

**DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: Self Initiated Inspection**

P021546292

|  |                                   |                           |
|--|-----------------------------------|---------------------------|
| FACILITY: ISABELLA PELLET  |                                   | SRN / ID: P0215           |
| LOCATION: 6900 W BASELINE RD, LAKE ISABELLA  |                                   | DISTRICT: Saginaw Bay     |
| CITY: LAKE ISABELLA  |                                   | COUNTY: ISABELLA          |
| CONTACT: Gary Glawe  |                                   | ACTIVITY DATE: 07/10/2018 |
| STAFF: Benjamin Witkopp  | COMPLIANCE STATUS: Non Compliance | SOURCE CLASS: MINOR       |
| SUBJECT: Follow up on Township observations and inspection as directed by enforcement unit |                                   |                           |
| RESOLVED COMPLAINTS:   |                                   |                           |

Ben Witkopp and Matt Karl of the Michigan Department of Environmental Quality (MDEQ-AQD) checked into the situation at Isabella Pellet. Township officials had made periodic observations of blue smoke and some fallout of wood dust onto nearby businesses. The AQD enforcement unit wanted an inspection to get a glimpse of current conditions.

The facility primarily produces wood pellets for fuel in stoves. It is covered by permit 30-11B. It is also subject to Administrative Consent Order 43-2014. The facility uses waste "softwood" chips from northern Michigan sawmills as its raw material. The wood is primarily red pine. Some hardwood is allowed to be mixed with the soft. As a result, the permit contains the definition of "softwood". The chips are then dried by a natural gas fired dryer and routed through a cyclone prior to additional processing. The process basically consists of using a hammer mill, pelletizer, cooler, and bagger to produced pellets.

The facility was operating at the time. Blue smoke was readily visible from approximately one half mile away as we approached the facility. The wind was primarily from the north but seemed to be switching to NNW. We parked at the SE corner of the office area and took a quick walk around the outside of the facility as Matt had never been there. We entered the office area, found no one and then started towards the manufacturing area when Chris Kibby appeared. I asked about the status of a potential new style of dryer - Dyer One - that Chris had previously mentioned to me. He personally felt it was promising but said Gary Glawe obviously makes the decisions. I asked if records were now maintained on site or whether I should make the records request to Gary. Chris said to make the request to Gary. He then told me it was OK to go through the facility and show Matt around.

Time was subsequently spent checking around the outside of the facility. Some areas of hardwood chips were found in the raw material stockpile area. This was the first time I had seen any present. Mixing hardwood with soft to meet the permit definition of softwood is allowed. The area under the cyclone had quite a pile of dust under it. The conveyor running from the cyclone to the inside of the building was losing a significant amount of material creating piles and drifts of dust outside. Keep in mind the top and sides of the conveyor are covered. We were also getting struck by material falling from a greater height. A couple of small holes could be seen on the south side of the cyclone. The loss of material during conveyance is a violation of FGwoodpellets SC III 1. Dust could be seen high up on the factory's east wall. Several photos were taken.

When we approached the car it was already covered by dust in this short time. Photos were taken. We then went inside and I showed the various plant components to Matt. We did not go into the small control room as the operator was busy at the time so I explained what the facility monitors and adjusts. One of critical thing the operator can adjust is the feed rate of chips. The presence of blue smoke is likely an indication too much material is being fed into the dryer. We then went outside again and I pointed out the blue smoke, dust, holes, mentioned above to Chris. I also pointed out the fallout on the vehicle during the time it was parked.

The next day I requested a years worth of records required by the permit. Records of the moisture contents were being kept. Review found a total of 55 times readings were greater than 50% and those were in the low to mid 50 range as measured prior to going into the dryer. The high moisture content is a violation of EUdryer SC II 4.

The section of the permit under EUdryer SC II 2 specifies the processing on only virgin softwood chips.

In the description of the emission unit it defines softwood as containing a minimum of 70% softwood and a maximum of 30% hardwood. However, records show times of only hardwood being processed indicated 875 tons of pure hardwood pellets being produced. Other times the ratios are off but records show softwood AND hardwood being produced the same day. EUdryer SC VI 4 requires the monitoring and recording of the tons of green softwood chips processed in the dryer. The limit is 8 tons per hour which is equivalent to 5 oven dryer tons per hour (ODT/hr). Records showed the ODT/hr was typically below 3 and only a few times slightly above 3. Keep in mind the pellet mill is the bottleneck in the operation. However, there aren't specific records for the actual hourly INPUT of chips. The records do show tons in and operating hours but not values for actual input per hour. The records concerning this issue do not make sense. Spot checking showed days of no input yet pellets being produced. Other days showed large input and minimal production etc. Since there isn't a silo to store dried material, it doesn't seem likely the input values are correct. This is a violation of the aforementioned condition.

In a similar manner, the facility is not recording the hourly fuel consumption of the dryer burner. This is a violation of EUdryer SC VI 7.

The temperature at the dryer inlet is specified not to exceed 850 degrees F. Records were not checked as the operating system is set to automatically trip if the temperature is exceeded. The fan setting for the dryer was set at 10 which coincided with the stack testing conditions of 28,000 cfm. It should be noted the stack testing was done on a used dryer that was wood fired and the current one is gas fired. Visible emissions are being checked and recorded as required.

FGwodpellets SC II 1 has a limit of 60,387 tons of green softwood chips processed per year on a 12 month rolling time period. The highest amount found was 20,401.65 tons. SC III 2 states that a chip storage pile shall not be kept on site for more than three days per week and not in place longer than three consecutive days. There were 139 instances where loads were on site longer than three days. SC III 3 has a limit on the number of operating hours per year on a 12 month rolling time period. There weren't any records submitted for the operating hours on a 12 month rolling time period though operating hours per day are kept. The facility has admittedly had a hard time with the timeframes for storage. They have limited to no control over when material is delivered. Also, the time of week material is received, production orders, and maintenance activities also play a large role in the time to process material. I have explained and provided the means for modifying the permit to seek elimination of the requirements directly to Gary. However, to date no action has been taken by the company.

The facility is subject to Administrative Consent Order 43-2014 so the violations noted above are subject to stipulated penalties. It should be noted the facility has three outstanding payments of the settlement amount contained in the order.

NAME B. Zickler

DATE 9-28-18

SUPERVISOR C. Hare