

Deer Park Community Advisory Council

www.deerparkcac.org

Meeting Notes Monday, August 23, 2021

The 294th meeting of the Deer Park Community Advisory Council was held on Monday, August 23, 2021 via Zoom video conferencing. Facilitator Diane Sheridan reviewed the agenda, which was accepted as proposed. The May 2021 meeting notes were approved without changes.

ATTENDANCE

DPCAC Community Members		DPCAC Plant Members		Guests/Resources	
	Ruth Boyd	X	Clean Harbors , Bruce Riffel	X	John Collins
	Steve Corry		Dow Chemical Deer Park , Monty Heins	X	Rick Deel, Harris Co. HS&OEM
X	Ken Donnell	X	Dow Chemical , Whitney Bolger	X	Anne Gowan
	Beverly Ferguson-Cooper	X	Evonik Oil Additives , Jim Bentinck-Smith, rep. by Trilby Cressman, Evonik	X	Justin Hicks, City of League City
	Bobby Garcia	X	GEO Specialty Chemicals , Steve Outlaw	X	Craig Hill, HCPCS
X	Sherry Garrison	X	Hexion , Marlene Mercado	X	Betty Lemley
X	Tommy Ginn	X	Intercontinental Terminals , David Wascome	X	Karen Lewis-Holmes, TCEQ
	Robert Hemminger	X	Lubrizol , Sam Striegel	X	Scott Malm, CTEH
X	Cara Herbeck	X	OxyVinyls VCM , Josh Munn	X	Frank Marine, Texas Molecular
X	Steven Horton	X	OxyVinyls PVC/KOH , Eric Delgado	X	Doug Moore, Lubrizol
X	Norma Hysler	X	Shell Deer Park , Jessica Blackmore	X	Jerry Mouton, Mayor
X	James Ragaisis	X	Shell Deer Park Manufacturing Site , Guy Hackwell, rep. by Bryan Moody	X	MaryJane Mudd, EHCMA
	Ariel Pena	X	Texas Molecular , Jimmy Bracher	X	Stuart Mueller, HCPCS
X	Buddy Rice	X	Valvoline , Robert Shelton	X	Tracy Netherly
	Vickey Roberts	X	Vopak Terminal Deer Park , Kathy Stewart	X	Susan Newman, Hexion
	Robert Segelquist			X	Christina Penrose, Lubrizol
	Andy Smith		Support Staff	X	Nicole Peterson, Hexion
	Charles Thomas	X	Diane Sheridan, Facilitator	X	James Ragaisis, San Jacinto College
X	David Wade	X	Cynthia Wotipka Boland, Secretary	X	Bubby Rice, City of Deer Park
	Ernest Weedon			X	Kayla Roman, HCPCS
			Guests/Resources	X	Tanya Travis, Lubrizol
		X	Jason Allred	X	Wallace Ward, Native Prairies
		X	Sarah Arroyo, Lubrizol	X	Blake White, Harris County OEM
		X	Richard Bergeron, Oxy Vinyls PVC		

Recent Significant Event at Lubrizol Deer Park (August 15-16, 2021)

The CAC changed its original plans for the August meeting to allow time for a report and questions on a significant industrial event that occurred at Lubrizol Deer Park, a Deer Park CAC facility. The facilitator reminded members that ongoing investigations and lawsuits constrain what the plant can report soon after the event. Meeting attendees submitted questions and comments in Zoom Chat. Any specific responses are shown with the questions below the presentation. Additional questions that were not answered at the meeting are listed after that. Sam Striegel, General Manager, spoke for Lubrizol Deer Park. Buddy Rice, Interim Emergency Management Coordinator for City of Deer Park, reported on the city's actions and communications with the public. Kayla Roman and Craig Hill of Harris County Pollution Control Services described the county's air monitoring at the events and how the public may access that information.

Overview of Community Input

Facilitator Diane Sheridan presented

NOTE: The attached presentation was updated after the DPCAC presentation to address some questions that arose in this and other CAC meetings.

Diane Sheridan summarized input she received from Deer Park, Pasadena, BAYCAP and other CAC communities that expressed frustrations learning what the odor was, its hazards, and steps to protect yourself and your family. Her colleague Anne Gowan monitored social media in the BAYCAP area so that key points could be added.

Odor went to multiple cities and counties. The smell varied by nose and area.

- With 2-3 mph winds, odor slowly traveled as far as Dickinson, Friendswood, planes on tarmac at Hobby and beyond--and it lingered.
- Some thought it smelled like rotten eggs, some did not. Some thought it smelled like Mercaptan, some did not. Smelled like a blend to some and burning plastic or burning rubber to others.

It was more than a nuisance for many

- Most communications referred to the odor as a **nuisance**, but many had physical symptoms as it **irritated** noses, eyes, and throats and caused headaches and nausea or vomiting. A Clear Lake resident used Next Door to survey readers about any physical symptoms; he received 950 responses.

Chemical name and its hazards not made clear

- Hydrogen sulfide? Mercaptan? Something else? Confusing when county said it was hydrogen sulfide but also that it had not detected any. Difficult for cities to decide whether to shelter in place.
- Those who tried could not find a Safety Data Sheet for "organic sulphur material." Some called Lubrizol and were told the SDS could not be released to the public and to call their fire department. Fire department said to contact Lubrizol.

- Noses detected the odor even if instruments did not. A common theme in community input was something *Non-detectable by air sampling does not mean no information or action is needed.*

Few cities warned community how to protect themselves and those for whom they are responsible

- Only La Porte and Seabrook issued a shelter in place, so many other communities were not told to turn off AC to keep odor out. Odor decreased but lasted after the shelter was lifted. Many became aware of the event when awakened by the smell, which became particularly strong about 3:00 a.m. in some communities.
- Lubrizol posted information on the industry CAER app. An elected official promoted CAER for warnings, but it cannot push out alerts. Cities do that. Many people may not know they must sign up for notifications from city/cities if they don't have land lines.
- Many did not know to open windows and air out houses the next morning or when it was safe to do so. Some could not do so before work, so odor settled in.
- People unsure how to protect themselves and families; e.g. family with a 7 month-old recovering from RSV and COVID. Clear Lake Regional Hospital turned off infant warmers in labor and delivery rooms because they did not know if the odor could impact newest lives.
- Many got information from NextDoor or other neighborhood social media sites. More than 500 comments on Next Door about the event symptoms.

People also fear the chemical harmed flora and fauna

- Trees, pets, squirrels, birds, songbirds in La Porte, honeybees.

Role for Harris County to communicate in such a large event

- At least when an event impacts multiple cities in the county and beyond. Frustration that county can push amber alerts, blue alerts, and COVID info but does not inform residents about a chemical release.

Sheridan emphasized there is always room for improvement after an event. Any concerns or suggestions not reflected in the overview should be placed in Chat during the meeting or emailed to dbsfacilitator@gmail.com.

Plant Presentation: *Statement from Lubrizol Deer Park - August 23, 2021*

Texas Facilities General Manager Sam Striegel represented Lubrizol Deer Park, with Sarah Arroyo, Tanya Travis, and Doug Moore as resources.

NOTE: The attached statement was updated after the DPCAC presentation to address some questions that arose in that meeting.

"Dear DPCAC Members,

We are deeply sorry for the impact our incident had on our area communities. The health and safety of our workers, communities and the environment are our top priority. We have been in this community since 1951 and we will work to regain your confidence as a trusted community partner.

Before detailing the incident and what was released, we want to affirm three things:

1. *Health and Safety of the Community: Air monitoring measurements confirm no expected health risk to surrounding communities tied to this incident, though we do understand and regret that some individuals experienced irritation. We sincerely apologize for that.*

The primary source of the odor Sunday night was mercaptan, an organic sulfur material widely used to odorize natural gas because of its distinctive unpleasant smell, but not harmful to the community in this case.

2. *Lubrizol values our strong partnerships with the local officials, Harris County and other agencies. As part of our response to the incident, we were in regular contact with local authorities and submitted continuous updates as part of the e-notify/CAER system.
We will be partnering with EHCMA (East Harris County Manufacturing Association) to work with the local agencies to better understand how all parties can improve the flow of information during events to ensure that all know how to respond. There is a deep investment among all partners in getting this right.*
3. *Internal investigation: We are completing an on-site investigation and sharing learnings across our site and across our organization to make sure this cannot happen again.*

What Happened?

On August 15th, we were in the process of heating a stable material (a grease additive) in a railcar, so that we could further process the material. The material was over heated during this process, triggering a decomposition reaction, which released heat and increased the pressure in the car. Eventually the increased pressure caused the relief valve to lift releasing the highly odorous material.

Upon notification of the event, our Emergency Response Team (ERT) immediately reacted. This included notifying our employees, our industry neighbors, and local officials, conducting fence-line and local community air monitoring, and safely stopping the release.

What was released?

The SDS we provided to Harris County Pollution Control, Harris County Office of Emergency Management and Deer Park Fire Department reflecting the material in the railcar is a zinc phosphate blend (Zinc Alkyls Diphosphate) product. A reaction occurred that caused the material blend to break down in the rail car primarily into mercaptans, hydrogen sulfide, and amines.

We continuously monitor air quality as part of our day-to-day operations. When this event occurred, we immediately mobilized additional air monitoring. During the release and response, the air monitoring results we saw indicated non-detectable levels for all the expected by-products throughout the event in the local communities. Lubrizol and multiple parties - including Harris County Pollution Control, Community Fire Departments, and CTEH conducted community air monitoring. While they weren't

present at levels detectable to air monitoring devices, the low odor thresholds still impact us.

Communities experienced a pungent smell even though there were no detectable levels of the referenced chemical compounds because these materials have an extremely low odor threshold (the lowest concentration in which you can smell the chemical). It's important to understand that odor thresholds for some materials are much lower than the capability of air monitors to detect. Air monitors measure Mercaptan as a "non-detect" if it is less than .05 parts per million but many people can smell Mercaptan at .002 parts per million. This is comparable to one milliliter (less than a teaspoon) of water in an Olympic sized swimming pool. It is one of the reasons why Mercaptan is used as an odorant for natural gas.

Thank you for allowing us to provide this update. We are appreciative to all cities and organizations involved in providing updates on this matter. Lubrizol is committed to being the community partner that you expect us to be."

Q & A

- *Your straw poll analysis is spot on. Here in Galveston County, it seemed that the experience was more or less extreme in pockets. Including different smells, different symptoms based on location, including vomiting. Please explain. It's possible that people could experience headaches, nausea and other minor irritations that would have an impact at these levels.*
- *If the analyzers did not detect the substance, can they be recalibrated to detect the released substance at a lower number? Should they be recalibrated to detect the substance at a lower number? Unfortunately, no. For the equipment that is being used to measure Mercaptan, we can't measure by quick air monitoring. To detect a particular chemical, a glass tube is attached to a piston pump and as the air travels through the tube, if the chemical that you are looking for passes through the tube, the color changes.*
- *According to MSDS, are there any long term effects based on ALL chemical reaction releases from the event? There are no expected long-term health effects at the detectable levels that were present in the community.*
- *I understand the sulphur smell. What about the burning rubber smell several citizens complained of? That's the "cocktail" of the odor – all of the chemicals mixed together.*

Additional Comments:

- *My plant is right next door and I had no information to relay to my team. They said H2S, but there were no H2S readings at the fence line. And the odor was over-powering. As a plant person, I expected better communication from our neighbor plant.*

City of Deer Park Emergency Management

City of Deer Park Interim Emergency Management Coordinator Buddy Rice presented

Rice briefly described the city's response to the event. The city was notified about the event by Lubrizol and later by an e-Notify message. The staff gathered together via ZOOM to discuss what was

known. Buddy added that the city was in continuous contact with Lubrizol during this time. Initial reports were that the odor was a mixture of Mercaptan and H₂S which would be more of a nuisance smell that should not present any health hazards. Based on the information that the city was receiving, they did not feel that it was necessary to issue a shelter-in-place order. Something should have been on social media a little earlier than it was. Buddy said that they were still trying to get information on what the release was.

Q & A

- *The city didn't use Code Red but what information did you put out?* Put out information on Facebook and the EOC was confident with that as it was accurate information. It was probably put out on other social media sites including emergency management, city page, police page, Twitter, and sharing the CAER Line messages.

Additional Comments:

- It's great that Buddy was satisfied with the information he had. Too bad the residents didn't have any of that information.

Harris County Pollution Control Services (HCPCS)

HCPCS was represented by Craig Hill and Kayla Roman.

The facilitator asked what kind of monitoring the county did for the event, including types of communications that were related to the public. Craig stated the HCPCS team responded immediately and was in continuous contact with Lubrizol to determine the type of material that was involved as that determines the type of air monitoring that will be conducted. Their focus was in the communities and they continued air monitoring activities until about 1:00 a.m. The county started monitoring again about 3:45 a.m. when complaints starting coming in from areas further south and they continued monitoring until about 3:30 p.m. the day after the release. No detectable impact to the community was observed as far air quality/environmental issues showing up in the various neighborhoods. Hill said HCPCS is still investigating the event. In addition to air monitoring, samples were collected and sent to the lab, which was able to give a more accurate picture of what is involved. Those results were consistent with other reports.

Q & A

- *How does the county share the information to the public?* They share primarily via Facebook, Twitter and NextDoor. They use Geo-Targeting on NextDoor to get to specific communities. Air monitoring results are also published to the Harris County website.
- When they conduct monitoring during an emissions event, the person doing the sampling inputs the data into the HCPCS system, and it is displayed on their website in near real-time.

Kayla shared the following contact information for HCPCS, links for the complaint form, mobile air monitoring map. She advised using the phone when an event is underway.

- Website: <https://pcs.harriscountytexas.gov/Pages/default.aspx>
- Complaint Line: (713) 920-2831
Main Email for general inquiries and complaints: pollution.control@pcs.hctx.net
Online Complaint Form: <https://webapps2.harriscountytexas.gov/PCSComplaintForm/complaint-form>

Additional Comments

- Just a suggestion; most residents I know were most disappointed with the timeliness of release of information. If any chemical reaction is released into the environment the residents should be notified immediately. When people are sitting at home all night with sore throats not sleeping all night makes them uneasy. Even if generic they should be let known.
- Facebook, Twitter and NextDoor are not enough. Half our population does not use social media. There needs to be a plan for emergency management text messaging. Also considering, not everyone is on Facebook in the evening
- Getting people the message to sign up for emergency messaging is definitely a challenge. We need to collectively overcome this hurdle. Mailers etc. especially to seniors who are not on social media.

How Plants Protect Workers That Make or Handle Chemicals like BTEX

(Slides posted at www.deerparkcac.org)

In a continuation of the series of meetings related to the UTMB study of cancer vs. proximity to refineries, DPCAC learned about industrial hygiene programs to protect from harmful exposure the workers that make or handle chemicals like Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX), the chemicals focused on in the study. Scott Malm, a toxicologist at CTEH, reviewed exposure information about BTEX, which showed Benzene is the most hazardous of the four.

Malm defined industrial hygiene (IH) and showed the hierarchy of controls used in IH. An upside down triangle shows the most effective to least effective methods to protect workers from harmful exposures:

- Elimination to physically remove the hazard
- Substitution to replace the hazard
- Engineering controls to isolate people from the hazard
- Administrative controls to change the way people work
- PPE to protect the worker with Personal Protective Equipment.

Malm then described various engineering controls, such as ventilation and removing vapors from storage tanks. Examples of administrative controls include training and worker education about possible health effects as well as rotating employees to reduce potential exposure and designing the workplace so routine work tasks are physically distant from the hazards. Photos were used to show PPE for BTEX, real time air monitoring equipment, and analytical air sampling

Q & A

- *Are Passive Dosimeter Badges used on a broad scale/small scale basis by our DP industry members?*
Not entirely familiar but would assume that it is based on the type of facility that you are going to. There are some federal requirements based on the amount of benzene that employees work with. OSHA has its' own benzene standard for dealing with benzene containing program. (NOTE: Will address at September meeting)

Updates

Ozone Exceedance Days - TCEQ's Karen Lewis-Holmes reported that there were six exceedances of the 8-hour standard for the month of June for the Houston region, including two in the Deer Park area and two ozone exceedance days for the month of July, including one in Deer Park. There were also two exceedance days of the 1-hour standard for the month of June and one for July, all in the Deer Park area. This is the peak time for ozone exceedance days.

Written Facility Updates - Members received regular periodic plant updates in advance of the meeting but the facilitator asked the plants who reported this month to share one highlight from their update that they wanted members to know about.

- **Hexion Inc.** - Marlene Mercado reported that the facility has had no OSHA recordables during the past year. The turnaround that is held every three years has been moved to 2022.
- **Intercontinental Terminals Company (ITC)** - David Wascome reported that the soil remediation of the "2nd 80s" tank farm is complete. Remediation of the surrounding area is ongoing and/or pending and expected to continue through this fall. The public will see work going on there shortly.
- **The Lubrizol Corporation** - Doug Moore said that the site's safety journey was continuing to improve and the TIRR for 2020 was 0.69, which was the second all-time best for the site. The plant's OSHA recordable is 0.48 for YTD.

Vopak Deer Park – Kathy Stewart turned in an interim report highlighting four sheens and a pin-hole leak into the ship channel. These will be detailed on the facility's next periodic report, which is every five months for the DPCAC plants.

New Plant Member - NOVVI is in the process of becoming a plant member of the CAC. They were in the group briefly several years ago. Diane hopes that she will be able to introduce them at the next meeting.

Texas Memorial Illumination – Diane said she would include in these notes information about a tribute at the San Jacinto park site that is seeking volunteers and may be of interest to members either to help or to visit. On November 13 from 6 p.m. to midnight, 21,500 luminaria will be lit in remembrance of the Texans who have lost their lives in armed conflict. It will take a minimum of 30 minutes to drive the route. Volunteers are needed to build the luminary bags on October 30 and place them on the battlefield on Nov. 13. More than 1500 volunteers are needed. Details at TexasMemorialIlluminationSanJacinto.com

Plans for Future Meetings

Until DPCAC decides otherwise, the group will meet by Zoom videoconference from 6:00 - 7:30 p.m.

Monday, September 27 - Annual Report on Emissions from DPCAC Plants

Monday, October 25 - Update from Shell re: sale of refinery to joint venture partner Pemex. Factors researchers consider when trying to find causes of cancer.

Dates for 2021 - all Mondays

Jan. 25

Feb. 22

Mar. 22

Apr. 26

May 24 (before Memorial Day)

No June meeting

No July meeting

Aug. 23

Sept. 27

Oct. 25

Nov. 29 (delayed due to
Thanksgiving)

No December meeting