

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

N146135905

FACILITY: WELCH FOODS INC		SRN / ID: N1461
LOCATION: 400 WALKER ST, LAWTON		DISTRICT: Kalamazoo
CITY: LAWTON		COUNTY: VAN BUREN
CONTACT: Bart Leonard , Technical Services Manager		ACTIVITY DATE: 08/04/2016
STAFF: Matthew Deskins	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Unannounced Scheduled Inspection		
RESOLVED COMPLAINTS:		

On August 4, 2016 AQD staff (Matt Deskins) went to conduct an unannounced scheduled inspection of the Welch Foods facility located in Lawton, Van Buren County. According to district files, Welch Foods is a synthetic minor (opt-out) source and they have one air permit (PTI No. 713-86C) issued to them by the AQD for two boilers. Also, it appears that they have jet printers being operated under the AQD Rule 287(c) permit exemption and adhesive applications being operated under the AQD Rule 290 permit exemption. The purpose of the inspection was to determine the facilities compliance with their air permit, the permit exemptions, and any other pertinent state or federal regulation that the AQD is delegated to enforce. Staff departed the district office at approximately 10:25 a.m.

Staff arrived at the facility at approximately 11:00 a.m. Staff wasn't sure where the entrance was and had to circle the facility a couple times before noticing a guard house. Staff proceeded to drive up to the guard house, introduced them self, gave them business card, and stated the purpose of the visit. They asked who staff needed to see but staff mentioned that it was their first time there and wasn't sure. The guards then called the office and told staff that Bart Leonard would be waiting for staff. They then gave staff a visitor I.D., parking space I.D., and told staff where to proceed to.

Once at the reception area, staff was greeted by Bart Leonard (Technical Services Manager). Staff introduced them self and stated the purpose of the visit. Bart mentioned that FTCH is their consultant and handles all of their air records. He then asked staff what they needed to see. Staff mentioned that they would ultimately like to review records required to be kept by the air permit and permit exemptions, as well as take a tour of the facility. Prior to any of that, staff asked Bart if there was some place that they could sit down to talk about facility operations since this is the first time staff has been there. Bart then led staff to a conference room.

Once in the conference room, staff exchanged business cards with Bart and gave him a copy of the DEQ's Environmental Inspection Brochure as well as the Boiler Guidance Document. Staff mentioned that there are new federal regulations that deal with boilers but the AQD is not delegated to enforce it. The AQD put together the document to give to facilities that have boilers and it has some helpful guidance links that they can use. Staff then asked about facility operations and the following is a summary of staff's discussion with Bart.

According to Bart, Welch Foods has been in business since 1918 and is a Co-Op owned by local grape farmers. They currently have 88 employees and operate 24/7, although processing isn't always being done during that time. He said that the facility has four processing lines but only one is in use right now which they are using to make Sparkling Grape Juice. He said that production has changed much in the last 10 years. Staff then asked if they still have the same equipment being operated under their permit and permit exemptions. Bart mentioned that the two boilers are still there although they are only operating the smaller one (Unit #3). Bart said that with them only operating one line, they don't need to operate them both and haven't operated Unit #4 in approximately 9 months. He said during the fall grape harvest they will run both for about a 6 week period. He went on to say that they still do both hot and cold applications of adhesive and that they only have 1 inkjet printer now. Staff then asked if they still aren't using fuel oil in the boilers and if the piping was still removed. Bart said that they don't and the piping is no longer there that would enable them use fuel oil. Staff then mentioned that since that's the case, they should probably look to do an updated PTE to see if they may be a true minor source. Staff explained that the current PTI is an opt-out for sulfur dioxide because originally the boilers were also permitted to combust fuel oil. Staff mentioned that the previous inspector also mentioned this but it doesn't appear it was ever followed up on by the facility. Bart mentioned that he would look into that.

Staff then asked to view records prior to taking a tour of the plant. Bart said that they give all the monthly

information to FTCH and they handle the recordkeeping. Bart said that once FTCH completes the reports, they e-mail them back to him and it is done on a monthly basis. Bart was having a hard time locating the most recent data and contacted FTCH. They told him that they had sent the most recent report to him the other day. Bart then led staff to his office to check his e-mail there. He said sometimes the computer in the conference room can lag behind with updates. Once at Bart's office he was able to locate the most recent report that FTCH had sent to him and he printed it off for staff. The following are the special conditions of PTI No. 713-86C and the facilities compliance status with them, along with their compliance with the Rule 287(c) and Rule 290 permit exemptions.

SPECIAL CONDITIONS OF PTI 713-86C

13. The sulfur dioxide emission rate from the boiler No. 3 shall not exceed 72.3 pounds per hour nor 89.8 tons per year.

AQD Comment: Appears to be in Compliance. The facility hasn't used fuel oil in years and only combust natural gas. Records reviewed by staff indicate annual sulfur emissions are only about 100 pounds.

14. The sulfur dioxide emission rate from the boiler Nos. 3 and 4 shall not exceed 89.9 tons per year.

AQD Comment: Appears to be in Compliance. The facility hasn't used fuel oil in years and only combust natural gas. Records reviewed by staff indicate annual sulfur emissions are only about 100 pounds.

15. The sulfur dioxide emission rate from the boiler No. 3 shall not exceed 1.11 pound per million BTUs heat input, based upon a 24-hour period. This is equivalent to using No. 6 fuel oil with a 1.0 percent sulfur content and a heat value of 18,000 BTUs per pound.

AQD Comment: Appears to be in Compliance. As mentioned previously, the facility hasn't used fuel oil in years.

16. The No. 6 fuel oil usage rate for the boiler No. 3 shall not exceed 10,920 gallons per day nor 1,129,200 gallons per year, based on a 12-month rolling period calculated at the end of each calendar month.

AQD Comment: Appears to be in Compliance. As mentioned previously, the facility hasn't used fuel oil in years.

17. Applicant shall only burn natural gas in the boiler No. 4.

AQD Comment: Appears to be in Compliance. The facility only burns natural gas in both boiler #4 and #3.

18. The total heat input from the combustion of natural gas and No. 6 fuel oil in the boiler Nos. 3 and 4 shall not exceed 569,375 million BTUs per year, based on a 12-month rolling period calculated at the end of each calendar month.

AQD Comment: Appears to be in Compliance. The most recent 12-month rolling total indicated 147,559.65 million BTUs. It doesn't appear that the facility comes close to the limit above. See Attached spreadsheet.

19. Visible emissions from the boiler Nos. 3 and 4, when firing natural gas, shall not exceed 10 percent opacity.

AQD Comment: Appears to be in Compliance. Staff did not note any VEs during the inspection.

20. Applicant shall monitor and record the natural gas and fuel oil consumption rates from the boilers and space heaters and calculate the total heat input on a continuous basis in a manner and with instrumentation acceptable to the Air Quality Division. This shall be recorded in the format specified in Appendix A, kept on file for a period of at least two years and made available to the Air Quality Division upon request.

AQD Comment: Appears to be in Compliance. The facility is doing this.

21. Applicant shall record the sulfur content of the No. 6 fuel oil fired in the boiler No. 3. This data shall be recorded in the format specified in Appendix A, kept on file for a period of at least two years and made available to the Air Quality Division upon request.

AQD Comment: Appears to be in Compliance. As mentioned previously, the facility hasn't used fuel oil in years.

22. The exhaust gases from the boiler No. 3 shall be discharged unobstructed vertically upwards to the ambient air from a stack with a maximum diameter of 44 inches at an exit point not less than 70 feet above ground level.

AQD Comment: Appears to be in Compliance. The stack appears to meet the above dimensions.

23. Monitoring and recording of emissions and operating information is required to comply with the Federal Standards of Performance for New Stationary Sources as specified in 40 CFR, Part 60, Subparts A and Dc. All source emissions data and operating data shall be kept on file for a period of at least two years and made available to the Air Quality Division upon request.

AQD Comment: Appears to be in Compliance.

Rule 290 Recordkeeping for EUADHESIVES.

AQD Comment: Appears to be in Compliance. The facility uses two types of adhesive, one is a hot melt and the other is a cold application. The hot melt adhesive (Technomelt Cool 250A) is used to glue the corners of cardboard box trays for shipping. The cold adhesive (Optal LG 45C) is used to glue 3 different labels on the bottles prior to packaging. Neither of the above adhesives contain any VOCs.

RULE 287(C) Recordkeeping for EUVIDEOJET.

AQD Comment: Appears to be in Compliance. The facility only has one inkjet printer now and usage is well below 200 gallons per month. Staff did mention that it appears that they are only including what was purchased and not what is used each month. Bart said that is how they've been doing it. Staff mentioned that they need to track how many gallons they used each month as required by the permit exemption. Staff stated that they won't make an issue of it this time since they are barely using any. Bart said that they would start tracking it by how much they use per month.

Staff then went on a tour of the facility with Bart. Bart showed staff the two boilers and as mentioned earlier, only Unit #3 was running. Staff noted that they are still the same units that were originally permitted and Unit #3 was rated at 50,000#/steam/hr and Unit #4 at 75,000. Bart also showed staff the equipment that is used in the process of making the Sparkling Grape Juice. The following is a general summary of that process as recalled by staff.

Once the grapes have been harvested, they get trucked into the facility to the grape receiving area. Once here, they are transferred into a pit where a screw conveyor transfers them up into the de-stemmer. The de-stemmer is a cylinder with holes in it that rotates. The grapes end up falling through the holes but the stems stay inside the cylinder. Once the grapes have been de-stemmed, they get pumped into the plant into batching/slurry tanks where various enzymes will be added to break down the pectin in the grapes. From here they will be pumped into other tanks where virgin paper gets added to help filter the juice. The paper filtering process will be done twice. Once the 2nd filtering process has been completed, the juice will either be pressed out of the paper or vacuumed out depending on what process they are using. It will then be stored in various tanks in the refrigeration room until ready to use. Once needed, the stored juice will be pumped from the storage tanks through diatomaceous earth to filter out any impurities. From there the juice will go through pasteurizers. They have 4 pasteurizers but may only run 1 at a time. Once pasteurized, the juice will then go into vats where it will be mixed with various flavorants depending on what product they are making. It will then be go to the bottling process or they may concentrate what they aren't going to use. They may sell the concentrate or use it at sister facilities. If bottling it, once it is completed they place 3 different labels on it (the body label, foil label at the top, and the neck label that goes over the bottom of the foil label). The labels are adhered by an adhesive called Optal LG 45C that comes in 2,502 # totes. The bottles will then placed in cardboard trays, shrink wrapped, and placed in the warehouse area until shipment. The corners of the cardboard trays they use are adhered using an adhesive

called Technomelt Cool 250A. This is a hot melt adhesive and as mentioned earlier in this report, neither of the above mentioned adhesives contain VOCs. After the tour of the plant was completed, staff thanked Bart for his time and departed at approximately 12:55 p.m. and headed toward the spray fields used by Welch's. The spray fields are used to get rid of the waste water from their grape processing.

Once at the spray fields, which is located approximately 1 mile west of the plant, staff met with Rick Ross. Rick informed staff that they fields have 5 pivots that they use for spraying but they do rotate them depending on certain conditions and how much their water permit allows. Right now, Rick said only pivot 5 was operating. Staff then went with Rick to check out the pivots. According to Rick, pivots 4 and 5 are the largest (cover the most acreage) and we had to get to them by going down to 64th Avenue. Staff noted that only pivot 5 was running. Winds were out of the S/SW and staff did not detect any odors. Rick then showed staff pivots 1 through 3 which weren't in operation. Rick mentioned that they do take wind direction into account to determine which pivots will be used in an effort to not bother the neighbors. Rick then showed staff the pivot programmer inside the garage which tracks everything electronically. They are currently averaging about 354,000 gallons of wastewater a day at the spray fields. Staff thanked Rick for his time and departed at approximately 1:25 p.m.

INSPECTION CONCLUSION: The facility appears to be in Compliance with PTI No. 713-86C and all other regulations that the AQD is delegated to enforce at the present time.

NAME Matt Deskin

DATE 8-9-16

SUPERVISOR MO 8/9/2016