 Maintenance Example)

Permit requirement	Appear Compliant?
The permittee shall calibrate, maintain and operate according to manufacturer's specifications, a continuous temperature monitoring device with a continuous recorder at the inlet and oulet of the catalyst bed of each catalytic oxidizer.	Yes, including Oven 8 maintenance service record example
2. The permittee shall equip and maintain each oven in FGOVENS with an alarm that signals when the temperature at the inlet of the catalyst bed during foam production is at or below the minimum temperature required by SC III.2.	Yes

# V. Testing/sampling

Permit requirement	Appear Compliant?
	ovens (EUOVEN9, EUOVEN11, and EUOVEN13) of FGOVENS were tested for volatile organic compound emissions (VOC) as non-methane non-ethane organic compounds (NMNEOC). The testing to be performed in accordance with Title 40 of the Code of Federal Regulations (40 CFR), Part 60, Appendix A, Methods 1, 2, 3, 4, 25A; and Part 63 Appendix A, Method 320/ASTM D6348 (FTIR).  Stack test showed compliance with permit limits.

a minimum, every five years from the date of the last test.

VI. Monitoring/recordkeeping (Records provided included Pounds Per Oven Spreadsheet and Verification of CAT Low Temperature Alarm at 650°F Oven 8 Maintenance Example)

Permit requirement	Appear Compliant?
The permittee shall keep monthly records of the amoun (weight) of foam produced per oven.	Yes
2. The permittee shall keep a record of the date and time of al temperature alarms occurring during foam production and o the corrective actions taken and shall compile the record or a weekly basis. The permittee shall keep the record on file a the facility and make it available to the Department upor request.	alarms have occurred and provided records showing a work order example for the

# VII. Reporting

Permit re	equirement	Appear Compliant?
	ompt reporting of deviations pursuant to General Conditions 21 and 22 Part A.	Yes
Co ap	emiannual reporting of monitoring and deviations pursuant to General condition 23 of Part A. The report shall be postmarked or received by the propriate AQD District Office by March 15 for reporting period July 1 to ecember 31 and September 15 for reporting period January 1 to June 1.	See full compliance evaluation report
20	of Part A. The report shall be postmarked or received by the propriate AQD District Office by March 15 for the previous calendar	See full compliance evaluation report
rep	ne permittee shall submit any performance test reports including RATA ports to the AQD Technical Programs Unit and District Office, in a rmat approved by the AQD.	Yes
ins aut the AC Co mo	the permittee shall notify the AQD District Supervisor, in writing, of the stallation, construction, reconstruction, relocation, or modification of thorized by Permit to Install No. 21-18A, as follows. For EUOVEN13, as permittee or the authorized agent pursuant to Rule 204, shall notify the QD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or codification for each oven is considered to occur not later than summencement of trial operation of EUOVEN13.	Yes

#### VIII. Stack and vent restrictions

FGOVENS stacks and vents do not appear to have been modified since the previous inspection March 7, 2022. The stacks and vents appear in compliance with MI-ROP-B8786-2020a.

IX. Other requirement(s) (NA)

#### FGOVEN12

A natural gas fired horizontal oven used to expand extruded polyolefin plastic into foam, and natural gas fired belt burners used to remove foam buildup on the belt. There is no pollution control equipment for this Flexible Group.

Units were off at the time of inspection.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date
EUOVEN12	A natural gas fired horizontal oven used to expand extruded polyolefin plastic into foam.	02-05-2014
EUBELTBURN12	Natural gas fired belt burners used to remove foam buildup on the belt.	02-05-2014

1. Emission Limits (Records provided included FG OVEN 12 – Record Keeping)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Appear Compliant?
voc	23.5 tpy	12-month rolling time period as determine at the end of each month	FGOVEN12	Yes, highest in provided records was 0.91 tons/ 12 months
Ammonia	3.54 pph	Hourly	FGOVEN12	Yes, see FGOVENS V.2. above

II. Material Limits (Records provided included FG OVEN 12 - Record Keeping)

Material	Limit	Time Period / Operating Scenario	Equipment	Appear Compliant?
Azodicarbon- amide	478 tpy	12-month rolling time period as determined at the end of each month	FGOVEN12	Yes, highest in provided records was 14.72 tons/ 12 months

Material		Time Period / Operating Scenario		Appear Compliant?
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- III. Process/operational restriction(s) (NA)
- IV. Design/equipment parameter(s) (NA)
- V. Testing/sampling

Permit requirement	Appear Compliant?
By October 31, 2022, the permittee shall verify the Ammonia emission rates from FGOVEN12, and at a minimum, every five years from the date of the last test.	Yes, see FGOVENS V.2. above

# VI. Monitoring/recordkeeping (Records provided included FG OVEN 12 - Record Keeping)

Permit requirement	Appear Compliant?
The permittee shall monitor, in a satisfactory manner, the natural gas usage from FGOVEN12 on a 12-month rolling time period basis.	Yes
<ol> <li>The permittee shall keep, in a satisfactory manner, monthly and previous 12-month azodicarbonamide material usage records for FGOVEN12. The permittee shall keep all records on file and make them available to the Department upon request.</li> </ol>	Yes
The permittee shall keep, in a satisfactory manner, monthly and previous 12-month VOC emission calculation records for FGOVEN12. The permittee shall keep all records on file and make them available to the Department upon request.	Yes

# VII. Reporting

Perm	Appear Compliant?	
1	Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A.	Yes
2	Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30.	See full compliance evaluation report
3	. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the	See full compliance

appropriate AQD District Office by March 15 for the previous calendar year.	evaluation report
The permittee shall submit any performance test reports including RATA reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD.	Yes

## VIII. Stack and vent restrictions

FGOVEN12 stacks and vents do not appear to have been modified since the previous inspection March 7, 2022. The stacks and vents appear in compliance with MI-ROP-B8786-2020a.

IX. Other requirement(s) (NA)

## **FGPARTICULATE** Conditions

Plastic milling operations and plastic storage silos controlled by filters. All have filters.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date
EUMILL01	Milling operation No. 1 for grinding plastic resins prior to extrusion with bag filter control.	
EUMILL02	Milling operation No. 2 for grinding plastic resins prior to extrusion with bag filter control.	
EUMILL03	Milling operation No. 3 for grinding plastic resins prior to extrusion with bag filter control.	
EUMILL04	Milling operation No. 4 for grinding plastic resins prior to extrusion with bag filter control.	
EUMILL05	Milling operation No. 5 for grinding plastic resins prior to extrusion with bag filter control.	07-01-1994
EUSILO01	Silo No. 1 for storage of plastic resin prior to use in other processes.	01-01-1975
EUSILO02	Silo No. 2 for storage of plastic resin prior to use in other processes.	01-01-1974
EUSILO03		01-01-1976

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation  Date/  Modification Date
	Silo No. 3 for storage of plastic resin prior to use in other processes.	
EUSILO04	Silo No. 4 for storage of plastic resin prior to use in other processes.	01-01-1977
EUSILO05	Silo No. 5 for storage of plastic resin prior to use in other processes.	01-01-1977
EUSILO06	Silo No. 6 for storage of plastic resin prior to use in other processes.	01-01-1978
EUSILO07	Silo No. 7 for storage of plastic resin prior to use in other processes.	02-01-1992
EUSILO08	Silo No. 8 for storage of plastic resin prior to use in other processes.	02-01-1995
EUSILO09	Silo No. 9 for storage of plastic resin prior to use in other processes.	02-01-1995
EUSILO10	Silo No. 10 for storage of plastic resin prior to use in other processes.	05-05-2008
EUSILO11	Silo No. 11 for storage of plastic resin prior to use in other processes.	04-10-2018
EUSILO12	Silo No. 12 for storage of plastic resin prior to use in other processes.	04-10-2018

Silos often had a resin pile at their base inside the silo, but no resin was seen in the outside, surrounding area. Mills inside the facility had some resin the immediate area.

- I. Emission Limits (Emission limits were not assessed as part of this inspection)
- II. Material Limits (NA)
- III. Process/operational restriction(s) (NA)
- IV. Design/equipment parameter(s) (NA)
- V. Testing/sampling (NA)
- VI. Monitoring/recordkeeping (Records provided included Mill and Silo Maintenance Checks and Silos Emissions Check Sheet)

Permit requirement		Appear Compliant?

1.		No, two years of records were requested. But maintenance requirements appear unfulfilled
2.	The permittee shall perform and record a visible emission check on the silos when loading. If visible emissions are observed the system shall be checked and a record of maintenance activities shall be kept.	

Appendix 3: Preventative Mainte	nance Plan	
Grinding Mills: Annual	Grinding Mills: Semiannual	Resin Silos: <u>Semiannual</u>
Check electrical connections on mill	Grease bearings on sifter Grease bearings on mill	Check oil, change if needed Clean filters on loaders
Check mechanical connections on mill	Clean cooling fan on mill motor	
Check electrical connections on sifter	Clean cooling fan on gate motor	Clean unit complete
Check mechanical connections	Clean cooling fan on fan motor	Check belts for tension and alignment
on sifter	Check belt on mill for wear and tension	Check all electrical connections
Check electrical connections on cyclone	Check belt on sifter for wear and tension	Check all mechanical connections
Check mechanical connections on cyclone	Check chains and sprockets on gate for wear and alignment	Clean electric cabinet
Check electrical connections in control panel	Change oil in gate gear box 90wt.	Check for air leaks Check chain and sprockets on
Check mechanical connections in control panel	Check all cloth sleeves for wear	rotary airlock
Grease bearings on mill motor	Clean interior of control panel	Check oil in gearbox on rotary airlock
Grease bearings on fan motor	Clean filter on loader	Check all indicator lights
Grease bearings on sifter motor	Check operation of asco valves	Grease pumps
	Check blade gap and alignment	Grease motor
	Clean screens on mill back	Check silo lights
	Clean screens on sifter	Record hour meter reading
	Check screens on sifter for holes and tautness	
	Check bag filters for leaks	

Maintenance records for silos and mill maintenance had some missing components. Mill records provided were missing the check of "Check bag filters for leaks." Several mill maintenance logs

include unsigned tasks, with no explanation as to why they were not completed. Silo maintenance is required semiannually, but maintenance records indicate they were not maintained often enough for permit requirements. A Violation Notice will be sent to the company concerning maintenance requirements.

#### VII. Reporting

Permit requirement	Appear Compliant?
Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A.	Yes
Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to	See full compliance evaluation report
and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year.	See full compliance evaluation report

VIII. Stack and vent restrictions (NA)

IX. Other requirement(s) (NA)

#### **FGCOLDCLEANERS**

Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, Rule 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979. There is no pollution control equipment on these units.

The lids were closed during inspection. The solvents are not heated as part of the parts cleaning process. EUCOLDCLEANER is agitated. EUCOLDCLEANER2 was unlabeled during the inspection. Labels were given by Staff during the inspection and photographs of their instillation were provided.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation  Date/  Modification  Date
EUCOLDCLEANER	Maintenance shop cleaner. Model 5916	01-01-1974
	Maintenance shop cleaner. Model 30 Solvent Parts Washer SK97	2017

I. Emission Limits (NA)

Material Limits (Records provided included Safety-Kleen MSDS)

Permit requirement	Appear Compliant?
1. The permittee shall not use cleaning solvents containing more than five percent by weight of the following halogenated compounds: methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, or any combination thereof.	Yes

III. Process/operational restriction(s) (Records provided included Safety-Kleen MSDS)

Permit requirement	Appear Compliant?
Cleaned parts shall be drained for no less than 15 seconds or until dripping ceases.	Yes
2. The permittee shall perform routine maintenance on each cold cleaner as recommended by the manufacturer.	Yes

IV. Design/equipment parameter(s) (Records provided included Safety-Kleen MSDS)

Permit requirement	Appear Compliant?
The cold cleaner must meet one of the following design requirements:      The air/vapor interface of the cold cleaner is no more than ten square feet.     The cold cleaner is used for cleaning metal parts and the emissions are released to the general in-plant environment.	less than 10 square feet Yes, the cold
2. The cold cleaner shall be equipped with a device for draining cleaned parts.	Yes
3. All new and existing cold cleaners shall be equipped with a cover and the cover shall be closed whenever parts are not being handled in the cold cleaner.	Yes, the lids were closed during the inspection
	No, EUCOLDCLEANER is agitated, but the lid is not mechanically assisted.
5. If the Reid vapor pressure of any solvent used in a new cold cleaner is greater than 0.6 psia; or, if any solvent used in a new cold cleaner is heated above 120 degrees Fahrenheit, then the cold cleaner must comply with at least one of the following provisions:	

- a. The cold cleaner must be designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7.
- b. The solvent bath must be covered with water if the solvent is insoluble and has a specific gravity of more than 1.0.
- c. The cold cleaner must be controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD.

EUCOLDCLEANER is an agitated unit without a mechanically assisted lid. A Violation Notice will be sent concerning this cold cleaner.

- V. Testing/sampling (NA)
- VI. Monitoring/recordkeeping (Records provided included Safety-Kleen MSDS)

	Appear Compliant?
1. For each new cold cleaner in which the solvent is heated, the solvent temperature shall be monitored and recorded at least once each calendar week during routine operating conditions.	Yes, cold cleaners are unheated
The permittee shall maintain the following information on file for each cold cleaner:	Yes, see each point
a. A serial number, model number, or other unique identifier for each cold cleaner. — Yes, as each cold cleaner has a unique identifier b. The date the unit was installed, manufactured or that it commenced operation. — Yes, see the above table c. The air/vapor interface area for any unit claimed to be exempt under Rule 281(2)(h). — Yes, it is less than 10 square feet. d. The applicable Rule 201 exemption. Rule 281(2)(h) e. The Reid vapor pressure of each solvent usedYes MSDS provided f. If applicable, the option chosen to comply with Rule 707(2)Appears not applicable	
3. The permittee shall maintain written operating procedures for each cold cleaner. These written procedures shall be posted in an accessible, conspicuous location near each cold cleaner.	Yes, the labels are installed
4. As noted in Rule 611(2)(c) and Rule 707(3)(c), if applicable, an initial demonstration that the waste solvent is a safety hazard shall be made prior to storage in non-closed containers. If the waste solvent is a safety hazard and is stored in non-closed containers, verification that the waste solvent is disposed of so that not more than 20 percent, by weight, is allowed to evaporate into the atmosphere shall be made on a monthly basis.	applicable, but no waste solvent observed in

## VII. Reporting

Permit requiremen	į.	Appear Compliant?
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Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A.	Yes
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30.	See full compliance evaluation report
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year.	See full compliance evaluation report

VIII. Stack and vent restrictions (NA)

IX. Other requirement(s) (NA)

## FGRULE290

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a and Rule 290. Emission units installed/modified before December 20, 2016, may show compliance with Rule 290 in effect at the time of installation/modification. There is no pollution control equipment for this Flexible Group.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation  Date/  Modification  Date
EUCLEANINGOVEN	Heat and vacuum cleaning of thermoplastic residue from metal tooling.	10-01-2014

1. Emission Limits (Records provided included Rule 290 Exemption Record Keeping)

rmit requirement	Appear Compliant?
1. Each emission unit that emits only noncarcinogenic volatile organic compounds or noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, if the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively.	
2. Any emission unit for which CO2 equivalent emissions are not more than 6,250 tons per month and for which the total uncontrolled or controlled emissions of all other ail contaminants are not more than 1,000 or 500 pounds per month respectively, and all the following criteria listed below are met:  a. For toxic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials.	

which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 0.04 micrograms per cubic meter and less than 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively.

- b. For toxic air contaminants with initial risk screening levels greater than or equal to 0.04 microgram per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively.
- c. The emission unit shall not emit any toxic air contaminants, excluding non-carcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with an initial threshold screening level or initial risk screening level less than 0.04 microgram per cubic meter.
- d. For total mercury, the uncontrolled or controlled emissions shall not exceed 0.01 pounds per month from emission units installed on or after December 20, 2016. e. For lead, the uncontrolled or controlled emissions shall not exceed 16.7 pounds per month from emission

units installed on or after December 20, 2016.

- 3. Any emission unit that emits only particulate air Appears not contaminants without initial risk screening levels and other applicable air contaminants that are exempted under Rule 290(2)(a)(i) or Rule 290(2)(a)(ii), if all the following provisions are met:
  - a. The particulate emissions are controlled by an appropriately designed and operated fabric filter collector or an equivalent control system which is designed to control particulate matter to a concentration of less than or equal to 0.01 pound of particulate per 1,000 pounds of exhaust gases and which does not have exhaust gas flow rate more than 30,000 actual cubic feet per minute.
  - b. The visible emissions from the emission unit are not more than 5% opacity in accordance with the methods contained in Rule 303.
  - c. The initial threshold screening level for each particulate toxic air contaminant, excluding nuisance particulate, is more than 2.0 micrograms per cubic meter.
- II. Material Limits (NA)
- III. Process/operational restriction(s) (Records provided included Rule 290 Exemption Record Keeping)

Permit requirement	Appear Compliant?
	Yes

- 1. The provisions of Rule 290 apply to each emission unit that is operating pursuant to Rule 290.
- 2. The following requirements apply to emission units installed on or after December 20, 2016, utilizing control equipment:
- Not applicable, as the oven was installed in 2016
- a. An air cleaning device for volatile organic compounds shall be installed, maintained, and operated in accordance with the manufacturer's specifications. Examples include the following:
- i. Oxidizers and condensers equipped with a continuously displayed temperature indication device.
- ii. Wet scrubbers equipped with a liquid flow rate monitor.
- iii. Dual stage carbon absorption where the first canister is monitored for breakthrough and replaced if breakthrough is detected.
- b. An air cleaning device for particulate matter shall be installed, maintained, and operated in accordance with the manufacturer's specifications or the permittee shall develop a plan that provides to the extent practicable for the maintenance and operation of the equipment in the manner consistent with good air pollution control practices for minimizing emissions. It shall also be equipped to monitor appropriate indicators of performance, for example, static pressure drop, water pressure, and water flow
- IV. Design/equipment parameter(s) (NA)
- V. Testing/sampling (NA)
- VI. Monitoring/recordkeeping (Records provided included Rule 290 Exemption Record Keeping)

rmit red	quirement	Appear Compliant?
each outlin Recor	ne permittee shall maintain records of the following information for emission unit for each calendar month using the methods ed in the EGLE, AQD Rule 290; Permit to Install Exemption or form (EQP 3558) or in a format that is acceptable to the AQD ct Supervisor.	
a.	Records identifying each air contaminant that is emitted.	
	Records identifying if each air contaminant is controlled or acontrolled.	
c. ca	Records identifying if each air contaminant is either arcinogenic or non-carcinogenic.	
ai	Records identifying the ITSL and IRSL, if established, of each r contaminant that is being emitted under the provisions of Rules 90(2)(a)(ii) and (iii).	
na de	Records of material use and calculations identifying the quality, ature, and quantity of the air contaminant emissions in sufficient etail to demonstrate that the actual emissions of the emission unit eet the emission limits outlined in this table and Rule 290.	

Volatile organic compound emissions from units installed <u>on or after</u> December 20, 2016, shall be calculated using mass balance, generally accepted engineering calculations, or another method acceptable to the AQD District Supervisor.

- f. Records are maintained on file for the most recent 2-year period and are made available to the department upon request.
- 2. The permittee shall maintain an inventory of each emission unit Yes that is exempt pursuant to Rule 290. This inventory shall include the following information.
  - a. The permittee shall maintain a written description of each emission unit as it is maintained and operated throughout the life of the emission unit.
  - b. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(2)(a)(iii), the permittee shall maintain a written description of the control device, including the designed control efficiency and the designed exhaust gas flow rate.
- 3. For each emission unit that emits noncarcinogenic particulate Appears not air contaminants pursuant to Rule 290(2)(a)(iii), the permittee shall applicable perform a monthly visible emission observation of each stack or vent during routine operating conditions. This observation need not be performed using Method 9. The permittee shall keep a written record of the results of each observation.

The unit had a running log of hours it was operated. That log indicated February 2, 2024 to July 24, 2024, there were eight cycles, each eight hours long.

#### VII. Reporting

	Appear Compliant?
1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A.	Yes
	See full compliance evaluation report
	See full compliance evaluation report

VIII. Stack and vent restrictions (NA)

IX. Other requirement(s) (NA)

#### **Exempt Emission Units**

Non-permitted, exempt equipment at the facility consisted of the following equipment list, with the exemptions they appear to comply under.

Emission Unit ID or Type	Emission Unit Description (Including Process Equipment & Control Device (s))	Notes and apparent exemption
	Milling operation No. 6 for grinding plastic resins prior to extrusion with bag filter control. This unit is from a decommissioned plant in Wales. Installed 09-18-2018	and not included in
		Appears exempt under Rule 285(2)(I)(vi)(C)
	Milling operation No. 7 for grinding plastic resins prior to extrusion with bag filter control. This unit is from a decommissioned plant in Boston. Installed 04-19-2022	
		Appears exempt under Rull 285(2)(I)(vi)(C)
	Milling operation No. 8 for grinding plastic resins prior to extrusion with bag filter control. This unit is from a decommissioned plant in Boston. Installed 03-24-2020	and not included in
		Appears exempt under Rule 285(2)(I)(vi)(C)
Eight single screw plastic extruders	Plastic extrusion that appears to exhaust into building	Appears exempt under Rule 286(2)(a)
Five twin screw plastic extruder	Plastic extrusion that appears to exhaust into building	Appears exempt under Rule 286(2)(a)
Two evaporative cooling towers	Evaporative cooling towers that do not use process water	Appears exempt under Rule 280(2)(d)
Two research and development extruders	Plastic extrusion that appears to exhaust into building for research and development	Appears exempt under Rule 286(2)(a)
A two roll mill for research and development	Research and development mill to make small color batches that appears to exhaust into the building	Appears exempt under Rule 283(2)(viii) or 285(2) (I)(vi)(B)
Three Irradiation Units	Accelerated electron beams cross link the plastics. This changes the molecules of the extruder products to activate the foaming agent, producing closed cell foam.	Rule 286(2)(a) as part of

Staff asked and Sekisui stated that the facility does not have boilers nor emergency generators.

Sekisui is working with Fishbeck on getting a PTI application resolved for Oven 14, which currently is being reviewed. The facility hopes to have this unit operational in a year, with additional associated equipment.

Sekisui updated Staff that no major modifications, removals, or installations since the last inspection March 7, 2022.

Sekisui reported no abnormal conditions, start-ups, shutdowns, or malfunctions that resulted in the emissions of hazardous or toxic air pollutants.

At the time of the inspection and based on a review of records obtained during or following the inspection, the facility appears out of compliance with Permit MI-ROP-B8786-2020a, due to the infrequent and incomplete maintenance of their mills and silos over the past two years, as well as their EUCOLDCLEANER being agitated without a mechincally assisted lid. A Violation Notice will be sent. -MWS

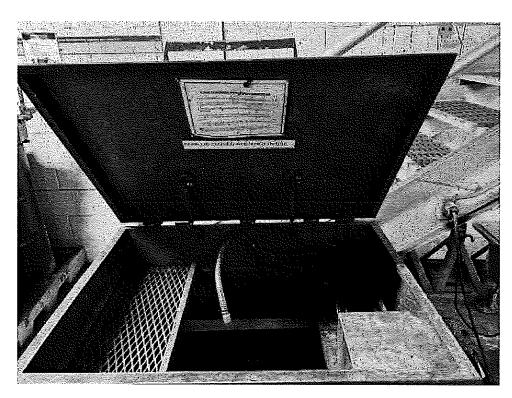


Image 1(EUCOLDCLEANER 1 of 2): Label from the facility inside the lid of the cold cleaner.



Image 2(EUCOLDCLEANER 2 of 2): Label on top of the lid of the cold cleaner.



<u>Image 3(EUCOLDCLEANER2 1of2)</u>: Label on top of the lid of the cold cleaner.

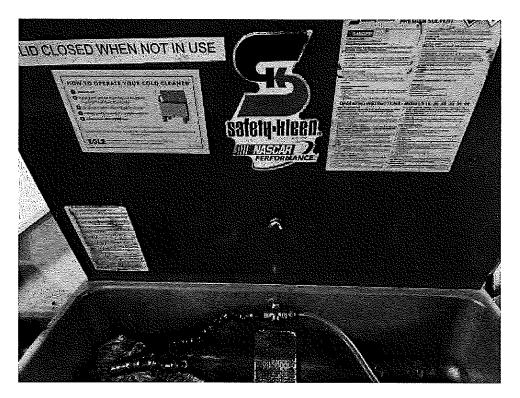


Image 4(EUCOLDCLEANER2 2of2): Label inside the lid of the cold cleaner.

NAME

Marish Scott

DATE Sept 20 200 SUPERVISOR Month