Jennifer Cox

From:	PUBCOMMENT-OCC
Sent:	Friday, August 30, 2024 11:44 AM
To:	PUBCOMMENT-APD; PUBCOMMENT-ELD; PUBCOMMENT-OCC2; PUBCOMMENT-OPIC
Subject:	FW: Public comment on Permit Number 914
Attachments:	CAW - Letter - Public Comment - TCEQ - Dow Sabine River Operations Ethylene Unit - Amendment Permit 914, RN100542711 - Flare - 8-1-24 Bmt Ent 7-11-24 - 8-27-24 SIGNED.pdf

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From: terryssmxd@aol.com <terryssmxd@aol.com>
Sent: Thursday, August 29, 2024 3:57 PM
To: PUBCOMMENT-OCC <PUBCOMMENT-OCC@tceq.texas.gov>
Subject: Public comment on Permit Number 914

REGULATED ENTY NAME DOW CHEMICAL SABINE RIVER OPERATIONS

RN NUMBER: RN100542711

PERMIT NUMBER: 914

DOCKET NUMBER:

COUNTY: ORANGE

PRINCIPAL NAME: THE DOW CHEMICAL COMPANY

CN NUMBER: CN600356976

NAME: Terry D Stelly

EMAIL: terryssmxd@aol.com

COMPANY: Southeast Texas Clean Air & Water, Inc.

ADDRESS: 227 N 30TH ST
NEDERLAND TX 77627-7031

PHONE: 4097290268

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COMMENTS: See Attached.

Southeast Texas Clean Air & Water, Inc.
A Non-Profit Citizens Environmental Organization
(Established 1966)
227 N 30th
Nederland, Texas 77627
409-729-0268

August 27, 2024

Texas Commission on Environmental Quality
Office of the Chief Clerk
MC-105
P.O. Box 13087
Austin, Texas 78711-3087
www14.tceq.texas.gov/epic/eComment/

Re: **Dow Sabine River Operations Ethylene Unit - Amendment Permit 914, RN100542711 - Flare**

TCEQ Staff:

Southeast Texas Clean Air and Water, Inc. (CAW) believes there should be consideration in requesting Dow Sabine River Operations (DSRO) to reduce their flare air emissions on their ethylene unit before approving this permit (Mack 2024, Figure 1, Stelly 2024, Figures 2-4 & Table 1).

CAW believes this is an opportunity for DSRO to invest capital towards improving the ethylene unit maintenance, adding advanced technology, and staff training in reducing their flare air emissions. There is evidence some of these options may have been set in place already when one reviews Figures 2-4 (Stelly 2024).

Mack (2024) on reporting fence line emissions show large amounts of benzene exceeding DSRO permit. However, these concentrations surely are NOT capturing the entire story. TCEQ reported air emissions show 10K's of pounds of benzene continually being reported released for the years 2013 – 2023 (11 years, Stelly 2024). The fence line monitoring station is NOT capturing the entire DSRO's benzene emission releases.

CAW believes too with 3 TCEQ Air Emission Reports filed in 2024, the last on May 20, 2024, only 1 showed a release of 15.37 lbs (678,374 ug\hr, Table 1) of benzene on that date. Indicating there are other sources, including fugitive releases, of benzene other than the permitted flare. Just imagine if this total release hit the fence line monitor, that would be another tragedy for human life! Thanks to wind dispersion distribution of the released concentration covered a wider area going undetected, except for the TCEQ's record for the initial release! Fugitive releases of benzene and other toxins (Stelly 2024, Table 1) points to a need to step up scheduled on site monitoring and maintenance (Mack 2024, Figures 1, Stelly 2024, Figures 2-4).

With the increase in industrial development in the local area TCEQ should consider providing additional monitoring for DSRO. CAW is concern for one specific group of constituents, especially for the area in which this plant operates already has a problem\controversy with SOX emissions due to nearby Oxbow Calcining, Inc. The air monitor station chosen for monitoring releases is NOT effective in detecting air releases of SOX (other) emissions from Oxbow, suggesting other monitoring options are required (Sadasivam and Aldern 2023, Strott and Rogerson 2022, Zapalac 2024). It appears the same is true for the benzene releases for DSRO's.

DSRO's emission limits should take their surroundings into consideration in terms of local industrial emissions and the local community, which consists of lower income individuals with high cancer rates. Including other near\far neighbors like Valero (https://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target=281217) or ExxonMobil (https://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target=423681). Yes, there are times when emissions are within permit limits, however the events still have releases which have a cumulative effect across the area. Potentially still providing a threat to health and safety for workers and surrounding communities. See map below or link https://projects.propublica.org/toxmap/. Question, why does TCEQ lack such maps? Ozone and PM2.5 maps sound fair, but there are a number of other emissions not being mapped!

CAW believes DSRO should continue to strive to reduce their benzene emissions, along with ALL toxic air components. In turn helping not only workers and their health, but those living adjacent to your fence line and communities beyond.

Based on the above, CAW requests a public hearing be held so the public may hear first-hand the issues involved in DSRO's permit request.

Thank you for this opportunity to provide comments on Dow Sabine River Operation's Amendment Air Permit 914.

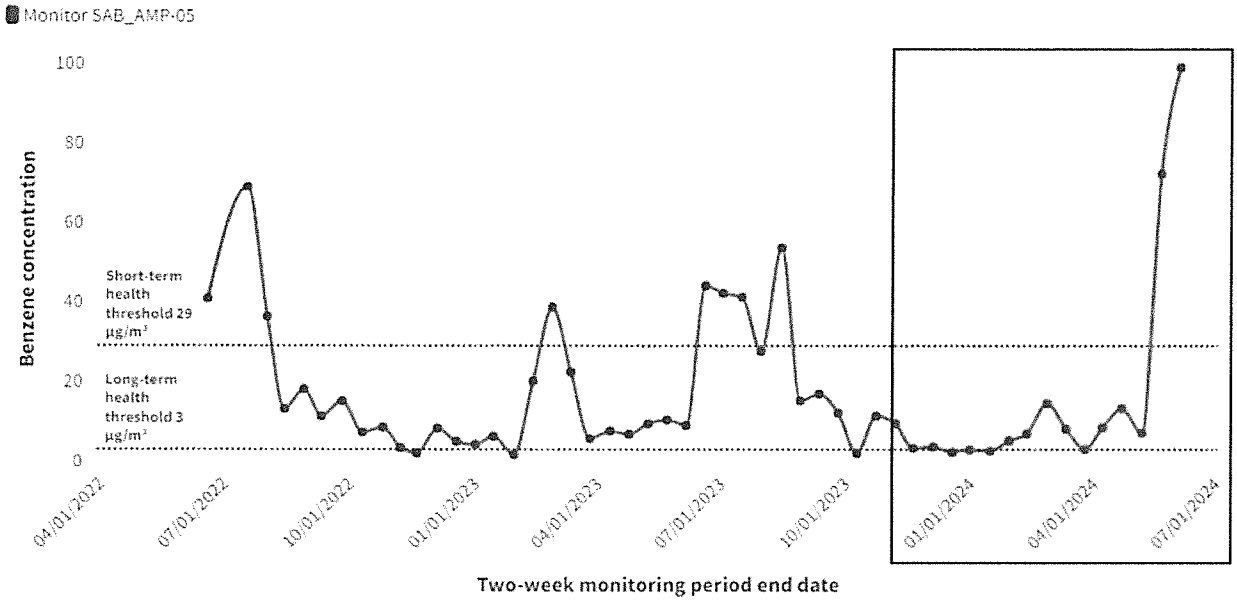
Sincerely,

Terry D. Stelly
Southeast Texas Clean Air & Water, Inc – President

Figure 1

Benzene concentrations at Dow Chemical Orange's fenceline

Since 2022, levels at a benzene monitor near a tank farm on the chemical plant's northeastern side, Monitor SAB_AMP-05, have spiked drastically since May.



Source: Monitoring data submitted to EPA

Source: Mack (2024).

Figure 2

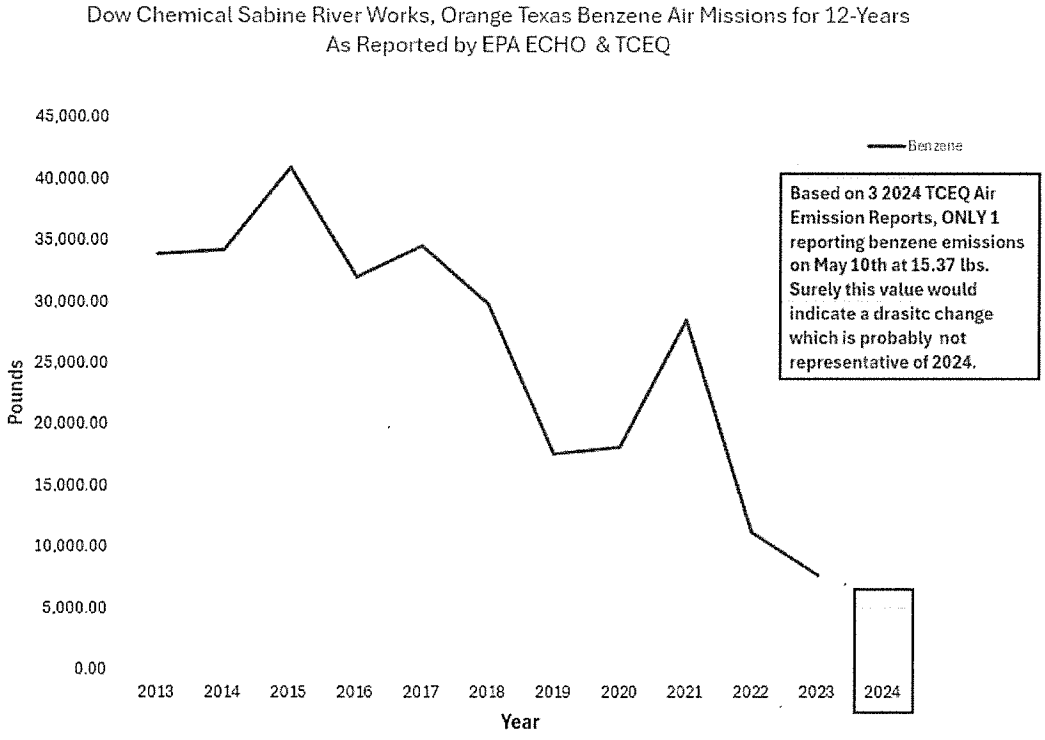


Figure 3

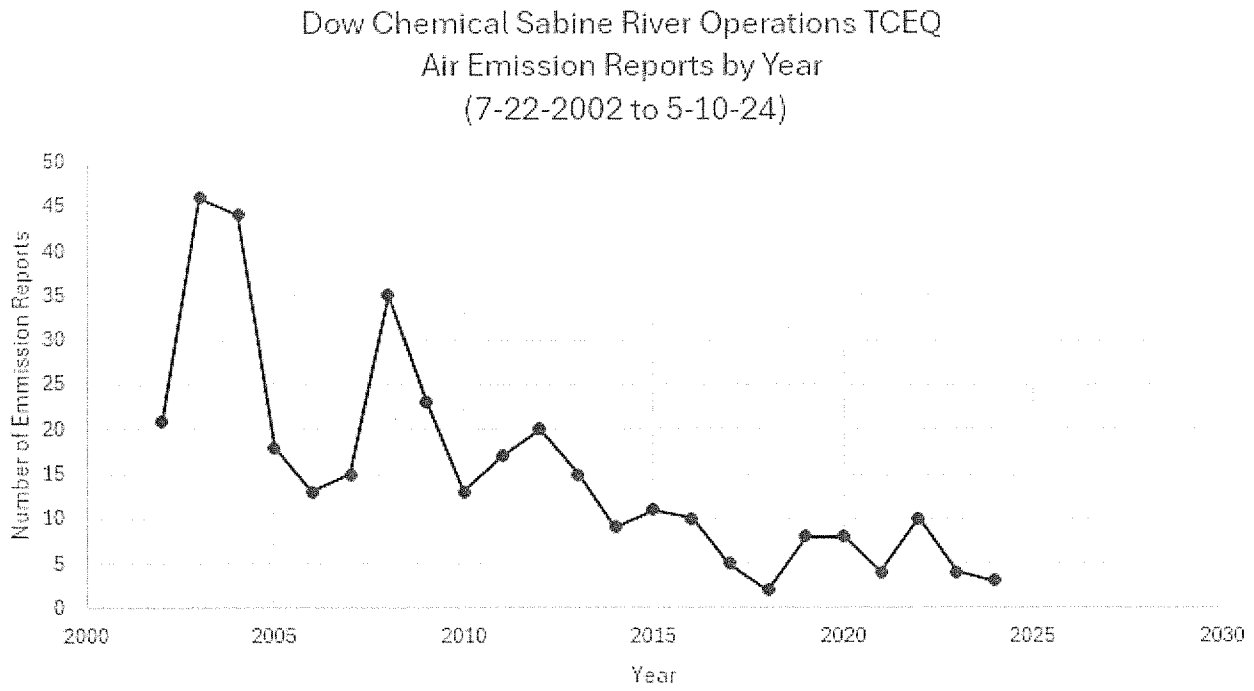
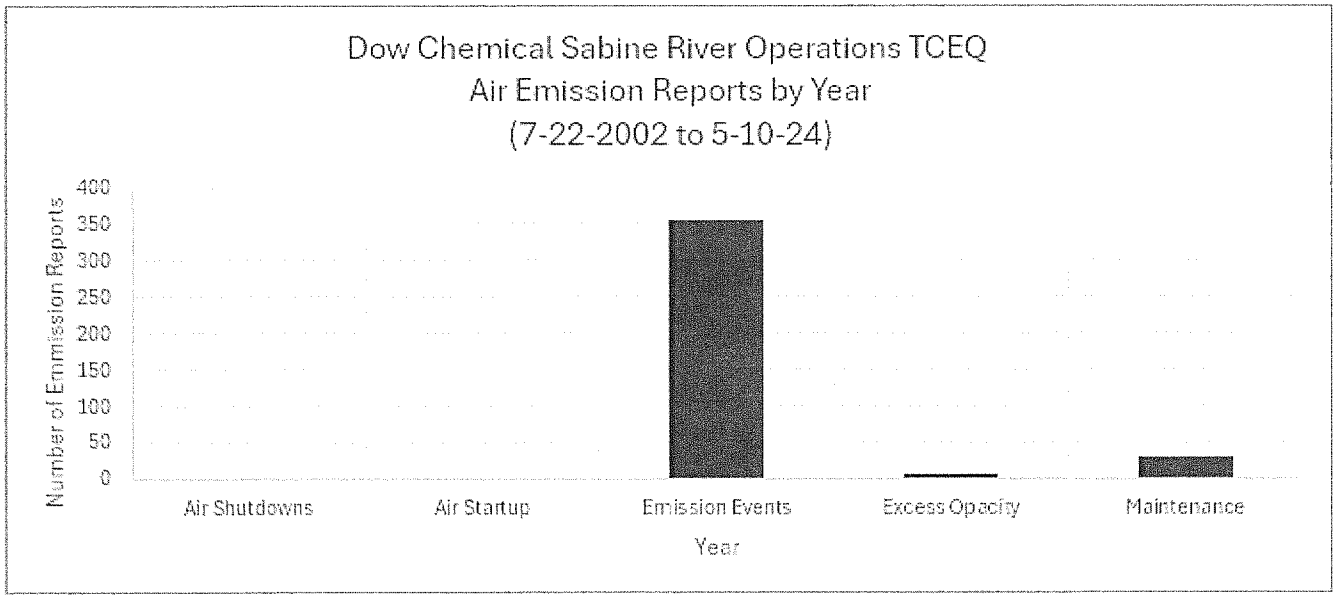


Figure 4



Compiled by Terry D. Stelly, August 2024. https://echo.epa.gov/air-pollutant-report?fid=110017746368, https://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target=422162

Table 1

Data from TCEQ's Air Emission Reports Database for the 3 available reports for 2024.

	Source:	https://www2.tceq.texas.gov/oce/i			Source:	https://www2.tceq.texas.gov/oce/i			Source:	https://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target=422999									
		TCEQ April 17, 2024				TCEQ April 29, 2024				TCEQ May 10. 2024									
		TDS Calculations				TDS Calculations				TDS Calculations									Total Estimated Quantity
	EST QUANTITY/OPACITY	Event Time		Tot Rel Event	EST QUANTITY/OPACITY	Event Time		Tot Rel Event	EST QUANTITY/OPACITY	Event Time		Tot Rel Event	Release rate for Event			Limit for Event			for the 3 Dates
CONTAMINANT	(Pounds)	(Hrs)	(Days)	(lbs\hr)	(Pounds)	(Hrs)	(Days)	(lbs\hr)	(Pounds)	(Hrs)	(Days)	(lbs\hr)	kg\hr	mg/hr	ug\hr	kg\hr	mg/hr	ug\hr	(Pounds)
Acetone	525	54.97	2.29	9.55	4	4.58	0.19	0.87											529.00
Acetylene	4				51	4.58	0.19	11.13											55.00
Benzene									15.37	2.75	0.11	5.59	0.68	678.37	678,374.18	0.38	376.32	376,324.36	15.37
Butane	51				497	4.58	0.19	108.44											548.00
Butene	497				10	4.58	0.19	2.18											507.00
Carbon Monoxide					10	4.58	0.19	2.18											10.00
Cyclopentane									4.11	2.75	0.11	1.49							4.11
Dicyclopentadiene									0.55	2.75	0.11	0.20							0.55
Ethylene (gaseous)	490	54.97	2.29	8.91	4,896	4.58	0.19	1,068.22											5,386.00
Isobutane					19	4.58	0.19	4.15											19.00
Methane					1,224	4.58	0.19	267.05											1,224.00
N-Butyl acrylate	1,925	54.97	2.29	35.02															1,925.00
Naphthalene									0	2.75	0.11	0.00							0.00
Particulate Matter	132	54.97	2.29	2.40															132.00
Propane	595				595	4.58	0.19	129.82											1,190.00
Propylene	18,413				18,413	0.00	0.00	Div by 0											36,826.00
Toluene									0.68	2.75	0.11	0.25							0.68
Vinyl acetate	470	54.97	2.29	8.55															470.00
Total	23.102				25.719				21										48.842

Compiled by Terry D. Stelly, August 2024. https://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target=422162

REFERENCES

Mack, Dante. 2024. Cancer-causing benzene emissions are rising at the Dow Chemical Orange plant in East Texas. Why? Oil and Gas Watch, July 25, 2024. https://news.oilandgaswatch.org/post/cancer-causing-benzene-emissions-are-rising-at-the-dow-chemical-orange-plant-in-east-texas-why

Pedersen, Courtney. 2023. Entergy breaks ground on new facility. Beaumont Enterprise, April 25, 2023.

Sadasivam, Naveena and Aldern, Clayton. 2023. How a Port Arthur chemical plant gamed the Clean Air Act. Beaumont Enterprise, February 17, 2023.

Strott, Savanna and Rogerson, Riley. 2022. Koch-owned plant finds legal ways to pollute. Texas Observer, February 17, 2022.

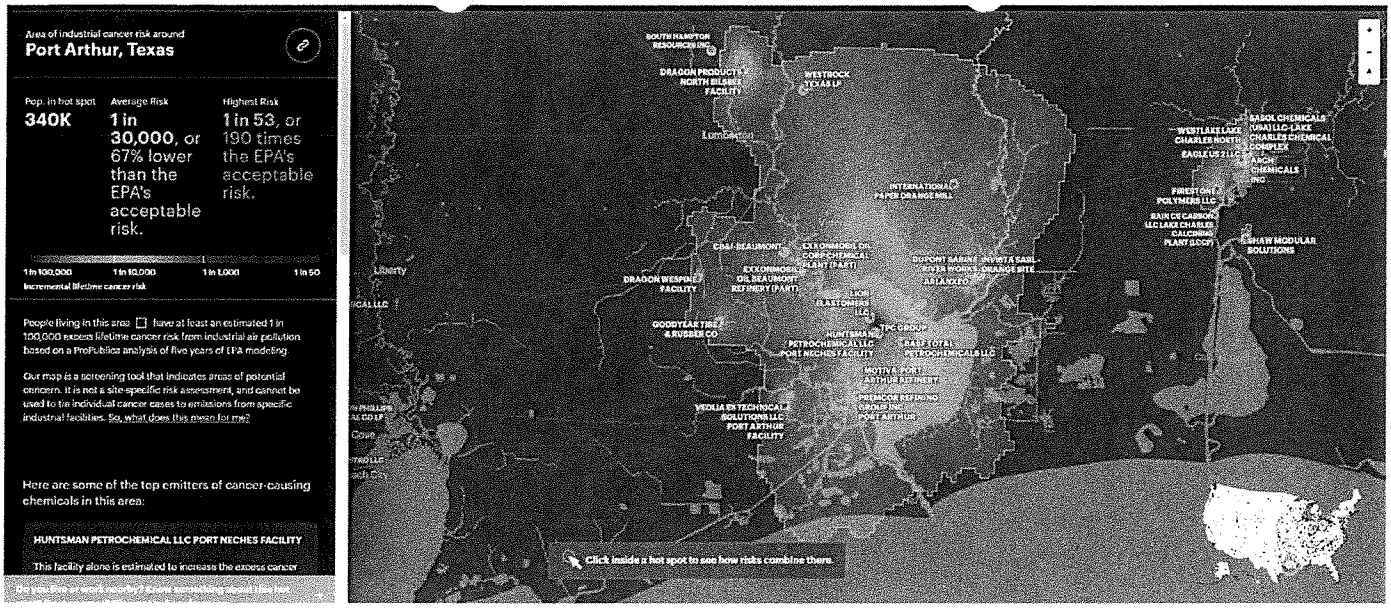
Zapalac, Megan. 2024. Local lowdown on why it might smell bad in Southeast Texas. Beaumont Enterprise, June 14, 2024.

https://projects.propublica.org/toxmap/

Area of industrial cancer risk around Port Arthur, Texas.

People living in this area [below] have at least an estimated 1 in 100,000 excess lifetime cancer risk from industrial air pollution based on a ProPublica analysis of five years of EPA modeling.

Our map is a screening tool that indicates areas of potential concern. It is not a site-specific risk assessment, and cannot be used to tie individual cancer cases to emissions from specific industrial facilities.



CAW founded in 1966, consists of 20 directors elected from the general membership. Ten of the 20 directors are elected from the membership in rotating 2-year terms. CAW members meet once a month, on the fourth Monday of each month, except December and a reschedule in May as necessary. Monthly meetings include reviewing applications for new/renewal of air or water permits, as well as topics of local, regional, state, or national interest.