

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

B408437431

FACILITY: CITIZENS, LLC		SRN / ID: B4084
LOCATION: 772 EMMETT, BATTLE CREEK		DISTRICT: Kalamazoo
CITY: BATTLE CREEK		COUNTY: CALHOUN
CONTACT: Mike Rugg , Site Manager		ACTIVITY DATE: 10/31/2016
STAFF: Rex Lane	COMPLIANCE STATUS: Compliance	SOURCE CLASS:
SUBJECT: Self Initiated Inspection		
RESOLVED COMPLAINTS:		

On October 31, 2016, MDEQ-AQD staff arrived at Citizens, LLC at 11 am to conduct an unannounced air quality inspection. Staff made initial contact with Mr. Mike Rugg, Site Manager and Mr. Mike Davis. Citizens purchased this property from Battle Creek Feed & Grain in July 2003. The elevator accepts corn, soybeans and red and white wheat at this location. The rail spur off of Grand Trunk Western has been abandoned and all grain delivery and transport is done by truck.

The facility was last inspected by the AQD on 10/19/05 and was determined to be non-compliant at that time. The last verified air pollution complaint was in February 2005 and the facility was cited at that time for dust fallout onto nearby private property attributed to a plugged silo bin cyclone. The closest private residences are about 500 feet north and northwest from the center of the facility site.

Per Mr. Rugg, the facility has only two employees. During the harvest season, the elevator is open from 9 am – 6 pm Monday through Saturday (Sundays as needed). During the non-harvest season, the elevator is open from 7 am – 4 pm Monday through Friday. The plant is typically shutdown from mid-April through May. Staff asked Mr. Rugg if there were any seed treaters installed at this facility and he said no.

Per the MDARD website for licensed grain dealers, Citizens' Battle Creek plant has a permanent total storage capacity of 675,000 bushels. Mr. Rugg provided staff with a facility diagram which shows silo bin locations and a bin capacity chart and total capacity appears to be slightly less than value listed by MDARD. Currently, the facility is not subject to federal New Standards of Performance for Grain Elevators, 40 CFR Part 60, Subpart DD which applies to grain terminal elevators with a permanent total storage capacity of more than 2.5 million bushels.

A truck load of beans came in during the inspection and was weighed on the scale. An overhead tube is pushed into the beans and a sample is pneumatically collected and conveyed to the office to determine moisture content, mass in pounds/bushel and overall grain cleanliness (i.e. free of crop residues, stones, etc.). If sample meets specifications, the truck driver is directed to dump grain into the floor grate and the empty truck weight subtracted to determine grain weight and bushels received. Mr. Rugg showed staff a daily operations log notebook that lists grain type and volume received and transported and a brief summary of maintenance activities performed at the facility. If grain moisture content exceeds 15% by weight for corn; 13% for beans; or 13.5% for wheat, it must be dried further in one of two on-site grain dryers before going into long term storage. Per Mr. Rugg, the older grain dryer (QED Chicago) is rated at around 1500 bushels/hour and the newer unit installed in 2010 (QED Model MM2000 Magnum) is rated at about 2,000 bushels/hour. The newer grain dryer is a two-unit module and the modules cannot run independent of each other. The grain dryers are operated on natural gas and have a plate perforation of not more than 0.094 inches and are therefore exempt from permitting requirements under Rule 285(p).

Staff asked Mr. Rugg about whether the facility periodically applies dust suppressants to the unpaved road ways. Mr. Rugg stated that chloride brine is typically applied once per year during the wheat harvest in July. Staff asked for the chloride application date for 2016 and Mr. Rugg did not find it in the operations log. Mr. Rugg emailed staff following the inspection and the chloride application was done on 7/5/16.

Staff was provided a brief tour of the facility and observed the grain dryers in operation processing corn. Bee's wings and other fine grain corn particles were being emitted from the dryer and accumulating on the unpaved surfaces. Lighter grain particles collected by the silo bin cyclone during grain handling operations discharges through a chute (see attached photo) into an open top wagon. Staff pointed out that the wagon was nearly full and the south wind was carrying away some of the material as fugitive dust. Mr. Rugg stated that he would bring in another wagon following the inspection and the collected material is spread on a nearby field. Staff observed the silo bin cyclone exhaust and did not note any visible emissions at the time of the inspection.

Continued maintenance on the process equipment and the silo bin cyclone along with periodic cleaning of the plant yard and chloride application to unpaved roadways should minimize the risk of dust leaving the facility and impacting nearby residences. At the time of the inspection, all described process equipment is exempt from permitting under Rule 285(p) and it appears that the facility is in compliance with applicable state air quality regulations. -RIL

NAME RL DATE 11/2/16 SUPERVISOR MQ 11/2/2016