

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

N803870955

FACILITY: FLINT CENTERLESS GRINDING INC	SRN / ID: N8038
LOCATION: 1838 REMELL ST, FLINT	DISTRICT: Lansing
CITY: FLINT	COUNTY: GENESEE
CONTACT: Larry Craney , Production Manager	ACTIVITY DATE: 02/29/2024
STAFF: Daniel McGeen	COMPLIANCE STATUS: Compliance
SUBJECT: Unannounced inspection of facility last inspected by AQD in 2015.	SOURCE CLASS: MINOR
RESOLVED COMPLAINTS:	

On February 29, 2024, the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD) conducted an unannounced inspection of Flint Centerless Grinding, Inc. and 3 other small businesses under the same roof. In all, the following businesses were inspected:

1. Flint Centerless Grinding, Inc.
2. JNET Services
3. Extreme Precision Screw Products, Inc.
4. Blevins Screw Products, Inc.

Environmental contacts:

Business names, and business environmental contacts:

Business Name	Description Of Business	Environmental Contacts
Flint Centerless Grinding, Inc.	Centerless grinding of metal parts	<ul style="list-style-type: none"> • Tom Allen, President; 810-744-1540; FCGTom@aol.com • Janet Allen, Secretary; 810-964-1143; JNetSvc@aol.com
JNET Services	Laser marking job shop	Janet Allen, Owner; 810-964-1143; JNetSvc@aol.com
Extreme Precision Screw Products, Inc.	Turning metal parts	<ul style="list-style-type: none"> • Steve G. Blevins, President; 810-744-1980; steve.blevins@epspinc.com • Jeff Blevins, Vice President; 810-744-1980; jeff.blevins@epspinc.com
Blevins Screw Products, Inc.	CNC machining and precision machined parts	<ul style="list-style-type: none"> • Ben Blevins, President; 810-744-1820 Ext. 299; ben.blevins@blevinsscrew.com • Larry Craney, Production Manager; 810-744-1820 Ext. 244; larry.craney@blevinsscrew.com

EGLE, AQD contact:Dan McGeen, inspector; 517-648-7547; mcgeend@michigan.gov**Emission units:**

Business Name	Emission Units*	Michigan Air Pollution Control (MAPC) Rules	Compliance Status
Flint Centerless Grinding, Inc.	<ul style="list-style-type: none"> • Metal grinding processes controlled by oil mist collector exhausting into general in-plant environment 	<ul style="list-style-type: none"> • 285(2)(l)(vi) (B) 	<ul style="list-style-type: none"> • Compliance
	<ul style="list-style-type: none"> • Cold cleaner using mineral spirits exhausting into general, in-plant environment 	<ul style="list-style-type: none"> • 281(2)(h), 285(2)(r)(iv), and 707 	<ul style="list-style-type: none"> • Compliance
JNET Services	Laser marking job shop	285(2)(l)(vi)(C)	Compliance
Extreme Precision Screw Products, Inc.	<ul style="list-style-type: none"> • Metal machining processes exhausting into general, in-plant environment 	<ul style="list-style-type: none"> • 285(2)(l)(vi) (B) 	<ul style="list-style-type: none"> • Compliance
	<ul style="list-style-type: none"> • Rinse tank using mineral spirits, aka cold cleaner 	<ul style="list-style-type: none"> • 281(2)(h), 285(2)(r)(iv), and 707 	<ul style="list-style-type: none"> • Compliance
Blevins Screw Products, Inc.	<ul style="list-style-type: none"> • Metal machining processes exhausting into general, in-plant environment 	<ul style="list-style-type: none"> • 285(2)(l)(vi) (B) 	<ul style="list-style-type: none"> • Compliance
	<ul style="list-style-type: none"> • Ultrasonic parts washer using alkaline solution 	<ul style="list-style-type: none"> • 285(2)(l)(iii), 285(2)(r)(iv) 	<ul style="list-style-type: none"> • Compliance

***An *emission unit* is any part of a stationary source which emits or has the potential to emit an air contaminant.**

Regulatory overview:

This facility, containing 4 family-owned businesses, is classified as a minor source in the Michigan Air Compliance Enforcement System (MACES) database. A *major source* has the potential to emit (PTE) of 100 tons per year (TPY) or more, of one of the criteria pollutants. *Criteria pollutants* are those for which a National Ambient Air Quality Standard exists, and include carbon monoxide, nitrogen oxides, sulfur dioxide, volatile organic compounds, lead, particulate matter smaller than 10 microns, and particulate matter smaller than 2.5 microns.

This facility is considered a minor or *area source* for Hazardous Air Pollutants (HAPs), because it is not known to have a PTE of 10 TPY or more for a single HAP, nor to have a PTE of 25 TPY or more for combined HAPs.

A number of the Michigan Air Pollution Control (MAPC) Rules for exemptions potentially apply. These rules exempt processes which meet the specified criteria from the requirement of MAPC Rule 201 to obtain a permit to install, aka an air use permit. The relevant exemption rules are:

- MAPC Rule 281(2)(h), exempting a cold cleaner which has an air vapor interface of less than 10 square feet.
- MAPC Rule 285(2)(l)(iii), exempting equipment for surface preparation of metals by an aqueous solution, except for an acidic solution.
- MAPC Rule 285(2)(r)(iv) exempts equipment for cleaning metals, provided the emissions are released only into the general, in-plant environment.
- MAPC Rule 285(2)(l)(vi)(B) exempts metal machining processes which exhaust only into the general, in-plant environment.
- MAPC Rule 285(2)(l)(vi)(C) exempts equipment that has eternally vented emissions controlled by an appropriately designed and operated fabric filter, that for all specified operations with metal is preceded by a mechanical pre-cleaner.

Additionally, MAPC Rule 707 applies, for new cold cleaners. Under the MAPC Part 7 Rules, "new" is defined as:

...any process or process equipment which is either placed into operation on or after July 1, 1979, or for which an application for a permit to install, pursuant to the provisions of Part 2 of these rules, is made to the department on or after July 1, 1979, or both, except for any process or process equipment which is defined as an "existing source" under R 336.1601.

Fee status:

This facility is not considered fee-subject, as it is not known to be a major source for criteria air pollutants, or for HAPs, nor is it subject to a federal New Source Performance Standard or a Maximum Achievable Control technology standard.

This facility is not required to report annual emissions through the Michigan Air Emission Reporting System (MAERS) or its successor, MiENViro.

Location:

- Address: 1838 Remell Street, Flint, MI 48503,, Genesee County
- Description: This facility is in an area of industrial and commercial businesses on all sides. Several hundred feet to the east and southeast is a residential neighborhood.

History:

The four businesses in this building are four of the seven family-owned businesses belonging to the Blevins Group, and work closely together, per their website, blevins-group.com, and date back to 1943. Two of the remaining three businesses are identified on the Blevin's Group website and operate at other locations.

Past inspections:

1/8/2015: Compliance.

Past violations:

None.

Past complaints:

None.

Safety apparel required:

AQD inspector Dan McGeen wore steel-toed boots, safety glasses with side shields, a hard hat, a high visibility safety vest, and had hearing protection available, as a matter of general practice. Additionally, he wore a disposable paper mask, out of personal preference, during the ongoing COVID pandemic.

Odor evaluation:

- Start time: 10:53 AM.
- Weather conditions: Sunny, clear, and 26 degrees F, with winds 5-10 miles per hour out of the west.
- Odors detected: None.
- Route taken: Lapeer Rd. east to Remell St., south on Remell St. to Kelso St., north on Kelso St. to the west parking lot of the plant.

Arrival:

AQD was represented by inspector Dan McGeen. This was an unannounced inspection.

- Arrival time: 10:54 AM.
- Weather conditions: Sunny, clear, and 26 degrees F, with winds 5-10 miles per hour out of the west.
- Visible emissions detected: No opacity, only steam.
- Odors detected in parking lot: None.

D. McGeen parked in the parking lot on the northwest side of the facility. He entered through the door on the west half of a north-facing wall, which was labeled for Flint Centerless Grinding. He met with the foreman, Jim, who took him through Flint Centerless Grinding and JNET Services. D. McGeen was then led to the northeast side of the facility and introduced to Larry Craney, Production Manager of Blevins Screw Products, Inc.. L. Craney showed him around both Extreme Precision Screw Products, and Blevin Screw Products, Inc.

Inspection:

1. Flint Centerless Grinding, Inc.:

This business has a number of centerless grinding processes. These processes utilize a water-based coolant/lubricant and are all exhausted to a mist collector which exhausts to the general, in-plant environment. There were no mist or particulate emissions visible inside the plant, and only a very mild odor.

Machining processes; MAPC Rule 285(2)(l)(vi)(B):

MAPC Rule 285(2)(l)(vi)(B) exempts the following:

- (l) The following equipment and any exhaust system or collector exclusively serving the equipment:
- (vi) Equipment for carving, cutting, routing, turning, drilling, machining, sawing, surface grinding, sanding, planing, buffing, sand blast cleaning, shot blasting, shot peening, or polishing ceramic artwork, leather, metals, graphite, plastics, concrete, rubber, paper board, wood, wood products, stone, glass, fiberglass, or fabric which meets any of the following:
 - (A) Equipment used on a nonproduction basis.
 - (B) Equipment that has emissions that are released only into the general in-plant environment. (Emphasis added.)**
 - (C) Equipment that has externally vented emissions controlled by an appropriately designed and operated fabric filter collector that, for all specified operations with metal, is preceded by a mechanical precleaner.

One process was running, but not presently grinding parts, a Cincinnati OM machine. Jim explained that he was in the midst of adjusting the unit to change the size of parts it would produce. Two other processes had just run earlier today, he said, another Cincinnati OM, and a Cincinnati EA. One process has been removed since the 2015 inspection, a Van Norman 2C.

A record on a bulletin board was scanned as a PDF (attached), and indicated that the air filters on the mist collector or "Air Sucker" had been replaced as follows:

- Replaced green filters and steel box filters 8/25/22
- Replaced green filters 10/21/22
- Replaced paper and green filters 4/18/23
- Replaced green filters 7/8/23
- Replaced green filters + paper filters 10/6/23
- Replaced paper filters 1/23/24

Cold cleaner; MAPC Rules 281(2)(h) or 285(2)(r)(iv):

For the single solvent-based parts washer, which is classified under the MAPC Rules as a "cold cleaner" because it does not heat solvent to the boiling point, either of the following exemption rules may apply:

MAPC Rule 281(2)(h), which exempts:

- (h) Cold cleaners that have an air/vapor interface of not more than 10 square feet.

MAPC Rule 285(2)(r)(iv), which exempts:

- (r) Equipment used for any of the following metal

treatment processes if the process emissions are only released into the general in-plant environment:

- (i) Surface treatment.
- (ii) Pickling.
- (iii) Acid dripping.
- (iv) Cleaning. (Emphasis added.)**

The cold cleaner is said to be serviced by Safety-Kleen. The surface area looked to be roughly 3 feet by 3 feet, so it would likely have a surface area of less than 10 square feet. The lid was closed, and it would only exhaust into the general, in-plant environment if the lid was opened. D. McGeen provided Jim with a copy of the bright orange EGLE cold cleaner sticker sheet.

The cold cleaner looked to be relatively new and would likely be classified as a new cold cleaner, so appears subject to MAPC Rule 707 under Part 7 for new sources, rather than under Part 6 for existing sources.

The record (scan attached) on the bulletin board listed service dates for the cold cleaner as well as the mist collector. The cold cleaner was serviced by Safety-Kleen on 11/17/2022, 5/18/2023, 9/20/2023, and 1/23/2024.

MAPC Rule 707 compliance checklist for Flint Centerless Grinding's cold cleaner:

Subrule	Requirement	Comments	Complies?
707(1)	It is unlawful for a person to operate a new cold cleaner unless all of the provisions of the following subrules are met or unless an equivalent control method is approved by the department.	Please see below.	Yes
707(2)	It is unlawful for a person to operate a new cold cleaner using a solvent having a Reid vapor pressure of more than 0.6 psia or heated above 120 degrees Fahrenheit, unless at least 1 of the following conditions is met:	NA, as the cold cleaner was unheated. An SDS for the Safety-Kleen mineral spirits used by Flint Centerless Grinding had not arrived, as of the date of this report. The RVP was not provided on the SDS for the Safety-Kleen Odorless Mineral Spirits provided by Blevins Screw Products, Inc. A competing brand of mineral spirits online listed an RVP of 0.13 psia, so the RVP of the Safety-Kleen product is not expected to exceed 0.6 psia.	NA
707(2)(a)	The cold cleaner is designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7.	NA	NA

707(2) (b)	The solvent bath is covered with water if the solvent is insoluble and has a specific gravity of more than 1.0.	NA	NA
707(2) (c)	The cold cleaner is controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the department.	NA	NA
707(3)	It is unlawful for a person to operate a new cold cleaner unless all of the following conditions are met:	Please see below.	See below
707(3) (a)	A cover shall be installed and the cover shall be closed whenever parts are not being handled in the cleaner. The cover shall be mechanically assisted in any of the following situations:	<ul style="list-style-type: none"> • The cover was closed. • NA, as the following scenarios do not apply. 	<ul style="list-style-type: none"> • Yes • NA
707(3) (a)(i)	The Reid vapor pressure of the solvent is more than 0.3 psia.	NA, as the RVP is believed to be less than 0.3 psia.	NA
707(3) (a)(ii)	The solvent is agitated.	NA, as the solvent is not agitated.	NA
707(3) (a)(iii)	The solvent is heated.	NA, as the solvent is not heated.	NA
707(3) (b)	A device shall be available for draining cleaned parts, and the parts shall be drained not less than 15 seconds or until dripping ceases.	A device was available for draining cleaned parts.	Yes

707(3) (c)	Waste solvent shall be stored only in closed containers, unless demonstrated to be a safety hazard and disposed of in a manner such that not more than 20% by weight is allowed to evaporate into the atmosphere.	No open storage containers of waste solvent were observed.	Yes
707(4)	A person responsible for the provisions of this rule shall develop written procedures for the operation of such provisions, and such procedures shall be posted in an accessible, conspicuous location near the cold cleaner.	D. McGeen provided Jim a copy of the orange EGLE cold cleaner sticker, which includes two identical stickers, with the understanding that one of the stickers would be posted nearby, if not on the unit itself.	Yes
707(5)	The provisions of this rule do not apply to a new cold cleaner that is subject to the provisions of the halogenated solvent cleaner national emission standards for hazardous air pollutants (1995), which are adopted by reference in R 336.1651.	NA, as this cold cleaner is not subject to the National Emission Standards for Halogenated Solvent Cleaning, 40 CFR Part 63, Subpart T.	NA

Rust preventative dip tank, MAPC Rule 285(2)(r)(iv):

A rust preventative dip tank uses wax and an oil mixed together to rust-proof parts. It was designed so that it is always open, but there appear to be no requirements to cover or close this kind of process. It was not treating parts at the time of the inspection. By email on 3/4/2024, AQD emailed J. Allen to request a copy of the SDS for the wax and oil solution used in the process, as well as the SDS for the Safety-Kleen mineral spirits used in the cold cleaner. The SDS sheets will be reviewed upon receipt.

2. JNET Services:

MAPC Rule 285(2)(l)(vi)(B) exempts the following:

(l) The following equipment and any exhaust system or

collector exclusively serving the equipment:

(vi) Equipment for carving, cutting, routing, turning, drilling, machining, sawing, surface grinding, sanding, planing, buffing, sand blast cleaning, shot blasting, shot peening, or polishing ceramic artwork, leather, metals, graphite, plastics, concrete, rubber, paper board, wood, wood products, stone, glass, fiberglass, or fabric which meets any of the following:

(A) Equipment used on a nonproduction basis.

(B) Equipment that has emissions that are released only into the general in-plant environment.

(C) Equipment that has externally vented emissions controlled by an appropriately designed and operated fabric filter collector that, for all specified operations with metal, is preceded by a mechanical precleaner. (Emphasis added.)

The laser etching or engraving process is used for etching metal parts. It was not running at the moment, but an employee Cody had been using it earlier in the day. The process has a long, flexible duct which goes straight up for several feet, horizontally for several feet, and drops down for several feet, prior to a vacuum cleaner which is a fabric filter. The long, winding flexible duct looked as if it would function as a gravity collector or knock out box, so it appeared to be a kind of mechanical precleaner.

3. Extreme Precision Screw Products, Inc.:

Machining processes; MAPC Rule 285(2)(l)(vi)(B):

As previously described, MAPC Rule 285(2)(l)(vi)(B) exempts metal machining processes which exhaust to the general, in-plant environment. L. Craney explained that Swiss machines are used here, which distinguishes this business from the neighboring Blevins Screw Products, Inc.

Vintage metal machining processes were running, exhausting indoors. There were no particulate emissions or odors detected. There were also newer CNC machines with mist collectors, such as Tri-Mist 850 G2 High Efficiency Mist & Smoke collectors. These exhausted indoors, and there were no visible emissions. A few older CNC machines had no mist collectors, but they were enclosed, with lids that were lowered in place prior to operating. There were no fugitive emissions of particulate.

Rinse tank, MAPC Rules 281(2)(h), 285(2)(r)(iv), and 707:

The rinse tank is a cold cleaner and is said to use mineral spirits and be serviced by Safety-Kleen every 8 or 8-10 weeks. The surface area looked to be roughly 3 feet by 3 feet, so it would likely have a surface area of less than 10 square feet. Please see MAPC Rule 707 compliance checklist for this unit, below.

MAPC Rule 707 compliance checklist for BlevinsScrew Products, Inc. rinse tank:

Subrule	Requirement	Comments	Complies?
707(1)	It is unlawful for a person to operate a new cold cleaner unless all of the provisions of the following subrules are	Please see below.	Yes

	met or unless an equivalent control method is approved by the department.		
707(2)	It is unlawful for a person to operate a new cold cleaner using a solvent having a Reid vapor pressure of more than 0.6 psia or heated above 120 degrees Fahrenheit, unless at least 1 of the following conditions is met:	NA, as the cold cleaner was unheated. The RVP was not shown on the SDS for the Safety-Kleen Odorless Mineral Spirits provided by Blevins Screw Products, Inc., only the vapor pressure. A competing brand of mineral spirits online listed an RVP of 0.13 psia, so the RVP of the Safety-Kleen product is not expected to exceed 0.6 psia.	NA
707(2)(a)	The cold cleaner is designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7.	NA	NA
707(2)(b)	The solvent bath is covered with water if the solvent is insoluble and has a specific gravity of more than 1.0.	NA	NA
707(2)(c)	The cold cleaner is controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the department.	NA	NA
707(3)	It is unlawful for a person to operate a new cold cleaner unless all of the following conditions are met:	Please see below.	See below
707(3)(a)	A cover shall be installed and the cover shall be closed whenever parts are not being handled in the cleaner.	<ul style="list-style-type: none"> The cover was open on the cold cleaner while it was not processing parts. However, it was immediately closed. AQD enforcement policy allows for a verbal warning to be given in lieu of a Violation Notice (VN) where the violation is non-recurrent, is administrative or operational 	<ul style="list-style-type: none"> Yes

	The cover shall be mechanically assisted in any of the following situations:	<p>in nature, is not immediately harmful to human health or the environment and is immediately corrected. These criteria were met, and no VN will be sent.</p> <ul style="list-style-type: none"> • NA, as the following scenarios do not apply. 	• NA
707(3)(a)(i)	The Reid vapor pressure of the solvent is more than 0.3 psia.	NA, as the RVP is believed to be less than 0.3 psia.	NA
707(3)(a)(ii)	The solvent is agitated.	NA, as the solvent is not agitated.	NA
707(3)(a)(iii)	The solvent is heated.	NA, as the solvent is not heated.	NA
707(3)(b)	A device shall be available for draining cleaned parts, and the parts shall be drained not less than 15 seconds or until dripping ceases.	A device was available for draining cleaned parts.	Yes
707(3)(c)	Waste solvent shall be stored only in closed containers, unless demonstrated to be a safety hazard and disposed of in a manner such that not more than 20% by weight is allowed to evaporate into the atmosphere.	No open storage containers of waste solvent were observed.	Yes
707(4)	A person responsible for the provisions of this rule shall develop written procedures for the operation of such	D. McGeen had given Jim of Flint Centerless Grinding a copy of the orange EGLE cold cleaner sticker, which includes two identical stickers. D. McGeen recommended L. Craney obtain one	Yes

	provisions, and such procedures shall be posted in an accessible, conspicuous location near the cold cleaner.	of these from Jim and post it near the unit if not on it, and he agreed to this.	
707(5)	The provisions of this rule do not apply to a new cold cleaner that is subject to the provisions of the halogenated solvent cleaner national emission standards for hazardous air pollutants (1995), which are adopted by reference in R 336.1651.	NA, as this cold cleaner is not subject to the National Emission Standards for Halogenated Solvent Cleaning, 40 CFR Part 63, Subpart T.	NA

4. Blevins Screw Products, Inc.:

Blevins Screw Products operates conventional machines, rather than Swiss machines like their neighbor, Extreme Precision Screw Products, Inc.

Metal machining processes; MAPC Rule 285(2)(l)(vi)(B):

This business has CNC machines, all of which have air filters, and exhaust indoors. They are said to have filters changed as needed, and to be completely broken down for maintenance once per year. The filters are a foam primary filter and a HEPA secondary filter. There were no visible emissions from these processes.

Water-based ultrasonic parts washer, MAPC Rules 285(2)(l)(iii), or 285(2)(r)(iv):

For the water-based, ultrasonic parts washer, either of the following exemptions may potentially apply:

MAPC Rule 285(2)(l)(iii), which exempts:

(iii) Equipment for surface preparation of metals by use of aqueous solutions, except for acid solutions.

MAPC Rule 285(2)(r)(iv), which exempts:

(r) Equipment used for any of the following metal treatment processes if the process emissions are only released into the general in-plant environment:

- (i) Surface treatment.
- (ii) Pickling.
- (iii) Acid dripping.

(iv) *Cleaning. (Emphasis added.)*

The parts washer was not running, at the moment. It uses an alkaline cleaning solution, DURL-LUM 603, and deionized water. There were no visible emissions or odors from the parts washer.

Departure:

- Time of departure: 11:50 AM.
- Visible emissions detected: None.
- Odors detected: None.

Conclusion:

There were no instances of noncompliance, other than an open lid on a mineral spirits rinse tank or cold cleaner at Extreme Precision Screw Products, Inc., but the lid was promptly closed, immediately resolving the issue. A VN will not be sent, as AQD enforcement policy allows for a verbal warning to be given when a violation is nonrecurrent, is operational or administrative in nature, does not immediately impact human health or the environment, and is immediately corrected.

NAME DATE 3/10/2024SUPERVISOR 