

Deer Park Community Advisory Council

www.deerparkcac.org

Meeting Notes Monday, August 26, 2024

The 319th meeting of the Deer Park Community Advisory Council was held on Monday, August 26, 2024, at the Republic Grill. Facilitator Anne Gowan reviewed the agenda, which was accepted as proposed. The May 2024 meeting notes were approved without changes.

Air Monitoring: Routine & During Major Industrial Events

Steve Smith, Chairman of the Technical Advisory Committee of Houston Regional Monitoring (HRM), presented an Air Quality Update to the Deer Park Community Advisory Council. Numerous agencies, including the Texas Commission on Environmental Quality (TCEQ), City of Houston, HRM, Harris County, and independent monitors, operate air quality monitoring stations throughout the Houston area. For over 40 years, HRM has managed ten monitoring sites, measuring ozone, nitrogen oxides (NO_x), carbon monoxide (CO), and particulate matter (PM). Ozone is not directly emitted but forms in the atmosphere when volatile organic compounds (VOCs) and NO_x react during daylight hours.

NO_x is a regional concern due to its emission from combustion sources, with more monitoring stations placed near high-traffic roadways. Carbon monoxide (CO), also a byproduct of combustion, poses a similar regional concern. Particulate matter (PM) can be a local issue (primary particulate) from sources such as diesel emissions, concrete batch plants, or metal recycling facilities. It can also be a regional concern (secondary particulate) when formed in the atmosphere.

Ambient air analyzers are capable of measuring CO, NO_x, ozone (O₃), and sulfur dioxide (SO₂). Additionally, VOC canister samplers collect air samples over a set time period (1-24 hours), and PAMS gas chromatographs take hourly samples. These air analyzers range in cost from \$15,000 to \$30,000 each, while more affordable air monitoring sensors for public use cost between \$200 and \$5,000. These smaller sensors are compact, easy to mount, user-friendly, and require no calibration, though they may experience data drift over time and should be interpreted with relative caution. Sensors designed for public use can be stationary or handheld and even linked to devices like a watch, making them useful for individuals like coaches or band directors to assess outdoor air quality before activities. They are also valuable tools for people with asthma or COPD.

While there is an abundance of air quality data available, HRM emphasizes that the key is how this data is used. HRM believes the purpose of collecting such data is to conduct meaningful studies. EPA has published "The Enhanced Air Sensor Guidebook," which includes information about interpreting sensor data, best practices, and recommendations on sensors. The guidebook can be found at <https://www.epa.gov/air-sensor-toolbox/how-use-air-sensors-air-sensor-guidebook>

Ambient air analyzers and air monitoring sensors are also utilized in industrial monitoring, personnel monitoring, continuous emission monitoring, and fence line monitoring. Personnel monitoring typically involves devices designed to measure specific compounds and are worn by individuals. Continuous emission monitoring takes samples directly from industrial stacks and is required at higher levels of combustion. Fence line monitoring, which operates continuously along the perimeter of industrial facilities, is mandated in certain regulatory conditions to track emissions over the longest path.

Different types of monitoring serve various purposes, and Houston has the most extensive air monitoring network in the country. Smith said that HRM is continuously evaluating new monitoring technologies and upgrading its network to enhance performance and maintain high standards.

Matt Van Vleck, Air Monitoring Section Manager at Harris County Pollution Control Services (PCS), provided an overview of the Community Air Monitoring Program (CAMP). PCS operates 22 stationary Sensit® SPODS units across Harris County, primarily concentrated in the southeastern region and along the ship channel, where most industrial facilities are located. Four of these sites, funded by the American Chemistry Council Foundation, are located in Houston's Hartmann Park, Riley Chambers Park, River Terrace Park, and La Porte's Fairmont Park. Seven sites are part of the Collective Impact Project, a collaboration between the Environmental Defense Fund (EDF), Harris County, and the City of Houston, to monitor air quality in Bayport. The Sensit SPOD device was selected for this program and includes sensors for VOCs and particulate matter (PM1, PM2.5, and PM10). It also features a weather station that provides data on wind speed, wind direction, temperature, and humidity, and functions as an automated canister sampling system.

VanVleck said one key advantage of low-cost sensors is the ability to deploy more units within the same budget, creating a larger network to monitor more communities. These sensors are easy to relocate in the event of a hurricane, can be repaired in-house, and provide near real-time data to the public. PCS also operates 12 ozone monitors to supplement the TCEQ's ozone monitoring network.

For mobile monitoring, PCS uses the Rapid Ambient Air Monitoring (RAAM) system, which is deployed for investigating odor complaints, emergency responses, severe weather events, and background surveys in Harris County. The RAAM system includes AromaTox instrumentation, which uses lasers to identify six classes of compounds through RapidScan and can speciate into 12 compounds with LabScan, detecting concentrations as low as sub-parts per billion (ppb). The PCS Emergency Response Section also conducts air monitoring with handheld devices during hazmat incidents, severe weather events, and investigations, providing faster results than truck-mounted analyzers

Data from these monitoring sites and activities is publicly available through the PCS website at <https://pcs-harriscounty.hub.arcgis.com>. Users can access information on CAMP, ozone, and RAAM. Ozone data is displayed in 5-minute averages.

Nate Levin, General Manager of Shell Deer Park Chemicals, provided an overview of the air monitoring conducted at their site, including the frequency of monitoring, types of monitors used, and how data is shared. Shell Deer Park Chemicals has fenceline monitoring in place to continuously track emissions. After the fire at the facility, additional monitors were set up by the City of Deer Park, TCEQ, HRM, and a third-party organization, CTEH. In the event of an incident, Shell updates its social media channels and the CAER Online platform to keep the community informed.

Questions and Comments:

1. *What DPCAC companies use Personnel Monitoring?* GEO Specialty Chemical, Shell, Texas Molecular and Clean Harbors use Personnel Monitoring for various chemicals.
2. *Does anybody monitor the North side of the channel, like Channelview?* Yes, HRMS and City of Houston have monitors in that area.
3. *How does the air north of Houston compare to the air south of Houston?* It depends on the time of the year. TCEQ data shows higher emission levels in North Houston during summer and higher emission levels in South Houston during the winter.
4. *What is CAER Online?* CAER Online is a community alert system designed to provide timely and accurate information about industrial incidents, such as chemical releases, fires, or other emergencies, to the public. "CAER" stands for Community Awareness and Emergency Response, a program initially developed to enhance communication between industrial facilities and the surrounding communities in the event of an emergency. The system allows community members to view posted messages and alerts from industrial facilities regarding operational updates. You can Download the app today by searching "EHCMA CAER Online" in the Apple and Google Play stores. The app does not send push notifications. You can also view messages online at <https://www.ehcma.org/page/caer-online>.

Updates

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 or two highlights from their update that they wanted members to know about.

- **Dow DP** – Manny Cabrera shared information about the last reportable release on Jan. 9, 2024. All material was effectively mediated. Three OSHA recordable injuries have occurred in 2024. The plant ran safely through Hurricane Beryl. Dow Deer Park Operations received the Caring for Texas Award from the Texas Chemistry Council (TCC).
- **GEO Specialty Chemical** – Mario Saentz stated the site had no reportable spills, outfall excursions or air releases. A groundwater well for their non-transient, non-community public water system has been installed, and approval from the TCEQ to begin operations was received on March 4th. Six new employees were onboarded at the Deer Park Site. A Level 2 emergency notification was issued August 12th when site lost power to the HCN storage area. The issue was resolved with no personnel or environmental impact. The site name was changed during December 2023 to DP Glycine LLC a subsidiary of GEO Specialty Chemicals, Inc.
- **NOVVI** – Bob Wolff reported that NOVVI had zero environmental events, and zero worker or process safety events. Novvi has submitted approval for their air permit (NSR) to the TCEQ and is awaiting approval. Novvi recently completed a reorganization and Chuck Kraft has been named President and Chief Operating Officer. Novvi is small employer with only 38 employees.

Hurricane Protection Update- U.S. Army Corps of Engineers (USACE) and Gulf Coast Protection District signed a design agreement to partner on the design of the Coastal Texas Project, specifically the Galveston Bay Storm Surge Barrier System. More info can be found at coastaltexasproject.com.

CenterPoint Energy is enhancing its storm response efforts in preparation for future major storms or hurricanes. A full list of actions and progress updates can be found at www.CenterPointEnergy.com/TakingAction. CenterPoint also offers a free Power Alert Service, notifying participants of outages in their area. You can sign up at www.CenterPointEnergy.com/PowerAlertService. Additionally, citizens can track outages in real-time at www.CenterPointEnergy.com/OutageCenter.

Plant Host

Novvi LLC produces highly specialized renewable synthetic hydrocarbon base oils designed to meet demanding application requirements. Committed to sustainability, Novvi creates products that reduce greenhouse gas emissions by utilizing ethically sourced renewable feedstocks. These products offer greater efficiency than traditional petroleum-based alternatives and are used in a wide range of applications, including lubricants, polymers, personal care products, elastomers, and electric vehicles.

DPCAC: New Logo

Gowan presented the new DPCAC logo and shared the design of a 2-sided tourism card that can be distributed at local events. The following items will also be developed: business card that includes a QR code to our website and a DPCAC Facebook page. Gowan thanked Shell Deer Park funding the logo design.

Plans for Future Meetings

DPCAC meets at Republic Grill at the City of Deer Park Battleground Golf course from 6:00 - 7:30 p.m.

September 23, 2024 – Annual Report on DPCAC Plant Emissions

October 28, 2024 - I’ve Got Something on My Mind”- Brainstorming and Prioritizing Program Topics for the Coming Year

Dates for 2024 - all Mondays

Jan. 22	May 20	Sept. 23
Feb. 26	No June meeting	Oct. 28
Mar. 25	No July meeting	Dec. 2
Apr. 22	Aug. 26	No December meeting

Dates for 2025 - all Mondays

Jan. 27	May 19	Sept. 22
Feb. 24	No June meeting	Oct. 27
Mar. 24	No July meeting	Dec. 1
Apr. 28	Aug. 25	No December meeting

ATTENDANCE

DPCAC Community Members		DPCAC Plant Members		Guests/Resources	
x	Ruth Boyd	X	Clean Harbors , Bruce Riffel	X	Ruth Askine
	Steve Corry, DPIISD	X	Dow Chemical Deer Park , Sharon Hulkan rep by Manny Cabrera	X	Ed Berg
x	Sheryl DaPron	X	Evonik Oil Additives , Jim Bentinck-Smith	X	Jimmy Bower
x	Kristina DeWitty, SJC	X	GEO Specialty Chemicals , Kwadwo Koosono rep by Mario Saentz	X	Melissa Caylor, Chamber of Commerce
	Ken Donnell	X	Intercontinental Terminals , David Wascome	X	Annette Chavez, Guest
	Jamie Galloway, DP OEM	X	Kinder Morgan , Blake Wood rep by Kyra Cantrell	X	John Collins
X	Sherry Garrison		Lubrizol , Hector Acosta	X	Brett Conaway, Harris County HS & OEM
X	Tommy Ginn	X	NOVI , Alan Kominek rep by Bob Wolff	X	Bubba Coxie, Harris County HS & OEM
X	Karen Guidry	X	OxyChem Deer Park PVC/KOH , Jeff Koetitz	X	Gladys Dworacek, Guest
X	Paul Guidry	X	OxyChem Deer Park VCM , Josh Munn	X	Sherrie Fontenot, Guest
X	Cara Herbeck		Pemex Deer Park , Guy Hackwell	X	Kristin Knoedler, DPIISD Teacher
	Steven Horton		Pemex Deer Park , Jennifer Walsh	X	Brian Lawson, Dow
X	Gretchen Knowles, Harris Co. Pct. 2	X	Shell Deer Park , Nathan Levin	X	Betty Lemley
	Wanda Morris	X	Shell Deer Park , Caroline Alcantar	X	Frank Marine, Texas Molecular
	Bill Patterson, DP City Council	X	Texas Molecular , Jimmy Bracher	X	John McPhaul, OxyChem DP PVC/KOH
	Ariel Pena		Valvoline , Robert Shelton	X	Steve Smith, Guest Speaker
	Randon Pierson		Vopak Moda , Jeff Sanford	X	George Tullgren
X	Darrell Pinckard		Vopak Terminal Deer Park , Gustavo Nery	X	Matt Van Vleck, Guest Speaker
	Vickey Roberts	X	Westlake Epoxy , Prashanth Hejmadi rep by	X	Chelsea Ward, Evonik
X	Andy Smith, San Jacinto Battleground SHS			X	Wallace Ward, Native Praires Assoc. of TX
X	Angela Smith, City of Deer Park		Support Staff	X	Don Zuckero
	Charles Thomas	X	Anne Gowan, Facilitator		DPIISD Students
	Cheyenne Valdez	X	Marilyn Bass, Secretary	X	Gracie Adcock
X	David Wade			X	Scarlette Campbell-Goleman
	Ernest Weedon			X	Isabella Castillo
				X	Andrew Chanaba
				X	Aalyiah Garrett
				x	Kiley Jones
				X	Marco Osorto
				X	Sophia Pruneda
				X	Cassidy Taylor, DPIISD Students
				X	Maddison Temiquel

Deer Park Community Advisory Council

Air Monitoring

8-26-2024

1. What were you surprised to learn about air monitoring?
 - Variety and number of sensors
 - Several Agencies
 - There are more stations than expected.
 - Big collaborative effort
 - Complex, well managed
 - How thorough they are.
 - Outsiders study Houston's air monitoring strategy.
 - HC small portable monitors can be picked up and secured.
 - How much actually is monitored and numbers of monitors
 - That Houston had so many monitors. Very surprised and pleased. Houston had the most monitors.
 - Didn't know that there were so many different types of the monitoring devices. Some are smaller than I thought.

2. What concerns do you still have about the way air monitoring is conducted?
 - Shouldn't all monitoring fall under our group?
 - Why so many groups? Duplication
 - New technology. Changing daily.
 - There are gaps on the map of monitoring locations
 - Communication with people needs to be improved with CAER.
 - "We think it's thorough"
 - Interaction amongst counties, could possibly be improved.
 - How it is reported to community.

3. Are there other community impacts that plants and Harris County Pollution Control should consider before conducting air monitoring or installing new monitors?
 - Close to community? Population near industry?
 - Other sensor proximity?
 - Activity at location? New construction?
 - Monitoring systems not working in Deer Park?
 - North Campus: smell by the tracks that the runners notice; anything that can be done about that?
 - Should monitor athletic fields, marching band practice fields, etc.
 - Continue to put close to neighborhoods/schools?
 - Odors and quick response via social media. Perceived as too fast to respond and challenges trust on what is being reported. Need to be more transparent.
 - Temp control or effect reliability?
 - Could use a drone

4. Are there any other lingering questions that you have?
 - What are specific compounds tested for as 'VOC'
 - Hard to keep up with communication of the data to the community.
 - Is there any communications between industries?
 - Low odor threshold chemicals below detectable limits
 - Are there any other types of monitoring besides fence line?
 - How closely is interHouston monitored?

- Tanker loading barges/RC's is there a gap?
 - Cleaning operations of barges, RCs, etc?
5. Any other feedback or topics that you would like to see DPCAC address?
- Integration of AI into the Petrochem Industry?
 - CAER app – Any way to add to Facebook?
 - Scenarios that we have had releases and how they use the monitors with weather conditions to pinpoint leaks.