

## **Effingham County Odor Investigation Update 11-16-23**

The Georgia Environmental Protection Division (EPD), the U.S. Environmental Protection Agency (EPA), along with the Effingham Emergency Management Agency (EMA) Director and other local officials have been investigating odor complaints in the area between Stillwell and Rincon since late September. Multiple investigations have been conducted to determine the source of the odor generating the complaints and to determine if there are any air quality violations that may be causing people to become ill. EPD and EPA are reviewing the sample results that have been collected and have not identified anything yet that could be classified as an air quality violation.

Although no violations have been found yet, EPD and EPA have personnel on standby and personnel working in these areas throughout the week trying to identify the source of the odors that are generating complaints.

When evaluating situations such as this one, it is important to note that odors caused by gases suspended in the air are usually more prevalent at night or early in the morning due to atmospheric inversions. This is a result of warmer air trapping cooler air closer to the earth's surface, which concentrates whatever is suspended in the air closer to the ground. As temperatures warm up, the concentrated gases are allowed to disperse upward into the air, reducing the concentrations near the ground. Thus, resulting in less odors near the ground.

It is also important to understand that just because an individual can smell something, doesn't mean that it is harmful to them. An example of this is hydrogen sulfide. This is a gas that is emitted by a lot of the manufacturing industries in the area. Some individuals describe its odor as something that resembles rotten eggs. Hydrogen sulfide can be smelled at 0.0005 parts per million (ppm), but the health threshold is 10 ppm (from NIOSH Recommended Exposure Limit) which is 20,000 times higher.

EPD has continued to monitor the air in the area looking at all possible sources, interviewing individuals in the area, taking air samples to be analyzed at the EPD laboratory and using handheld air monitors. In addition to this, EPA is working with EPD, the EMA and other local officials to set up some continuous air monitoring stations at several locations in the community. All responding agencies are doing everything within our legal authority to determine the source/sources of the odors and determine if any of these odors are associated with an emission that may be harmful to the public or the environment.

Any individual may file a complaint with EPD about this matter. In order to properly report a complaint please record the following information: date of the incident, location of the odor occurrence, the time and duration, temperature, windspeed, wind direction and describe as best you can the odor. Email the information to [coast.epdreporting@dnr.ga.gov](mailto:coast.epdreporting@dnr.ga.gov) and in the subject line type-in "Effingham Odor Investigation". Once we have enough data, we can use this information to backtrack possible sources.

If you have specific questions about one of the permitted facilities in the area, please call EPD's Air Protection Branch at 470-938-3349. For general questions or concerns about unusually strong odors in the Effingham area you can call the EPD Coastal District at 912-264-7284 or email [coast.epdreporting@dnr.ga.gov](mailto:coast.epdreporting@dnr.ga.gov).