



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VI
1201 ELM STREET
DALLAS, TEXAS 75270

8/11/10
EPA-SCUTH
RI

PLAINTIFF'S EXHIBIT

SH-2412

SEP 10 1979

Mr. R. V. Mattern, Superintendent
Environmental Conservation
Shell Chemical Company
Post Office Box 2633
Deer Park, Texas 77536

Dear Mr. Mattern:

RE: Request For EPA Inspection Report

Enclosed is a copy of the EPA air inspection report you requested.

Please note that certain information (i.e., company drawings, letters, and state emission inventories) originally supplied by your company to the inspector have not been included, since it is assumed this information is already in your possession.

If you have any questions please call me at (214) 767-2755.
My apologies for the delay in responding to your request.

Sincerely yours,

John R. Hepola

John R. Hepola
Chief, Engineering Section
Air Compliance Branch

JRH/lbs

Enclosure

ENVIRONMENTAL	
DATE	9-13-79
NAME	R.V. MATTERN
	RETURN TO EVC FILE
☒	COPY IN EVC FILE
	FOR EVC INFO ONLY
COPY	CHR, CUB (H)
CIRC.	

DPMC-09109

LAM 002998

INFORMATION CHECKLIST

1. Date of Inspection: October 12, 1978 3. Time In: 10:00
and October 20, 1978 Time in 9:30
Time Out 3:00 Time Out: 12:30

2. Name of Inspectors: Richard P. Jackson

2a. Confidentiality Statement given to: Chuck Rivers

4. Persons contacted during plant inspection:

Chuck Rivers Senior Staff Engineer, Environmental Regs.

Dick Slyker Senior Environmental Engineer

Phil Schwin Manager Environmental Operations

5. Name and mailing address of facility:

Shell Chemical Co.

Deer Park Manufacturing Complex

P. O. Box 2633 Deer Park, TX 77536

6. Location of facility (include county or parish):

Off Hwy. 225 in Deer Park, TX

Harris County

7. Number of Air Quality Control Region: (AQCR) 216

8. Name and title of person responsible for facility:

R. G. Dillard, General Manager

Shell Chemical Co.

Deer Park Manufacturing Complex

P. O. Box 2633

Address:

Deer Park, TX 77536

Telephone No.: 713-476-4371

9. Name and title of person responsible for environmental matters:

R. V. Mattern, Supt., Environmental Conservation

Shell Chemical Co.

Address:

Deer Park Manufacturing Complex

P. O. Box 2633 Deer Park, TX 77536

Telephone No.: 713-476-4371

10. Name and address of corporate president or chief executive officer:

John Bookrot-President

Shell Oil Co.

1 Shell Plaza, Houston, TX

11. State of Incorporation: Delaware

12. Describe ownership and corporate structure: _____

Stock Company

13. Were any processes or units not in normal operation during inspection? yes

If yes, explain. OP2, ethylene products, and VCM were down.

EPU was down for good.

14. Describe and give dates of any process changes or modifications and any new construction since August 1971. Describe and give dates for any process changes or modifications and any new construction which are planned for the facility.

See Attachments (1), (2)

15. Plant Process

- a. In addition to your impressions of how the facility is operating, describe all processes at the facility and include the following information: See Cover Memo^{pg. 2} and Process

Data sheets of E.I.Q.

- 1) Emission points of each unit in each process (include fugitive sources). See Process Data Sheets of E.I.Q.
- 2) Operating schedule (describe any seasonal or other operational variations). - See page 1 of E.I.Q.
- 3) Schematic drawing of the various processes including control equipment and emission points. See^{EIQ} Process Data
- 4) Describe all^{sheets of E.I.Q.} emission control equipment and which unit or process emission it controls. See^{EIQ} Process Data Sheet
- 5) If any unit is a combustion unit, include the following: heat, sulfur, and ash content of each fuel burned; average and maximum amount of each fuel burned per hour and the design capacity of unit. See E.I.Q.^{and} cover memo (pg. 2)
- 6) If any unit is an incinerator, include the type of waste burned, the design and actual burning rate, the number of combustion chambers, and the temperature in the secondary combustion chamber. See E.I.Q., cover memo, and
- 7) If the facility is a pulp and paper mill, include the average dry solids content and average density of the spent liquor entering each recovery furnace.

Attachments (2), (3)

N/A

b. Production and Emission Data

- 1) Products, including intermediates.

<u>Process</u>	<u>Product</u>	<u>Hourly Production Rates</u>		
		<u>Design</u>	<u>Average</u>	<u>Maximum</u>
See Process Data sheets of E.I.Q.				

- 2) Raw Material Rates.

<u>Process or Unit</u>	<u>Feed Material</u>	<u>Consumption Rates</u>	
		<u>Average</u>	<u>Maximum</u>
X See Process Data Sheets of E.I.Q.			

LAM 003001

DPMC-09112

3) Flue Gas Flow Rate.

<u>Process or Unit</u>	<u>Emission Point</u>	<u>Flue Gas Exit Rate</u>	
		<u>Average</u>	<u>Maximum</u>

See Stream Composition and Stack Data Sheets of E.I.Q.

4) Stack Height and Diameter.

<u>Process or Unit</u>	<u>Emission Point</u>	<u>Stack Height</u>	<u>Stack Diameter</u>
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See Stream Composition and Stack Data sheets in E.I.Q.

5) Pollutant Emission Rates.

<u>Process or Unit</u>	<u>Emission Point</u>	<u>Pollutant</u>	<u>Emission Rates</u>		<u>Method</u>
			<u>Average</u>	<u>Maximum</u>	<u>Determined</u>

See Stream Composition and Stack Data sheets in E.I.Q.

See Attachment(4) for update of emission rates to year 1977. All source #'s

not listed in Attachment (4) are zero since they are now going to flares.
 16. Complete hydrocarbon checklist if facility is located in Louisiana, AQCR's 184 and 186 in Oklahoma, and the following counties in Texas: Aransas, Bexar, Brazoria, Calhoun, Dallas, El Paso, Galveston, Hardin, Harris, Jefferson, Matagorda, Montgomery, Nueces, Orange, San Patricio, Tarrant, Travis and Victoria.

17. Are any of the following materials used or produced at this facility: Asbestos, Beryllium, mercury, vinyl chloride, or polyvinyl chloride? If so, explain fully. Vinyl chloride is produced at this facility but kept in a "closed-system". VCM loading facilities have monitors that check for 0.5 ppm VCM in the atmosphere.

② Asbestos is used for insulation and in the CAU Unit in the chloroaldehyde membrane of an electrolytic process.

③ Hg is used in the lab as well as ^{for process} manometric purposes.

LAM 003002

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tnotes -

- LAM 003003**

loading

Are there loading facilities for volatile hydrocarbons? yes, 6 of them

If yes, obtain answers to following: For answers see Loading and Unloading sheets of E.I.Q.

a. What products are loaded? See E.I.Q.

b. What is the vapor pressure of the products under actual storage conditions? See E.I.Q.

c. Are the loading facilities equipped with a vapor collection and disposal system? Describe. some are, some aren't

d. What are the capacities of the trucks, tank cars or trailers loaded? trucks 5000 to 8000 gals. rail cars 10,000 to 30,000 gals.

e. What is the through put per day of the loading facilities, averaged over 30 days? See E.I.Q.

f. Are provisions made to prevent spills during the attachment or disconnection of filling lines? Describe. yes,

sump collection systems, from which tank truck ^{pick up} ~~run it up~~ and take the spilled material to incinerators. All lines and vapor recovery hoses are blown with N₂ before disconnecting and purged to condensers.

Are there water separators at this facility? yes

If yes, obtain answers to following:

a. What hydrocarbons are separated? cracked oil from Ethylene Unit,
Aromatics, gas oil, and lub oil.

b. What is the vapor pressure of the hydrocarbons separated? _____
in the neighborhood of 1.5 psia.

c. How many gallons of hydrocarbons enter the water separator per day? _____

d. Is the separator equipped with a vapor loss control device? Describe.

Yes, a concrete slab is over API Oil Separator.

Pumps and Compressors

Are pumps and compressors handling volatile hydrocarbons equipped with mechanical seals or equivalent?

Most but not all. Some pumps still have packing glands.

LAM 003005

Waste Gas Disposal

Are there any ethylene emissions from the facility? yes

If yes, obtain answers to following:

- a. Will the ethylene stream support combustion without use of auxiliary fuel? no
- b. Are the ethylene emissions burned in a direct-flame afterburner or an equally effective device? yes

If yes, what is the combustion temperature and retention time?
?

Organic Solvents

Are there any organic solvent emissions from the facility? yes

If yes, obtain answers to following:

- a. What organic solvents are emitted? Acetone, methyl ethyl ketone, Methyl Isooctinol, methanol, carbinol, isononyl ether, and ethanol.
See painting section of E.I.Q.

- b. What is the maximum amount of organic solvents emitted per hour
See E.I.Q.

How determined? Quantity used x solvent wt x #/gal
2000 #/ton

- c. What is the maximum amount of organic solvents emitted per day?
See E.I.Q.

How determined? _____

LAM 003006

DPMC-09117

d. Are the emissions controlled? yes, no Describe. Chilled water condensers, scrubbers, vents to incinerators and flares, floating roofs, recycle recovery systems, and refrigerated condensers.

Flares

Are flares utilized at this facility? yes, 7 of them

If yes, obtain answers to following:

- a. How many flares are used and to what processes are they connected? See Attachment (6)

Ground flare, OP2, OP3, ANS, HIPA, GNECE flares. OP2 flare is connected to the OP2 Olefins Process. OP3 flare is connected to the OP3 Olefins Process.

~~Ground Level Flare is connected to the OP3 Process. HIPA Flare is connected to A Sovenet Process, VCM Process, and Glycerine and Assoc. Products Process, ANS Flare is connected to the VCM Process, A Solvent Process, G Solvent Process.~~

GNECE Flare is connected to the VC Unit and Glycerine and Assoc. Products Process. ~~EP Flare is connected to the Ethanol Facility and Geroitol Unit. It was connected to the Ethylene Production Unit but it was permanently shut down on 10/20/79.~~

- b. Do the flares ever "smoke"? yes Describe.

They smoke when not enough steam is applied and in an emergency.

- c. Describe the flare.: Mostly John Zink. All have smokeless Rated Capacity

LAM 003007

DPMC-09118

Shell Oil Company • Shell Chemical Company

A Division of Shell Oil Company



8/2.1.1

Deer Park Manufacturing Complex
P.O. Box 100
Deer Park, TX 77536

August 1, 1985

Ms. Vicky Wang
Texas Air Control Board
5555 West Loop, Suite 300
Bellaire, Texas 77401

Dear Ms. Wang:

Attached please find copies of our 1984 Asbestos Report and a permit for our fire training grounds, which you requested as part of your annual refinery inspection.

If further information is needed, please call me at 476-7515.

Very truly yours,

A handwritten signature in cursive script, appearing to read "R. A. Spaunhorst".
R. A. Spaunhorst

bc: ECB Satellite
Env. Con. Chron (2)

KAS:oc

DPMC-09119

LAM 003009