

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION

ACTIVITY REPORT: Self Initiated Inspection

U23150425229538

FACILITY: Citizens Grain Elevator, LLC		SRN / ID: U231504252
LOCATION: 421 N. Cochran Ave, Charlotte		DISTRICT: Lansing
CITY: Charlotte		COUNTY: EATON
CONTACT: Bruce Wymer, Vice President Food Grade Soybeans		ACTIVITY DATE: 05/19/2015
STAFF: Michelle Luplow	COMPLIANCE STATUS: Compliance	SOURCE CLASS:
SUBJECT: Self-initiated inspection to determine compliance with NSPS Subpart DD and become familiar with the facility		
RESOLVED COMPLAINTS:		

Inspected by: Michelle Luplow (author) and Kaitlyn DeVries (Grand Rapids District Office)

Personnel Present: Bruce Wymer, Vice President Food Grade Soybeans (bwymer@citizenselevator.com)  
Caitlin Tirrell, Production & Distribution Manager Food Grade Soybeans  
Angie Setzer, Vice President of Grain, Citizens LLC

**Purpose:** Conduct an unannounced, self-initiated compliance inspection by determining if Citizens is subject to the NSPS Subparts A and DD, Standards of Performance (NSPS) for Grain Elevators. There are currently no records in MACES that this facility has ever been inspected. This facility does not have an air-use permit or an SRN at this time.

**Facility Background/Regulatory Overview:** Citizens Elevator has several facilities throughout Michigan, with the accounting/merchandising office located at 421 N. Cochran Rd in Charlotte, and the main office located in Vermontville. Other facilities include Otto Rd in Charlotte and Battle Creek. The Charlotte Citizens Elevator is a non-GMO food grade/human consumption soybean handling operation that receives soybeans and loads out 90% of the soybeans in packaged and stacked in bags (by robots) to be sent to Japan. The remaining 10% of soybeans (broken, discolored, small soybeans) are loaded out via truck for animal feed. There were no anhydrous ammonia tanks located on site during the inspection, Bruce Wymer, Vice President, confirmed this finding. B. Wyman said that all soybeans are produced throughout the entire state of Michigan (minus Michigan's Upper Peninsula) and the very northern parts of Ohio and Indiana.

B. Wymer said that they current run 2 shifts (2 10-hour shifts) and generally 6 days per week.

**Inspection:** This was an unannounced scheduled compliance inspection. At approximately 2:45 p.m. on May 19, 2015 we met with Bruce Wymer, VP of Food Grade Soybeans. I explained to him that currently the facility does not have an air-use permit but that the main reason we were there was to determine NSPS DD subjectivity and to receive a tour of the facility. I provided him with a DEQ "Environmental Inspections: Rights and Responsibilities" brochure to illustrate what happens during a typical inspection procedure.

B. Wymer gave us a tour of all aspects of soybean processing. The soybeans are sent through screens that size the beans, through a destoner to remove the stones, a sorter to remove the broken pieces and odd-shaped beans, and sorting by color. He explained that all processes associated with these steps are under vacuum and the particulate generated from these processes are collected in cyclones (1 cyclone for the mill and 1 cyclone for the destoner). While onsite there was no evidence of opacity for either of the cyclones or from any of the processes (which are housed indoors). The particulate and scrap from the cyclones are then scooped out from below the cyclone by a payloader and the "product" is sent out as feed for cattle.

There are currently 20 silos, 1 column grain dryer, 3 dump pits and 2 truck loadout areas (1 above each dump pit, the 3<sup>rd</sup> dump pit does not have truck loadout). The grain dryer is designed specifically for processing food grade soybeans, operating at less than 100F. There are also a total of 16 elevator legs. These pieces of equipment are currently exempt under Rule 285(p) for commercial grain handling equipment.

According to B. Wymer, the Charlotte elevator has a permanent storage capacity of approximately 987,000 bushels. In order to trigger 40 CFR 60, New Source Performance Standard DD, a grain elevator must have greater than 2.5 million bushels of permanent storage capacity. At this time, Charlotte Citizens is not subject to NSPS DD. If Citizens Charlotte ever exceeded 2.5 million bushels of permanent storage capacity, they would become subject to NSPS DD and automatically have to report to MAERS. It is not probable that Citizens will exceed 2.5 million bushels because the current property acreage would not allow for more storage.

B. Wymer also said that the total throughput for the 2014 calendar year was 1.2 million bushels, and 2015 is predicted to have 1.4 million bushels of throughput. According to the white paper "Calculating Potential to Emit (PTE) and Other Guidance for Grain Handling Facilities" dated 11/14/95 from John Seitz, Director of the Office of Air Quality Planning and Standards, truck or rail receiving/truck or rail shipping (which is used at Citizens) has an associated PTE of 50 tons/year of PM-10 emissions for a throughput of 14 million bushels. Assuming a linear relationship between the number of bushels and PM-10 emissions, the PTE PM-10 emissions from Citizens Charlotte for approximately 1.2 million bushels would be approximately 4.3 tons/year. Citizens

would have to be emitting 15 tons of PM-10 per year in order to be required to report to MAERS.  
Citizens Charlotte is in compliance with all applicable state and federal regulations at this time.

NAME Michon Lydon

DATE 5-27-15

SUPERVISOR A.M.