



DOW CHEMICAL U.S.A.

T. Walks
J. S

LOUISIANA DIVISION

P. O. BOX 150

PLAQUEMINE, LOUISIANA 70764

504 388-8000

November 25, 1981

"ENVIRONMENTAL CONTROL"

NOV 30 1981

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Plastics Administration
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DUST SAMPLING PROJECT FOR THE PLASTICS DEPARTMENT
NOVEMBER 10, 1981 THROUGH NOVEMBER 17, 1981

The even numbered quadrants were picked up on November 17. There was only one quadrant in which the total collector contents exceeded the 20 tons/mi²/mo recommended limit --- Quadrant Number 8 whose collector is located on Caustic Road next to the CPE Warehouse. However, only half of the equivalent 21.28 tons/mi²/mo found in this quadrant could be attributed to plant emissions, in this case CPE emissions. The remaining half was observed to be dirt and sand, the source of which is believed to be the continuing tank construction in the Caustic Block.

CPE was observed this week in Quadrants 10 through 16 as well as in 8, although it was not found to exist in excess in any of these. There was one CPE spill recorded during this same period of time. It occurred on November 12 and involved approximately 3000 lbs of CPE resin. This appears to be the source of the various amounts of CPE found in these 5 collectors.

The largest amount of any one resin type found in a single quadrant this week was the 16.42 equivalent tons/mi²/mo of PVC found in Quadrant 2. PVC was also observed in Quadrants 4, 6, 14, and 16. There were no spills reported to Dow Security by Goodrich which might help to pinpoint the source(s) of the PVC resin release(s) which resulted in various amounts of PVC being found in the 5 quadrants mentioned.

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Dust Analysis-11/10-17/81
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The most frequently observed resin this week was PE powder. Although the amounts observed certainly could not be considered excessive, this resin was seen in 7 of the 8 quadrants sampled this week. There was one PE spill reported to Plant Security on November 11 which appears to be the source of this powder.

Attached is the dustfall data for the week of November 10 through 17.

Pam Usie

Pam L. Usie
Linear Polyethylene and Derivatives
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Attachments (4)

ltb

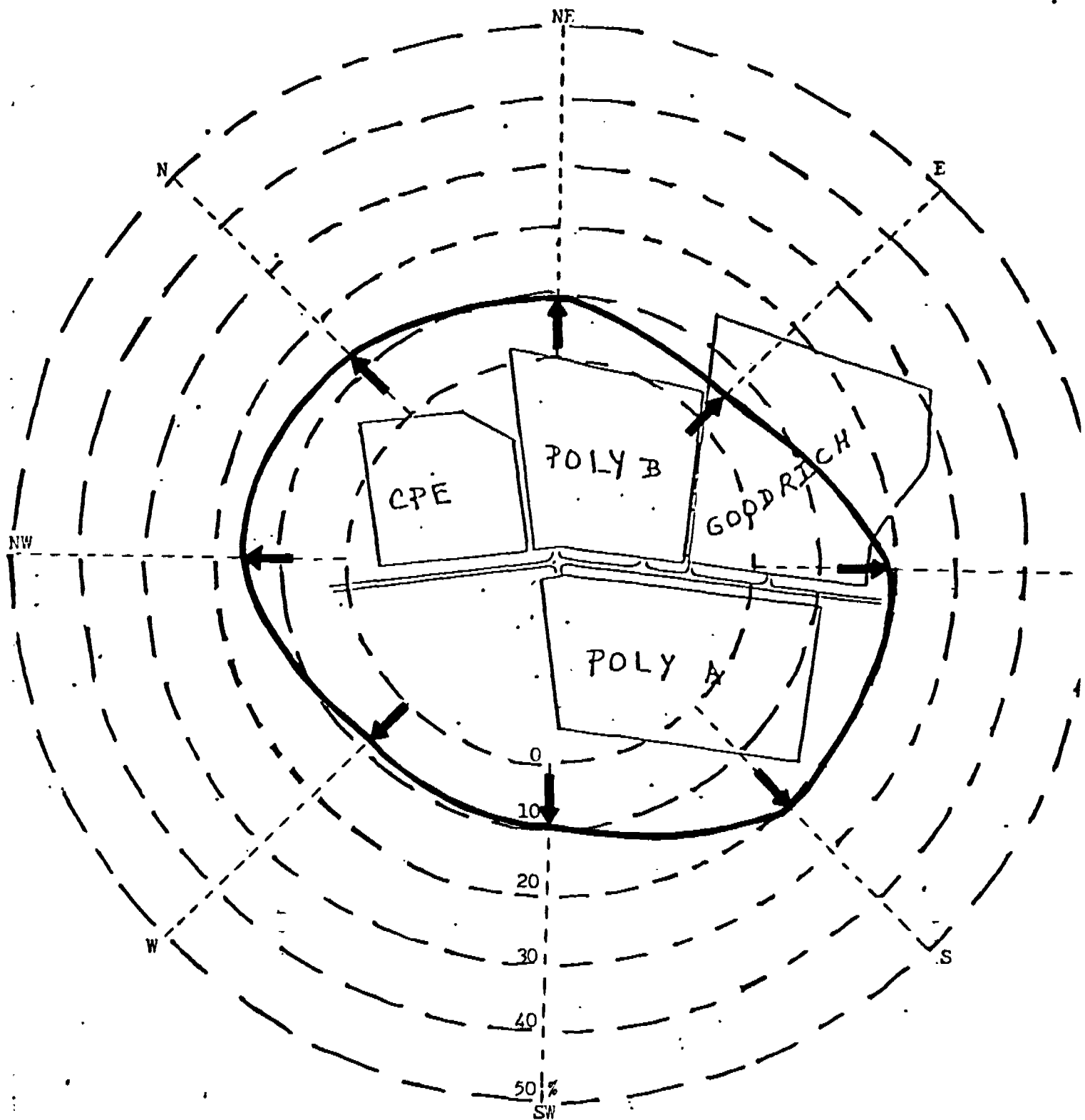
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(Average % In Given Direction Over The W.)

WIND DIRECTION

DATE OUT: 11-10-81

DATE IN: 11-17-81



QUADRANTS SAMPLED: EVEN

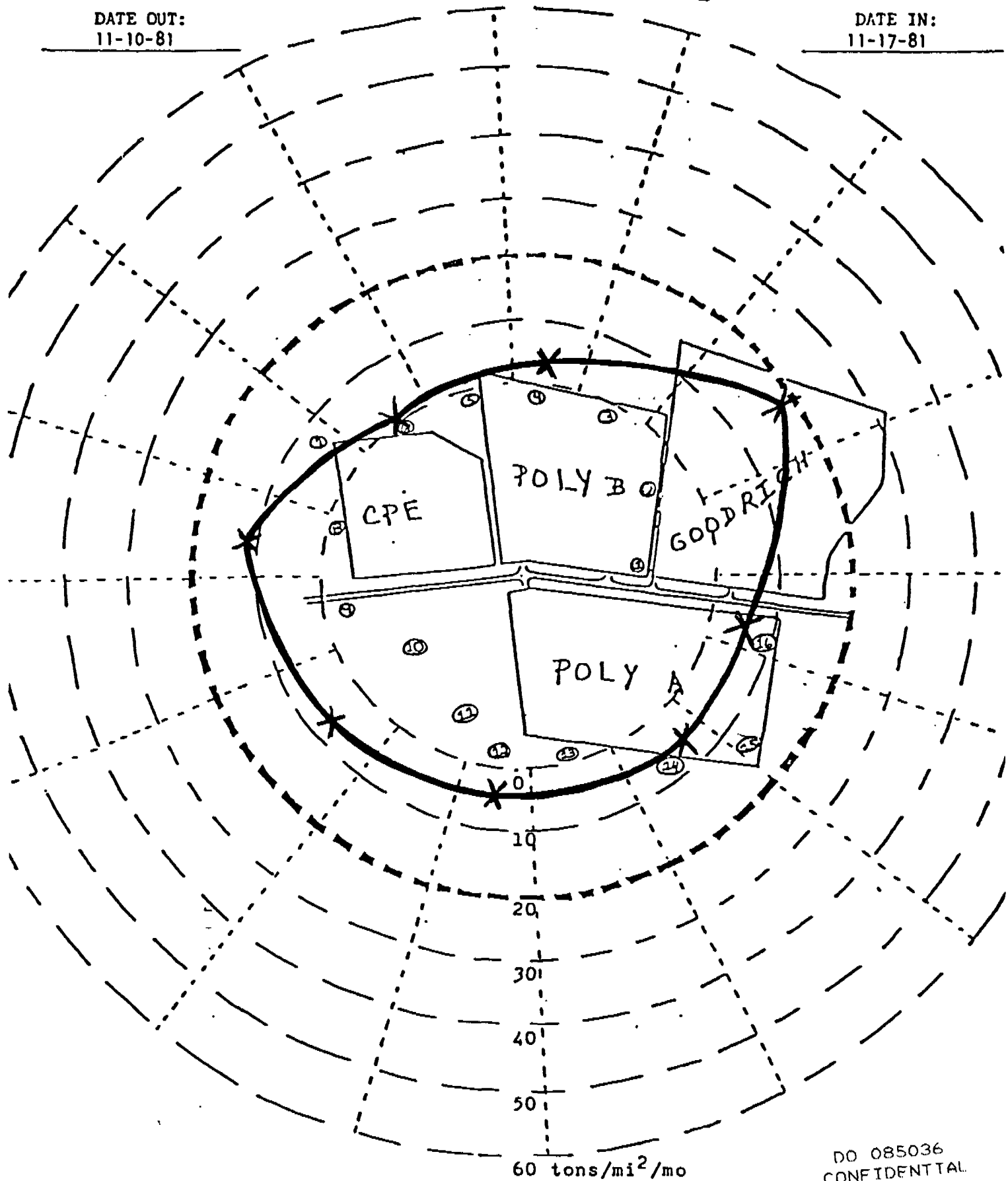
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DUSTFALL DUE TO PLANT EMISSIONS

Circled Numbers Indicate Collector Locations
X's Indicate Amount Collected in That Quadrant

DATE OUT:
11-10-81

DATE IN:
11-17-81



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EPA limit: 20 tons/mi²/mo

Quadrants Sampled: EVEN

DUSTFALL ANALYSIS

DATE OUT: 11-10-81

DATE IN: 11-17-81

D_T Total dustfall extrapolated to Tons/mi²/mo.

$D_{T/PE}$ That part of D_T which is due to plant emissions.

$D_{T/O}$ That part of D_T which is due to factors other than plant emissions (insect eggs, dirt, sand, etc.)

QUADRANT	DUSTFALL	D_T TOTAL	$D_{T/PE}$	$D_{T/O}$	COMMENTS
2	.0272	18.25	18.25	0	90% PVC, 10% HDPE
4	.0057	3.82	3.44	0.38	80% HDPE, 10% PVC, 10% insect remains
6	.0128	8.59	0.86	7.73	Mostly dirt and sand, 5% PVC, 5% HDPE
8	.0317	21.28*	10.64	10.64	Even mixture of CPE, and dirt or sand
10	.0124	8.32	7.49	0.83	80% CPE, 10% PE, remainder was dirt
12	.0080	5.37	3.58	1.79	Even mixture of CPE, HDPE, and dirt
14	.0062	4.16	4.16	0	Even mixture of CPE, PE, and PVC
16	.0087	5.84	5.84	0	Even mixture of CPE, PE, and PVC

* Excessive; above recommended limit

PLU/ltb
11-25-81

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SPILL LOG

DATE	PLANT INVOLVED	TIME OF REPORT	CHEMICAL INVOLVED	WIND DIRECTION	COMMENTS
11-11-81	POLY B	10:30 A.M.	PE	N	When air blowers started up, it blew powder off the airslides*
11-11-81	CPE	10:37 A.M.	TALC	N	100#, unplugging line BL 31*
11-12-81	CPE	6:00 A.M.	CPE	W	3000#, dumped CY 206 A & B

* Reported to Plant Security.

PLU/ltb
11-25-81

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