

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

B154826398

FACILITY: Post Foods		SRN / ID: B1548
LOCATION: 275 Cliff St., BATTLE CREEK		DISTRICT: Kalamazoo
CITY: BATTLE CREEK		COUNTY: CALHOUN
CONTACT: Rob Mason , Environmental Engineer		ACTIVITY DATE: 07/28/2014
STAFF: Dorothy Bohn	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: unannounced inspection		
RESOLVED COMPLAINTS:		

This was an unannounced inspection. Prior to arrival I drove around the plant and did not observe any visible emissions except steam. I arrived at 9:05 am at the guard shack. Then I met with Cathy Sanford and Rob Mason for an introductory meeting at 9:30. During this meeting I gave Rob an inspection pamphlet.

We then went to see some of the equipment. I observed many stacks during the inspection, either from on the roof of the building or from an adjacent building and did not observe any particulate emissions. The roofs were all clean. Almost all of the stacks have their ID on them. Stacks that are a CAM unit (except the recently added CAM stacks) have a blue sign with the stack ID on them.

Each building has packaging lines for the products produced in them. Date coders are used to label each box. Many lines use ink in an embossing process but they are going toward a laser process where it is burned into the box. The ink printers have been operating under Rule 287(c) and are included in MAERs reporting but are not in the ROP. This is getting added in with the current minor modification application. Hot melt adhesive is used to seal boxes so this is exempt per Rule 287(i).

In/on building 4 some of the equipment I observed was: EU489 (a dryer) which is only used for one product; 4 cookers (EU401-404). The stacks for EU417, 418 and 420 had caps on them with visible dust accumulated on them (these stacks are on top of a penthouse), especially EU417. There were no visible emissions though. Rob and Cathy said it is a buildup from over a long period of time as they never clean the caps. There were 2 stacks in the very NE corner emitting a lot of steam that were not numbered. It was determined that one was #452 (not in the ROP) and that both are cooker steam exhausts that they say emit nothing but steam (neither are in the ROP).

At building 29 I observed the coater for FG2983CoatOxdOn, its collection points and the oxidizer on the roof. The inlet temperature to the oxidizer was 626°F (minimum required is 550°F) and the outlet was 723°F. I observed 2 wet scrubbers. The one for EU2984 was operating at 5.75'H2O and the one for EU2934 was at 6.5'H2O. Both showed that the acceptable range was 4-9. The baghouse for EU2910 was operating at 7"H2O.

I observed FG-20108 Baking being installed in building 20 under PTI 31-14A. It is almost ready to start testing and they plan to begin operation by 8/21/14. They need look at getting their ROP modification application before they begin operation and they have 30 days after they begin operation to submit a notification that they started operation. We discussed what this meant and I said that it means operation not production. EU20108 is a huge, continuous oven with 2 levels.

The powerhouse is in building 6. Specific information on each boiler is in the 7/17/12 report for EPA's inspection. EUBoiler-1 was operating at 430 #steam/hr (max is 470). EUBoiler-4 was heated (in a steam blanket) but not operating. EUBoiler-3 is not operable without being refurbished. A boiler inspection was performed during the 7/4/14 plant shutdown. The oil tanks are emptied and cleaned out but they do not want to drop their capability in the permit at this time. Due to the area source Boiler MACT they can only operate on oil if there was a gas curtailment.

I observed one of their 10 cold cleaners. They are all Safety Kleen (SK) units. 9 of the units are the same using SK's premium gold (naphtha). The 10th unit agitates, is 6 gallons in size and its solvent contains 3-5% HAP (naphthalene). The unit I observed was in Building 4 and is one of the 9. The lid was closed and the posting was inside the SK container wet with solvent. It must have fallen off the wall and it was placed inside. They said they would get a new post up and check all the others. This unit says it gets hot at the bottom (Cathy said the max temp is 106°F) but we think that is for the recycler not for cleaning. Attached is a document emailed to me by

Post on 8/13/14 showing that the coldcleaners operate at ambient temperature and are only heated for recycling of the solvent.

FG-Milling was not operating when we were at that part of the facility (the bins were full) so I did not observe that operation. Building 2 houses skilled trades – pipefitters, electricians, plumbers, etc. Cathy said everything is exempt. I did not observe it.

Records: After viewing the equipment we broke for lunch and then went back to Rob's office to go over the records. Cathy has most everything on the computer. Records were complete through June.

Source-wide: We discussed the malfunction abatement plan (MAP). It does not address the horizontal & vertical dust separators. They said that they treat these like a cyclone, so I suggested we update the MAP to add include this with the cyclones. They do not include the maximum/minimum/ranges for control equipment because they are all different but they said the maintenance has that information when doing their checks. Cathy had printouts of work orders that are computer generated for the maintenance staff. They identified if problems were found and what was done.

Records of the facility's non-boiler fuel use showed 25-40 MMCF per month of gas. At the end of June the 12 month rolling total (MRT) was 391 MMCF. Fuel oil has not been used in a long time. Particulate /PM10 emissions are based on #/1000# permit limits and how many hours the process ran. The monthly totals ranged from 5.17 (in Dec.) to 9.54 (in May) and the 12 MRT was 94.02 at the end of June (this was the highest for the last 12 months).

The company only has one Rule 290 source right now. See Rule 290 below.

Coating Records: The various coating groups have all the same monitoring and recordkeeping requirements except for FG2983CoatOxdOn. I observed where Cathy has the records of pounds of each material used. They are basically used as received (maybe mixed with other components to apply but not thinned, etc.) She is applying a control factor which combines the retention factor and control device factor. The PG factor was always 73%. The ethanol factor varies with the line. For the Oxidizer it is 94%.

At the end of June the following VOC emissions (tpy) were calculated for each coating line:

Line	Before control	After Control	Limit
EU1725	0.23	0.06	1.6
FG-477	14.05	7.27	14.1
FG-488	6.18	1.78	7.4
FG-2028	73.81	19.93	25.0
FG-2983CoatOxdOff	7.81	2.11	4.0
FG-3210	1.34	0.36	6.0
FG-32104	18.00	5.88	18.0

FG-2983CoatOxdOn: I observed records of the startup and shutdown of the oxidizer and cereal production and the temperature of the oxidizer. They said that the system sends an email if it thinks the production is operating and the oxidizer is not on and it alarms if the temp. falls below 550°F. They have been the CAM requirements for the system. If they are operating on the high VOC cereal and the oxidizer is not operating they include the VOCs emitted then under this FG. I did not write down the emissions but did observe the calculations for this group.

Boilers: Monthly gas use varied between 21-52 MMcf. The 12 MRT at the end of June was 415 MMcf.

FGRule290: Post said that EU32121 is not currently in use. Records showed that at the end of June the 12 MRT was 026 ton. Monthly totals ran from 0.0 to 0.07 tons or 140 pounds (the high being in 10/13). I reminded them that Rule 290 is not a 12 MRT but a monthly limit.

Rule 287(c): Records for the package printers show that 825 non-contact ink is used for 15 lines. In 2013 they used 290 gallons and it is 0.75 #VOC/gal. So this is 218#VOC emitted for all the lines combined in 2013. We discussed how they can show compliance with the 200 gallons per month limit. As they are removing these printers and going to laser the amount should decrease to less than 200 gallons/year soon.

Common records: Powerhouse staff perform the visible emission readings on a daily basis (requirement is once per week for non-CAM stacks and daily for CAM). Rob said they do 6 checks (views) in order to see all of the

stacks. A check list is used and if they see anything they notify the appropriate personnel. Rob said they also listen for funny noises, etc. while doing the checks.

Post had all the calculations for hours of operation. They are calculated by data on the number of shifts a process operated. They were below their limits on these.

I left just before 3. The facility appeared to be in compliance with their requirements at the time of the inspection.

NAME Dorothy Behm

DATE 8/13/14

SUPERVISOR MD 8/15/2014