

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: Scheduled Inspection

B752147566

FACILITY: GELMAN SCIENCES INC		SRN / ID: B7521
LOCATION: 600 S WAGNER RD, ANN ARBOR		DISTRICT: Jackson
CITY: ANN ARBOR		COUNTY: WASHTENAW
CONTACT: Mark Smith		ACTIVITY DATE: 11/29/2018
STAFF: Mike Kovalchick	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Compliance inspection.		
RESOLVED COMPLAINTS:		

**Minor Source:****Facility Contacts**

Mark Smith-Company representative.

Phone 734-516-1368 [msmithgolfski@gmail.com](mailto:msmithgolfski@gmail.com)

Paul Herrinton-Vice President of Laboratory Operations-BoroPharm

Phone 888-366-1496

Sue Dean -SUP Regulatory, LLC [deansc@umich.edu](mailto:deansc@umich.edu)

Ph: 734.649.5836

**Purpose**

On November 29, 2018, I conducted an unannounced compliance inspection of Michigan Innovation Headquarters (Company) located in Ann Arbor, Michigan in Washtenaw County. The purpose of the inspection was to determine the facility's compliance status with the applicable federal and state air pollution regulations, particularly Michigan Act 451, Part 55, Air Pollution Control Act and administrative rules.

**Facility Location**

The facility is located in a commercial business park on the West side of Ann Arbor.

**Facility Background**

The facility was last inspected on 7/22/2008 when it was named Pall Corporation and before that Gelman Sciences. The main buildings have been retrofitted by the new owner. The current owner of the property is the Michigan Innovation Headquarters. However, the Pall Corporation still owns Buildings 4 & 5.

Building 4 & 5 houses the groundwater remediation system currently in use to treat the long standing, extensive 1-4 dioxane contamination in the area groundwater. This treatment system consists of a hydrogen peroxide treatment process used to breakdown the dioxane molecules; followed by an ozone treatment process to oxidize the compounds; followed by a final post-treatment step utilizing sodium bisulfite prior to discharge into Honey creek in accordance with the restriction in their NPDES permit. With this current treatment scenario, the contaminated influent from the assorted groundwater remediation extraction wells are collected into a single holding/equalization pond. There are no air emissions associated with this treatment process and recent OSHA type air monitoring inside the building were negative for dioxane.

From the Company's website:

"MI-HQ offers collaborative workspaces, turn-key office spaces, small and large conference rooms, hi-speed internet, wet labs, specialty work areas, production areas, warehouse space and unlimited free parking.

This high energy, entrepreneurial environment brings together professionals from life sciences, drug discovery,

medical device, alternative energy, cutting-edge technologies, consulting firms and business development services.

Startups and established companies work side by side in both dedicated and shared spaces.

The broad range of expertise present on the campus helps promote problem-solving at an accelerated pace.”

Building 1 and 2 are now used by approximate 50 different tenants/companies. There are approximately 90,000 square feet of office space with about half of that being used for R&D including laboratories.

### **Regulatory Applicability**

The Company is operating generally under Rule 283 (2) permit exemption rule. One of the Company's tenants named BoroPharm does not qualify for this exemption. It manufactures pilot scale amounts of high value specialty chemicals but regularly sells these chemicals for profit so is disqualified from using Rule 283 per Rule 283(3).

One 135 KVA (144 HP) small natural gas fired emergency generators subject to 40 CFR Part 60, Subpart JJJJ Standards of Performance for Stationary Spark Ignition Internal Combustion Engine. (Meeting NSPS requirements satisfies RICE MACT Subpart ZZZZ.) It was installed in 2011 but only recently entered into service. It has been operated for 300 hours (mostly for testing purposes) and is well maintained.

### **Arrival & Facility Contact**

Visible emissions or odors were not observed upon my approach to the Company's facility. I arrived at 9:00 am, proceeded to the facility office (Building 1) to request access for an inspection, provided my identification and spoke with Mark Smith (MS). I informed him of my intent to conduct a facility inspection and to review the various records as necessary.

MS extended his full cooperation and fully addressed my questions.

### **Pre-Inspection Meeting**

MS outlined that each tenant is reasonable for their own environmental compliance although they use a consultant to generate reporting information as a whole. The Company does conduct OSHA style monitoring of the labs and adjacent areas to ensure there isn't an issue with toxic air emissions. Previously surveys didn't show a problem and new survey was to occur later in the day.

MS indicated that air emissions are minimal with many of the tenants working with chemicals at only trace laboratory levels. He indicated that tenants Wacker and BoroPharm did generate some more significant levels of air emissions but emissions are still very low. (Swift is their largest tenant but air emissions from their R & D expected to be very low.) Wacker is strictly R & D while BoroPharm has a pilot scale operation with several small reactors being operated under ten different laboratory hoods that are vented to atmosphere. Most of the compounds are being captured by condensers but small amounts of solvents are lost. MS said that BoroPharm does sell their products. I mentioned to him that because of this, Rule 283 exemption wouldn't apply to their operations so would need to investigate if they could meet Rule 290.

MS indicated that the Company is being impacted by significant asphalt odors due nearby Superior Asphalt which is located about 2000 feet to the SE. He says it is particularly bad during mornings when there is a low-level inversion present. The odors are forcing the Company to take additional measures to clean air intake into the building so laboratory air is clean as possible

MS noted that a significant expansion is planned in 2019.

### **Onsite Inspection**

MS gave me a brief tour of the facility. We walked by the Wacker laboratories but didn't enter. We were joined by Paul Herrinton with BoroPharm who gave me a tour his facility. Paul showed me their laboratory, the ventilation hoods, a chemical storage room, and their hazardous waste storage area.

Paul estimated emissions of about 10 gallons/month. Of that, about 90% is acetone, 5% hexane, 5% ethyl acetate, MTBK, and dichloromethane. Later, at the hazardous waste storage location, I noted drums of the same materials that he had previously outlined. Everything at the lab looked well maintained included the storage room

and hazardous waste storage area.

**Recordkeeping/Permit Requirements Review**

Records provided by email on January 4, 2019. See Attachment (1). Records shows that the Company can meet the requirements of Rule 290 based on the types of chemicals used and the small quantities that are used each month.

**Post-Inspection Meeting**

I held a brief post-inspection meeting with MS. I requested that he coordinate gathering records for 2018 that show monthly air emissions records/calculations in sufficient detail to show compliance with Rule 290 for both the Wacker and BoroPharm laboratory facilities. I thanked MS for his time and cooperation, and I departed the facility at approximately 10:15 am.

**Compliance Summary**

The Company is in compliance.

NAME *M. Kovalchuk*

DATE 1/14/2019

SUPERVISOR *[Signature]*

**Information Request from MDEQ:**

600 South Wagner, LLC was visited by Mike Kovalchick from MDEQ, and has received a request for chemical use that affects air quality with respect to the building located at 600 South Wagner, Ann Arbor, MI with emphasis placed on the two largest users in the building, BoroPharm, LLC and Wacker Silicones. The focus of Mr Kovalchick's request was for information regarding intake/outgoing amounts of liquid chemicals used at a rate of 1 gallon per month or more.

**Response**

MI-HQ takes the safety of our occupants and the community at large seriously. We work to continuously improve our systems so we have the means to efficiently manage Environment, Health and Safety requirements to meet the needs of our community and stay in regulatory compliance as information or regulations are updated.

In our efforts to ensure that our systems are working, we measure indoor air quality on an ongoing basis. Our most recent air sampling was completed on Dec 1, 2018 and all concentrations were found to be below non-residential screening levels.

We have the two highest volume users, BoroPharm LLC, and Wacker Silicones (mentioned earlier) who have provided the following information:

- BoroPharm, LLC prepared a report on usage, which is attached to the end of this response.
- Wacker Silicones is purely research and development and therefore meets exemption requirements under Rule 283 (R 336.1283). They conduct their operation with laboratory process equipment utilizing T-BACT for empirical and theoretical research [part (2) (iii) and (iv)]. Their output is well below any usage levels in that part of the regulation.

Please let me know if you have any further questions, and thank you for your patience on receiving this report.