

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

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| FACILITY: MLC Research and Development LLC | | SRN / ID: P0728 |
| LOCATION: 130 S. Leja Drive, VICKSBURG | | DISTRICT: Kalamazoo |
| CITY: VICKSBURG | | COUNTY: KALAMAZOO |
| CONTACT: Robert Jaros , General Manager | | ACTIVITY DATE: 06/14/2017 |
| STAFF: Monica Brothers | COMPLIANCE STATUS: Compliance | SOURCE CLASS: |
| SUBJECT: Unannounced scheduled inspection | | |
| RESOLVED COMPLAINTS: | | |

Staff (Monica Brothers) arrived on-site at about 2:30pm. Upon arrival, stack opacity was at about 5%. Apple odors were observed as I exited the vehicle in the facility parking lot. MLC Research began production in January 2017 and dries fruits, vegetables, pomaces, and associated byproducts in a direct-fired rotary drum dryer. They sell their final products to dog food companies. Associated process equipment includes a boiler for the rotary drum dryer, a cyclone collector, 2 vibratory sieves, finished hopper/bin, hammer mills, and a baghouse. They are currently operating under PTI No. 132-16. I met with Robert Jaros, the Sales and Procurement Manager. I let him know that I was there to do an air quality inspection and gave him my business card. I briefly explained that I would like to take a tour of the facility and described the kinds of records I would be looking to see afterward.

Emergency Generator and Space Heating Units:

As we were standing outside discussing the facility, I noticed an emergency generator on the east side of the large warehouse building. I asked if this was the only generator that they had onsite, and he said that it was. He said that it was used to power the office in cases of emergency. It is a Generac Industrial Power natural gas unit that is rated at 70kW and 118hp. It was manufactured on 2-10-15, and the model number is SG0070KG036. The non-resettable hour meter read 31.1 hours. It also had an EPA certification sticker on it. It is subject to NSPS 40 CFR 60, Subpart JJJJ because it is an emergency SI engine, greater than 25hp, manufactured after 01-01-09. The facility is in compliance with this subpart because the engine has a manufacturer's certification sticker. Next, Robert showed me a very small natural gas heater for the building. It is a 580,000 Btu input Thermocycler, with a model number of GTC480CM. This unit is considered exempt under Rule 282(b)(i). There is also another heating unit for heating the office. It is a Comfortmaker, model END4X60L24A1, serial number X150250393. This would also be considered exempt under Rule 282(b)(i).

Food Drying Process:

Robert then took me through the production process. On that particular day, they were processing apple pomace. The raw material gets loaded into an inside holding bunker. It is completely open to the in-plant environment, but it is completely enclosed and cannot be affected by outdoor weather. From there, the material gets dumped into a hopper and sent to the rotary drum dryer by a system of conveyors. The rotary drum dryer is directly fired by a 10MMBTU/hr natural gas boiler, and the particulate is controlled by a 7.5 diameter cyclone collector. The cyclone collector is located inside and vents internally. The product goes through a series of hammer mills and vibratory sieves to filter out pieces that are too large to package. These larger pieces then get sent back for another round of processing until they become the correct size. The final product gets packaged either in small bags or super sacks and then gets sent to the consumer. At the end of the process, there is a baghouse to filter out particulate. The baghouse is located inside but vents externally. It is a Camfil-Farr unit with a magnahelic differential pressure gauge.

Records:

After the tour of the drying process, we sat down in a conference room and looked at their records. For EUBURNER, they are limited to using only natural gas, with which they are in compliance. They are also limited to using 86 million cubic feet of natural gas per year on a 12 month rolling timescale. Robert showed me their natural gas usage and they are far under this limit. EUROTARYDRYER requires that the cyclonic collector always be in operation while the rotary dryer is drying material. It was operating at the time of inspection. It is also required that they do daily visible emissions checks. These checks can be done by a non-certified reader, but if any visible emissions are observed, a certified reader must then step in and do Method 9 readings. Their 6-minute average opacity limit is 10%. Robert showed me a spreadsheet where it showed that the daily readings were being done. All of the readings were recorded

as "none observed". Robert said that they do not currently have anyone onsite that is certified to do Method 9 readings, so after the inspection I let him know about Smoke School and that he should send a couple of employees to get certified, just so that there is a back-up person available.

For EUFOODPROCESS, it is required that the baghouse is always in operation when the food-drying process is occurring. The baghouse was operating at the time of inspection. It also has a daily visible emissions check requirement. Robert showed me the same visible emissions spreadsheet that had all visible emissions checks as "none observed". The permit also requires them to have on hand the manufacturer's inspection and maintenance recommendations for the baghouse, so that these recommendations can be followed for inspection frequency and filter changes. Robert showed me that he has these manuals on hand and will also be having someone from the manufacturing company coming out to MLC research to show them some recommended maintenance practices. The PTI also requires them to keep records of each baghouse inspection and dates when filters and spare parts were changed, but since the facility only started operating in January, they have not yet done any of these things.

For FGFACILITY, they are required to keep the raw materials either in enclosed tanks or inside storage buildings, protected from the weather. They are in compliance with this condition. They are also required to process only materials used for human and animal consumption. Robert showed me a spreadsheet where they have been keeping track of the amount and type of material processed on a daily basis. They have only been processing fruit and vegetable material. This also fulfills the requirement that they must keep track of the type and amount of raw material processed/day. The final recordkeeping requirement for FGFACILITY is a calculation of how many tons/hour of final product they produce as a daily average. They are limited to 4 tons/hour. They are doing these calculations and their highest daily average is 1.68 tons/hour. The records for this are attached to this report. I thanked Robert for his time and left the facility at about 4:00pm. The facility seemed to be in compliance at the time of inspection.

NAME 

DATE 6/29/17 SUPERVISOR YMA 7/3/2017