



DOW CHEMICAL U.S.A.

Terry Wells
Dean

December 7, 1981

LOUISIANA DIVISION
P. O. BOX 160
PLAQUEMINE, LOUISIANA 70764
604 389-8000

"ENVIRONMENTAL CONTROL"

A. J. Seidule
Plastics Administration
Building 2306

DEC 08 1981

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DUST SAMPLING PROJECT FOR THE PLASTICS DEPARTMENT
NOVEMBER 24, 1981 THROUGH DECEMBER 1, 1981

None of the even numbered quadrants sampled this week exceeded the recommended limit on dustfall emissions. The highest dustfall value was obtained at quadrant number 8 which is located on Caustic Road next to the CPE warehouse.

The dustfall in quadrant 8, which registered 18.10 tons/mi²/mo, was composed of 90% CPE, 5% HDPE and 5% insect remains. A portion of the CPE probably came from a CPE spill which was reported to plant security on November 30. Cyclone C-106C plugged releasing an estimated 250 lbs of CPE to the air in the general direction of quadrant 8.

Polyethylene was found in all eight quadrants this week but not in excessive quantities. The HDPE found in quadrants 2 and 4 may have come from the spill reported by Poly B on November 29. Approximately 1000 pounds of HDPE was released to the air when a rupture disc ruptured.

Attached is the dustfall data for the week of November 24th through December 1st.

Joe Granier

Joe A. Granier
Linear Polyethylene and Derivatives
Technology Center Laboratory
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Attachments (4)

ltb

DO 085049
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DUSTFALL ANALYSIS

DATE OUT: 11-24-81

DATE IN: 12-1-81

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	0.0098	6.57	6.57	---	60% PVC, 40% HDPE
4	0.0078	5.22	4.96	0.26	70% HDPE, 20% PVC, 5% CPE, 5% DIRT,ETC
6	0.0090	6.02	5.72	0.30	50% CPE, 40% HDPE, 5% PVC, 5% DIRT,ETC
8	0.0270	18.10	17.19	0.91	90% CPE, 5% HDPE, 5% INSECT, DIRT
10	0.0104	6.97	5.58	1.39	80% HDPE, 20% DIRT, INSECTS
12	0.0047	3.14	1.57	1.57	50% HDPE, 50% DIRT, INSECTS
14	0.0049	3.28	0.98	2.30	30% HDPE, 70% DIRT, INSECTS
16	0.0049	3.28	0.98	2.30	30% HDPE, 70% DIRT, INSECTS

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12-7-81

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SPILL LOG

DATE	PLANT INVOLVED	TIME OF REPORT	CHEMICAL INVOLVED	WIND DIRECTION	COMMENTS
11-28-81	CPE	8:25 P.M.	TALC	SE	<100#, NO WATER TO SCRUBBER
11-29-81	POLY B	5:00 P.M.	HDPE	SW	1000#, RUPTURE DISC RELEASE
11-30-81	CPE	5:30 A.M.	CPE	SSE	250#, PLUGGED CYCLONE - 106C
12-1-81	CPE	9:00 A.M.	CPE	NW	15,000#, C-103 DRAIN LEFT OPEN

* Reported to Plant Security.

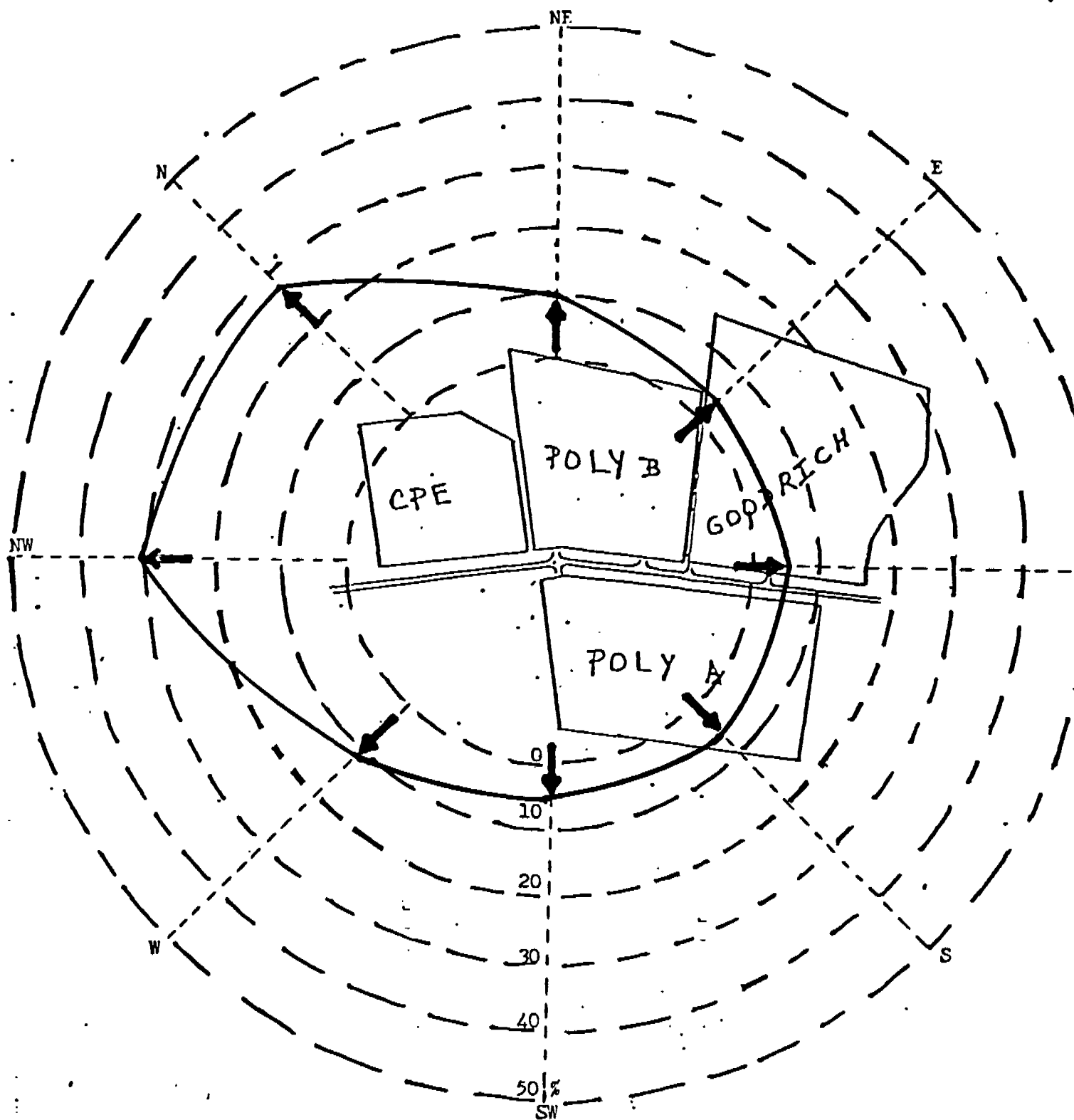
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WIND DIRECTION
(Average % In Given Direction Over The Week)

DATE OUT: 11-24-81

DATE IN: 12-1-81



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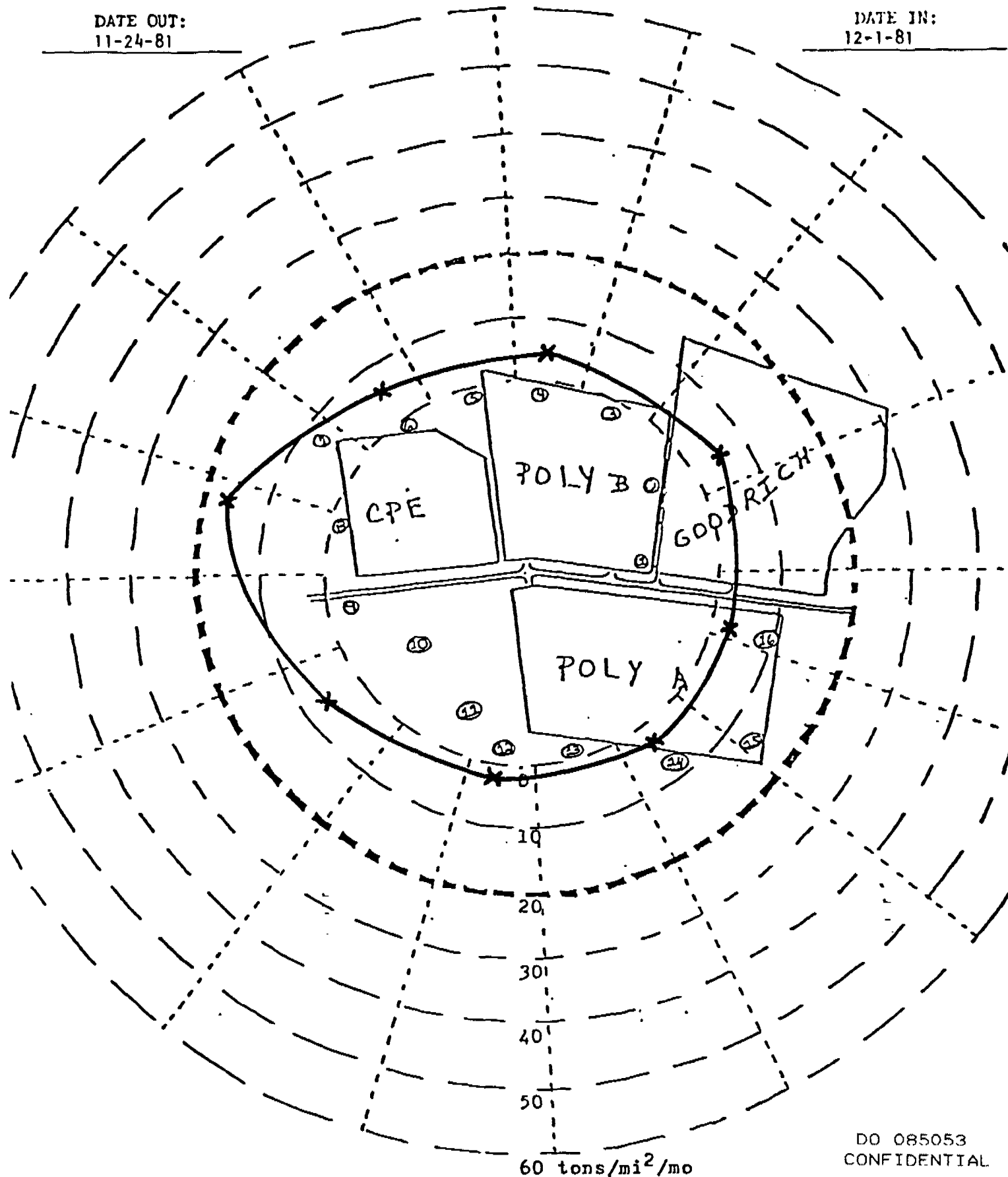
QUADRANTS SAMPLED: EVEN

DUSTFALL DUE TO PLANT EMISSIONS

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

DATE OUT:
11-24-81

DATE IN:
12-1-81



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EPA limit: 20 tons/mi²/mo

Quadrants Sampled:

EVFN