

MEMORANDUM

TO:	Heinz Braun, Compliance Branch Manager
THROUGH:	Gary Bortz, Inspector Supervisor-District 7, Office of Air Quality
FROM:	Tiffany Wooten, Inspector, Office of Air Quality
CC:	Stuart Spencer, Associate Director, Office of Air Quality
DATE:	November 30, 2017
SUBJECT:	Georgia-Pacific Plywood Fire Emergency Response Incident & Follow-Up

SUMMARY:

On October 28, 2017, at approximately 9:37 a.m., the Georgia-Pacific Plywood facility (alternatively referred to as "the site") in Crossett, Arkansas was reported to have caught fire and local authorities were dispatched to assist in responding to the fire. I was contacted at 10:30 a.m. by Ms. Sarah Ross, Environmental Manager at the Georgia-Pacific Crossett, LLC Paper Mill, to inform ADEQ of the fire. Ms. Ross inquired if ADEQ would be sending personnel during the emergency response incident. Because the fire occurred on a Saturday, I told Ms. Ross I would notify my supervisor and contact her if someone was available to come to the site. Ms. Ross said she would provide Ms. Jennifer King, the local Georgia-Pacific public affairs contact, my contact information. I contacted Mr. Gary Bortz, District 7 supervisor (ADEQ, Office of Air Quality), and asked if I should travel to the facility, since I was contacted directly by the facility and I was closest in proximity. Mr. Bortz, my direct supervisor, discussed the situation with Mr. Heinz Braun, Compliance Branch Manager, ADEQ, Office of Air Quality, and at approximately 1:00 p.m. I was authorized to travel to the site and represent ADEQ on the ground. I contacted Ms. King and told her I was en route to the site.

At 1:35 p.m. I arrived at the meeting area set up by Ms. King, at the Georgia-Pacific Paper Mill administration building, approximately a half mile west of the Plywood facility. Ms. King and I were joined by Mr. Michael Hohnadel, V.P., Manufacturing for Georgia-Pacific, and Mr. Rene Thouillion, Georgia-Pacific air engineer. Ms. King stated the fire began at approximately 9:33 a.m. in Building 1, based on the fire's path. Ms. King stated the only people at the Plywood facility at the time the fire started were GSD Demolition members, a Texas-based, fully-licensed contracting firm responsible for performing the demolition work, and Georgia-Pacific security. Ms. King said numerous fire departments provided resources to the firefighting efforts, including Union County, Bradley County, Drew County, Chicot County, and other local volunteer brigades. The fire was contained and was allowed to burn out since efforts to fully extinguish it were unsuccessful.

During our discussion, Mr. Hohnadel received a call from the demolition contractor supervisor, Jason Spears, and stated when the blaze began twelve contractor personnel and one Georgia-Pacific security person were on site. Based on preliminary information and evidence available, Georgia-Pacific determined that the likely cause of the fire was sparking caused by metal cutting, which was part of the demolition process. Georgia-Pacific stated no wide-spread evacuations or community evacuations were warranted. One building directly south of the Plywood facility and approximately 1-1/2 city blocks caught on fire from smoldering debris, but was quickly extinguished by firefighters. During our meeting with Crossett Fire Department personnel, Chief Higgenbotham and Fire Marshal Willhite stated it had been determined there were no additional fires caused by burning debris. Because the wind was blowing directly south, the fire department assessed no threat to adjoining Georgia-Pacific properties were imminent. A fire barrier was created between the Georgia-Pacific Plywood and Georgia-Pacific Chemicals sites to prevent the possibility of further damage. There had been numerous reports to Ms. King of debris on citizen's property, none of which had been categorized as "toxic." The main street, running parallel with the plant, was closed and citizens were urged to stay away from the plant so firefighting efforts would not be impeded. Early reports were the fumes coming from the plant were "toxic", but this statement was not based on any data-driven or empirical determination. It was later determined Chief Higginbotham informed the community all smoke has a "toxic" component to it and they should stay away from it.

Georgia-Pacific Corporate personnel who joined us were Mr. Satrick Anthony- V.P., Operations, Mr. Matt Tiller-Remediation, Mr. Rick Kimble-Public Affairs, and Mr. Mike Hassett- Sr. Manager, Remediation. Mr. Hassett informed me, prior to demolition, all regulated building materials, hazardous/universal wastes, and asbestos-containing material, etc. had been removed and properly disposed of. He stated all legacy documentation and pre-demolition stabilization was done prior to demolition, as well as a full survey of the plant. He stated he could provide me with a detailed transportation log(s) showing the removal of the wastes, if necessary. The demolition had begun in early September and was slated to last approximately 6-8 months, with an ending date sometime in March/April of 2018. According to Ms. King, the demolition began when Georgia-Pacific determined the Plywood Mill buildings were not going to be beneficial for other businesses and that production would be permanently halted. Mr. Hohnadel stated the demolition process was primarily a scrapping process, with the steel and sheet metal being cut for reclamation. At the time of the fire, approximately 90% of the production sources and machinery were still on site with no intent for reclamation. All of the machines and sources had been drained of oil, lubricants, etc. Mr. Anthony stated the demolition would now be categorized as a fire clean up and would commence once the fire burned out and cool down. Mr. Anthony stated the cool down phase should be completed in a few days then an official investigation into the cause of the fire would begin along with an assessment of damage. He stated the demolition contractors had a fire clean up firm they would employ and that work would begin as soon as the site became stable and work could resume.

Mr. Kimble, Georgia-Pacific, Corporate Public Affairs inquired as to whether ADEQ would be issuing a statement to the community. I told him I was going to provide my superiors with the information from our meeting so they would be informed. Any response or statement, if deemed necessary, would come from ADEQ Headquarters. I told them I would take their names and contact information in the event someone from our Department needed additional information. Mr. Kimble asked me if I would constitute this fire as a structural fire. Based on the information provided, the plant was no longer considered a regulated entity because the air permit had been

voided. The fire would be considered a structural fire, just as any vacated building would be. I stated, from an inspector's perspective, the main purpose was to gather as much information as possible, to disseminate to concerned citizens that contacted ADEQ. One of the main concerns was from the fallout of the burned debris on neighboring properties. Mr. Anthony said Georgia-Pacific would be employing a contracting firm to clean affected citizens' properties and to provide information regarding the nature of the residue, specifically its non-toxic and non-hazardous nature. He further stated all the water used in the fire-fighting process would drain to Georgia-Pacific's storm water process. He stated the fire chief, Mr. Higgenbotham, would create a fire report for the incident.

On Monday, 10/30/17, I was instructed by our Department to conduct a follow-up inspection. I contacted Mr. Hassett and Mr. Tiller from Georgia-Pacific and requested a timeline of events so a follow-up inspection and meeting could be held. On Wednesday, 11/01/17, Mr. Kimble contacted me to set up a meeting and itinerary. The parties agreed on a follow-up conference on Tuesday, 11/07/17.

On Tuesday, 11/07/17, Jay Northern, District 7 inspector-ADEQ, Office of Air Quality, El Dorado Field Office, and I met at 10:00 a.m. with Mr. Satrick Anthony, Mr. Matt Tiller, and Mr. Rick Kimble of Georgia-Pacific at the Learning Center at the Georgia-Pacific Crossett Paper Mill. Mr. Anthony started the conference by having Mr. Tiller distribute an official incident investigation report provided by GSD, the demolition firm, and a summary of site condition report crafted by the consulting firm Amec Foster Wheeler. After our meeting at Georgia-Pacific concluded we met with Chief Beau Higgenbotham and Fire Marshal Michael Willhite..

According to the information we received from Georgia-Pacific and the Crossett Fire Department, the timeline of events of Saturday, 10/28/17 began when the GSD demolition crew arrived at 6:30 a.m. for a safety meeting. The crew began filling the 500-gallon water truck on site as a safety person issued a hot work permit. We were not supplied a copy of the hot work permit, nor was a copy requested. One issue that was heavily discussed was the lack of available water. Mr. Anthony stated they employed FSM, Fire Sprinkler Maintenance, and a contractor to turn the water off to the plant as part of the demolition plan. The shutting off of the water was to conserve water to the other plants in the event any water pipes got damaged during demolition. The water could not be turned back on in the event of a fire, because the fire loop and main riser in the log yard behind the Plywood mill had been compromised by earlier demolition work.

According to the fire report and the GSD investigation report, the crew began the task of wetting down the work zone, as part of their safety plan, and began torch cutting anchor bolts for equipment stationed inside Plant 1. During the torch cutting, there was sparking that ignited a small pile of wood debris. The fire watch person immediately grabbed a hose connected to the fire truck, and, using the full stream (highest pressured setting) on the hose doused the material which failed to extinguish the fire and pushed it towards a ³/₄ rubber hose hydraulic line. The hydraulic line had been purged of oil, however, there was residual oil left in the line which acted as a catalyst for the fire. As the residual oil leaked down the line, the fire continued its' path upwards to the support columns leading to the wooden roof timbers. At this point, the 500-gallon water truck and two, 20 lb. fire extinguishers were not adequate to control the fire and the local fire department was notified.

At 9:45 a.m., the Crossett Fire Department arrived on the scene. After assessing the magnitude of the fire, further assistance was requested from all fire departments in Ashley County. During the

response, two additional calls were made stating there were fires at the Georgia-Pacific Chemical plant and the ACMC Wellness Center. Fire fighters responded to both fire calls which were found to be false fires. Chief Higgenbotham requested that any onlookers leave the scene, businesses across from the Plywood facility and residents within a 3-block radius of the plant were asked to stay inside. Chief Higgenbotham told the onlookers, businesses, and residents the smoke was" toxic", as any structural fire would be, and that they did not need to inhale the concentrated fumes; again, this statement was not based on any data-driven or empirical determination. Although there were no chemicals involved in the fire, Chief Higgenbotham stated structural fires contain excess amounts of carbon monoxide, cvanide, hydrogen sulfide, oxygen, and LEL which is dangerous to breathe. Chief Higgenbotham and Mr. Anthony stated fiery debris was carried from the plant onto properties within a $\frac{1}{2}$ mile radius of the plant. A retired firefighter patrolled through the city where the debris was falling to report if there were any other fire outbreaks. According to Chief Higgenbotham, H2S is one of the measurable and common components of smoke. Georgia-Pacific has a H2S monitor in West Crossett, positioned to capture and measure H2S levels leaving the G-P facilities. According to the 10/28/17 data, there was a range of levels ranging from 0 to <2.5 ppb all day, including the hours during the blaze. The reportable quantity level is 70 ppb for 30 minutes.

Captain Boykin of the Crossett Fire Department had an air monitor on his person. The monitor is used once a fire is under control and its purpose is to help the fire department determine when air packs are no longer necessary. The monitor is a display-only, real-time, monitor used to determine the concentration of carbon monoxide, cyanide, hydrogen sulfide, oxygen, and LEL. The monitors stopped reading concentrated levels after Chief Boykin stationed himself at the entrance of the Plywood facility, more than 25 ft. from the heaviest smoke. Once the fire was contained, at approximately 3:30 p.m., the evacuation was lifted. A skeleton crew of fire fighters remained overnight to extinguish any residual flare ups. None of these firefighters complained of any complications from the smoke. No official air monitoring took place because the fire department and facility officials did not deem it necessary.

Mr. Anthony stated a team from GSD was dispatched into the community to clean up the charred debris fallout, which he said was non-asbestos, foil-backed insulation. The insulation was discarded into two roll-offs, located behind the plywood plant, which will be sent to the Union County Landfill. Businesses such as churches and schools were cleaned up first with residential neighborhoods following. There was no damage to any outlying business or residential properties. All clean-up activities were completed within two days. The few remarks received were that the debris was a nuisance or an inconvenience.

Before demolition, all hazardous waste and universal waste components had been removed, along with asbestos. During our tour of the demolished buildings, we were shown buildings where bulk wastes were being held. There was no integrity issue with the waste packaging. We were shown the asbestos roll offs, which were properly sealed. The roll offs containing burned insulation were also shown to us. While on site, we observed no pungent odors indicating leakage or compromise of containment. All water runoff from the fire and recent rainfall was being contained on-site or positioned by the plant's lay-out to be absorbed back into Georgia-Pacific's water treatment system. No threat of contamination to any surrounding areas was evident.

There is an additional ambient air monitor that records particulate matter (PM 2.5) located near Ashley County Medical Center and northeast of the plywood plant. I contacted Shaun Kitchens

of ADEQ and he stated the monitors record a sample every three days, the standard EPA sampling calendar for FRMs, and is based on the 24-hour concentration of PM2.5. The 24-hour standard for PM2.5 is 35 micrograms per cubic meter. According to the sampling calendar, data was retrievable for 10/25/17, 10/28/17, and 10/31/17. On 10/25/17, the PM2.5 recorded was 4.37 micrograms per cubic meter. Data sampled for the date of the fire, 10/28/17, was 4.50 micrograms per cubic meter. According to Mr. Kitchens, the 24-hr. period began 12:00AM Saturday morning and ended at midnight. The next sampling of PM 2.5 occurred on 10/31/17 and recorded 6.33 micrograms of PM2.5 per cubic meter.