

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

N617733026

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| FACILITY: MONSANTO COMPANY | | SRN / ID: N6177 |
| LOCATION: 67760 US 131, CONSTANTINE | | DISTRICT: Kalamazoo |
| CITY: CONSTANTINE | | COUNTY: SAINT JOSEPH |
| CONTACT: Barry Meyer, Site Manager | | ACTIVITY DATE: 01/15/2016 |
| STAFF: Dennis Dunlap | COMPLIANCE STATUS: Compliance | SOURCE CLASS: SM OPT OUT |
| SUBJECT: Scheduled inspection. | | |
| RESOLVED COMPLAINTS: | | |

This was not an announced inspection. The inspection brochure was handed out. Barry Meyer is the Site Manager. Derek Peterson and Michael Ochsner were also present. There are 70 full time employees. During de-tasseling there may be 1-2 thousand employees. The facility has contracts with landowners to grow seed corn. The past year about 18,000 acres were contracted out. In the future this may go up to 34,000 acres. In the field the female corn is de-tasseled and there are male rows for pollination. It appears that this facility is not subject to the NSPS Part 60 Subpart DD because the storage capacity of the grain elevator is less than 2.5 million U.S.. bushels.

There are 6 corn dryers (Permit 251-05E). The dryers are in operation during harvest. In 2015 they were operating 8/31 to 10/4. Visible emission checks were done daily on the 6 dryers during operation. The corn is dried from about 35% down to 11-12.5% moisture. Records that are kept include 12-month rolling time period natural gas usage, bushel of corn dried, and NOx emissions. NOx emissions per day determined at the end of each calendar month is also calculated. For October 2015 the 12-month rolling time period for natural gas was 121.07 MMscf; for corn 2.45 million bushels; NOx emissions were 6.05 tons. These amounts are in compliance with permit limits. For Sept. 2015 the daily NOx emissions was 364 lb/day. This is also in compliance.

Permit 130-05E is for the treatment of the seed corn. This process involves taking the corn from bulk storage and adding fungicides, insecticides, and colorant. The corn is then put into bags. This process usually operates from late August to the end of January. The permit is for three seed treaters, two bagging lines (one bagging line, one package line) and three dust collectors. The VOC limit is 60 tpy based on a 12-month rolling time period. The permit also has a facility-wide table for PM-10 and HAP. The 12-month rolling time period emissions for VOC is about 22.4 tons. For Sept. 2015 the 12-month rolling time period emissions of PM-10 was 12.98 tons (permit limit is 89 Tons). No HAP is currently used. It appears that there is one dust collector for the treaters and one for the bagging line. There is a central vacuum system for housekeeping.

The Foundation Dryer has its own shelling line with dust collector. The seed is packaged in boxes and shipped to Iowa.

Walk Through

During harvest about 130 truckloads of corn per day pass through the facility. This includes about 60 corn varieties. Four different varieties can be processed at a time. The corn is unloaded and the husk is removed. The husks and bad ears are shipped out for silage. The corn is inspected before drying. The corn is dried on the ear. After drying the corn is shelled. There are four dust collectors for the shelling process and cleaning (aspirator). There are 3 shelling lines. The corn then goes to bulk storage. The storage here is for 2 million bushels.

The treating process involves a 6 story tower. Corn is removed from bulk storage and is cleaned, sorted, and sized. There are four sizes, large round, medium round, large flat and medium flat. Essentially every kernel is viewed by a camera. There are 4 dust collectors in the upper part of the tower for the cleaning and sorting processes. These emit inside. The corn is then treated and it goes to packaging bins. There is one treatment dust collector near the top of the tower that emits outside. There is another dust collector on the ground floor that emits outside. This is for the bagging line. There were no visible emissions from this dust collector outside.

The treated corn is then bagged. About 24 bags per minute can be processed. One bag can plant about 2.5 acres and contains about 82,000 kernels. The bags have a label that is printed in the lab using a ribbon. There is also a jet printer that prints on the bags. According to use amounts the VOC that is emitted from this printer is about 9 lbs/yr.

There is a small re-bagging line for returned material. There is a small dust collector here that emits inside the building.

The lab is used primarily to determine physical characteristics of the seed and to send off samples for testing (germination, etc).

The Foundation Dryer for corn is in a separate building. It has 4 husking tables.

NAME Dennis Dunlap DATE 1/25/16 SUPERVISOR MA 1/25/2016