

Date Report Submitted: January 18, 1974

ENVIRONMENTAL PROTECTION AGENCY
AIR POLLUTANT EMISSIONS REPORT
SECTION I - GENERAL INFORMATION

FORM APPROVED
OMB NUMBER 158-R75

For Official Use Only:

Date Sent: _____

Date Returned: _____

UTM Grid Coordinates: _____

SIC No.: _____

Source ID: _____

CCR 000035453

Plant, institution, or establishment name: Continental Oil Company VCM Plant

Plant, institution, or establishment address: P.O. Box 605 Westlake Louisiana 70669
(Street or Box Number) (City) (State) (Zip)

Person to contact regarding this report: J. C. Lunn, Jr. Title: Process Engineer Telephone: 318/882-0550

Mailing address: P.O. Box 605 Westlake Louisiana 70669
(Street or Box Number) (City) (State) (Zip)

Approximate number of employees at plant, institution, or establishment location: ☐ Less than 100 ☒ 100 or more.

Elevation of plant, institution, or establishment in relationship to mean sea level: 15 feet above mean sea level, _____ feet below mean sea level.

Information is representative of calendar year: 1973

Land area at plant location: 18 acres. Enclose a sketch of layout if there is more than one building.

Plant location: (give nearest cross streets, describe by landmarks or enclose a map, engineering drawing, or sketch) See enclosed maps

☐ Air pollutants of the type indicated in the instructions for the completion of this report, i.e., _____

are not emitted at this plant, institution or establishment. Therefore, no other Sections of the report need be completed.

J. C. Lunn, Jr. (Signed) Process Engineer (Title)

Please return all sections of this report to: _____

Additional forms may be obtained from the above address.

NOTE: Please read reverse side of
this page. Use additional sheets
if necessary. Retain last copy.

ENVIRONMENTAL PROTECTION AGENCY
AIR POLLUTANT EMISSIONS REPORT

SECTION II - FUEL COMBUSTION FOR GENERATION OF HEAT, STEAM, AND POWER

Plant, institution, or establishment name: Continental Oil Company - VCM PlantNormal operating schedule for fuel use: 24 Hours per day Days per week Weeks per year 8184 Hours per year.Dates of annually occurring shutdowns of operations: Varies - Generally one fifteen Additional operating information enclosed ☐
day shutdown per eight or nine months

Source ^a Code	Number of Combustion Sources ^b (Reported)	Size of Unit (Input) ^c 10 ⁶ BTU/hr.	Type of Unit ^d	Installation Date ^e	Percent Excess Air Used In Combustion (Design) ^f	Power Output Megawatts ^g
II-a	1	68	Cracking Furnace	1968	NA	NA
II-b	1	68	Cracking Furnace	1968	NA	NA

- List a separate code number to represent each source (e.g., II-a, II-b, II-c, etc.), then enter the same code number and the required data on the continuation of this Section on Page 3, and in Sections V and VI.
- Multiple sources may be grouped if units are similar in size and type, burn the same fuel, or are vented to the same stack.
- Nameplate data are sufficient (give rated or maximum capacity, whichever is greater).
- Hand-fired, underfeed, overfeed, traveling-grate or spreader stoker; cyclone furnace; pulverized, wet or dry bottom with or without fly ash reinjection; rotary or gun type oil burner; etc.
- List separately future equipment and expected date of installation.
- Power generation only.

NOTE: Please read reverse side of
this page. Use additional sheets
if necessary. Retain last copy.

ENVIRONMENTAL PROTECTION AGENCY
AIR POLLUTANT EMISSIONS REPORT

SECTION II - FUEL COMBUSTION FOR GENERATION OF HEAT, STEAM, AND POWER (continued)

Plant, institution, or establishment name: Continental Oil Company

Source Code ^a	Type of Fuel ^b	Annual Consumption ^c					Hourly Consumption ^d		Percent Used for Space Heat	Heat Content BTU/Quan. ^e	Percent Sulfur ^f	Percent Ash (Solid Fuel Only) ^g	Delivered Cost of Fuel \$/Quantity	Future User
		Quantity ^d	Percent Distribution by Season				Maximum	Average						
			Spring March/ May	Summer June/ Aug.	Fall Sept./ Nov.	Winter Dec./ Febr.								
II-a	Natural Gas	495000 MSCF	25	25	25	25	68 MSCF	60.5 MSCF	0	1000/SCF	.0004	NA	(1)\$.8059 per MSCF	NA
II-b	Natural Gas	495000 MSCF	25	25	25	25	68 MSCF	60.5 MSCF	0	1000/SCF	.0004	NA	(1)\$.8059 per MSCF	NA

- a. List code numbers corresponding to each source referred to on page 2, (e.g., II-a, II-b, II-c, etc.), then enter required data on this page, and for the same code number sources in Sections V and VI.
- b. Coke, bituminous coal, anthracite coal, lignite; No. 1, 2, 4, 5 and 6 fuel oil; natural gas; LPG; refinery or coke oven gas; residual coke; wood; bark; sludge; etc. (Note: Indicate if two or more fuels are burned in the same boiler and provide all data pertinent to each fuel type.)
- c. Fuel data are to be reported on an "as burned" basis.
- d. Solid fuel, tons; liquid fuel, gallons; gaseous fuel, 1000 cubic feet.
- e. If unknown, please give name and address of fuel supplier.
- f. Sulfur and ash content for each fuel should be a weighted average.
- g. Estimated percent increase or decrease in fuel usage (by fuel type) per year for the five years after the calendar year for which this report is completed. If increase is due to new equipment, please list this equipment separately on page 2 and the expected fuel use on this page.

Note 1: Costs are confidential to Continental Oil Company. Since costs are changing rapidly, the VCM Plant requests exemption from the 5 day requirement to report changes in this item.

NOTE: Please read reverse side of this page. Use additional sheets if necessary. Retain last copy.

CCR 000035455

Date Report Submitted: January 18, 1974

ENVIRONMENTAL PROTECTION AGENCY
AIR POLLUTANT EMISSIONS REPORT

FORM APPROVED
OMB NUMBER 150-R78

SECTION III - COMBUSTIBLE SOLID AND LIQUID WASTES DISPOSAL

Plant, institution, or establishment name: Continental Oil Company VCM Plant

Combustible solid and liquid wastes disposed of ☐ on site, ☒ off site, ☐ both on and off site. If off site, location of disposal site and/or name of hauler: PPG Industries, Inc. Nelson Industrial Services, Inc. (If disposal of solid and liquid wastes is partly or wholly on site, complete remainder of this page and Sections IV, V and VI; otherwise, skip to Section IV.)

Normal on-site combustion operating schedule: _____ Hours per day _____ Days per week _____ Weeks per year _____ Hours per year.

Seasonal and/or peak operation period: (Specify) _____

Dates of annually occurring shutdowns of operations: _____ Additional operating information enclosed ☐.

Source Code ^a	Waste Material			Method of Disposal ^d	Installation Date	Hourly Burning Rate, lbs.		Auxiliary Fuel Used ^e	Percent Excess Air Used in Combustion (Design)	Future Disposal ^f
	Type ^b	Amount Per Year ^c	Percent Combustible			Average	Maximum			

- List a separate code number to represent each source (e.g., III-a, III-b, III-c, etc.), then enter required data on this page and for the same code number sources in Section V and VI.
- Rubbish, garbage, mixed garbage and rubbish, waste paper, wood chips or sawdust, etc.
- Tons, pounds, or gallons/year.
- Open burning dump; incinerator, single chamber; etc. (See instructions for examples and use appropriate identification numbers; other non-listed methods, specify.)
- Indicate whether auxiliary fuel is used in incinerators and pit burning, and the amount.
- Estimated increase or decrease in combustible solid and liquid wastes disposal rate for the five years after the calendar year for which this report is completed. If increase is due to new equipment, please list this equipment separately.

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Date Report Submitted: January 18, 1974

ENVIRONMENTAL PROTECTION AGENCY

FORM APPROVED
OMB NUMBER 100-R78

AIR POLLUTANT EMISSIONS REPORT

SECTION IV - PROCESS/OPERATIONS EMISSIONS

(Page 1 of 3)

Plant, institution, or establishment name: Continental Oil Company VCM PlantNormal operating schedule: 24 Hours per day Days per week Weeks per year 8184 Hours per year.Seasonal and/or peak operation period: NADates of annually occurring shutdowns of operations: Varies - Generally one fifteen day shutdown per eight or nine months Additional operating information attached ☒. Note: See "Emission Inventory Questionnaire"

Source Code ^a	Processes or Operations Releasing Pollutants to the Atmosphere ^{b,c,d}	Date Installation Went on Line	Raw Materials ^e Used for Processes of Operations				Products ^e of Processes of Operations				Intermittent Operation Only: Average Hours/week ^a	Future Increase or Decrease in Process Rate
			Type	Quantity		Type	Annual Average ^f	Quantity				
				Annual Average ^f	Hourly Process Rate, lbs.			Hourly Process Rate, Lbs.				
				Design	Maximum			Design	Maximum			
IV-a	Vinyl Chloride Production	2/68	Chlorine	460 x 10 ⁶ lbs.	49000	56200	hydrogen Chloride	427 x 10 ⁶ lbs.	44000	52,200	NA	NA
	1,2-Dichloroethane Production		Ethylene	358 x 10 ⁶ lbs.	36000	44000	1,2 Dichloroethane	1180x10 ⁶ lbs.	125000	144,200	NA	NA
	C-500 Vent Stack						Vinyl Chloride	730 x 10 ⁶ lbs.	75000	89,200	NA	NA
IV-b	Tank Car Vent Recovery (H-625)	1969	NA				NA				8	-96.7%
IV-c	Propylene Vent (BL-501)	2/68	NA				NA					NA

- a. List a separate code number to represent each source (e.g., IV-a, IV-b, IV-c, etc.) then enter required data on this page and for the same code number sources in Sections V and VI.
- b. Multiple sources may be grouped if similar in size and type.
- c. Sulfuric acid-contact; aluminum smelting-crucible furnace; cement manufacturing-dry process; etc. (See instruction for examples and use appropriate identification numbers; other non-listed processes and operations, specify.)
- d. The pollutants to be covered in this report are listed in the accompanying instructions.
- e. Sulfur burned; pig, foundry returns, or scrap aluminum melted; limestone, cement rock, clay, iron ore used; etc.
- f. Pounds, tons, gallons, barrels, etc.
- g. Sulfuric acid produced; aluminum ingots produced; cement produced; etc.
- h. For intermittent processes, indicate average number of hours per week of operation so that estimates of yearly emissions may be obtained.
- j. Estimated percent increase or decrease in process rate on a total plant basis for the five years after the calendar year for which this report is completed. If increase is due to new equipment, please list this equipment separately.

NOTE: Please read reverse side of this page. Use additional sheets if necessary. Retain last copy.

Date Report Submitted: January 18, 1974

ENVIRONMENTAL PROTECTION AGENCY AIR POLLUTANT EMISSIONS REPORT

FORM APPROVED
OMB NUMBER 104-RTA

SECTION IV - PROCESS/OPERATIONS EMISSIONS
(Page 2 of 3)

Plant, institution, or establishment name: Continental Oil Company VCM Plant

Normal operating schedule: _____ **Hours per day** _____ **Days per week** _____ **Weeks per year** _____ **Hours per year.**

Seasonal and/or peak operation period: _____

Dates of annually occurring shutdowns of operations:_____. **Additional operating information enclosed** ☐.

Source Code	Processes or Operations Releasing Pollutants to the Atmosphere ^{a,c,d}	Date Installation Went on Line	Raw Materials Used for Processes of Operations				Products of Processes of Operations				Intermittent Operation Only: Average Hours/week ^b	Future Increase or Decrease in Process Rate		
			Type	Quantity		Type	Annual Average ^e	Quantity						
				Annual Average ^e	Hourly Process Rate, lbs.			Hourly Process Rate, Lbs.	Hourly Process Rate, Lbs.					
					Design	Maximum				Design	Maximum			
IV-d	Dry Crude EDC Tank (T-450)	2/68	NA					NA					(1)	NA
IV-e	Pure EDC Tank (T-451)	2/68	NA					NA					(1)	NA
IV-f	Sales EDC Tank (T-452)	2/68	NA					NA					(1)	NA
IV-g	Slops EDC Tank (T-460)	2/68	NA					NA					(1)	NA
IV-h	Tars Tank (T-405)	2/68	NA					NA					(1)	NA

Note: 1. Will vent only upon filling or if a thermal change occurs.

- a. List a separate code number to represent each source (e.g., IV-a, IV-b, IV-c, etc.) then enter required data on this page and for the same code number sources in Sections V and VI.
- b. Multiple sources may be grouped if similar in size and type.
- c. Sulfuric acid-contact; aluminum smelting-crucible furnace; cement manufacturing-dry process; etc. (See instruction for examples and use appropriate identification numbers; other non-listed processes and operations, specify.)
- d. The pollutants to be covered in this report are listed in the accompanying instructions.
- e. Sulfur burned; pig, foundry returns, or scrap aluminum melted; limestone, cement rock, clay, iron ore used; etc.
- f. Pounds, tons, gallons, barrels, etc.
- g. Sulfuric acid produced; aluminum ingots produced; cement produced; etc.
- h. For intermittent processes, indicate average number of hours per week of operation so that estimates of yearly emissions may be obtained.
- j. Estimated percent increase or decrease in process rate on a total plant basis for the five years after the calendar year for which this report is completed. If increase is due to new equipment, please list this equipment separately.

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CCR 000035458

Date Report Submitted: January 18, 1974

ENVIRONMENTAL PROTECTION AGENCY

AIR POLLUTANT EMISSIONS REPORT

FORM APPROVED
OMB NUMBER 104-010

SECTION IV - PROCESS/OPERATIONS EMISSIONS

(Page 3 of 3)

Plant, institution, or establishment name: Continental Oil Company VCM Plant

Normal operating schedule: _____ Hours per day _____ Days per week _____ Weeks per year _____ Hours per year.

Seasonal and/or peak operation period: _____

Dates of annually occurring shutdowns of operations: _____ Additional operating information enclosed ☐.

Source Code ^a	Processes or Operations Releasing Pollutants to the Atmosphere ^{b,c,d}	Date Installation Went on Line	Raw Materials Used for Processes of Operations				Products of Processes of Operations				Intermittent Operation Only: Average Hours/week ^h	Future Increase or Decrease in Process Rate		
			Type	Quantity		Type	Annual Average ^f	Quantity						
				Annual Average ^f	Hourly Process Rate, lbs.			Hourly Process Rate, Lbs.	Design	Maximum				
					Design	Maximum				Design	Maximum			
IV-1	Wet Crude EDC Tank (T-453)	1968	NA					NA					(1)	NA
IV-j	Dock EDC Storage Tank (T-415)	1970	NA					NA					(1)	NA
IV-k	Dock VCM Recovery Vent (BL-409)	1970	NA					NA					290 hrs/yr	-99%

- List a separate code number to represent each source (e.g., IV-a, IV-b, IV-c, etc.) then enter required data on this page and for the same code number sources in Sections V and VI.
- Multiple sources may be grouped if similar in size and type.
- Sulfuric acid-contact; aluminum smelting-crucible furnace; cement manufacturing-dry process; etc. (See instruction for examples and use appropriate identification numbers; other non-listed processes and operations, specify.)
- The pollutants to be covered in this report are listed in the accompanying instructions.
- Sulfur burned; pig, foundry returns, or scrap aluminum melted; limestone, cement rock, clay, iron ore used; etc.
- Pounds, tons, gallons, barrels, etc.
- Sulfuric acid produced; aluminum ingots produced; cement produced; etc.
- For intermittent processes, indicate average number of hours per week of operation so that estimates of yearly emissions may be obtained.
- Estimated percent increase or decrease in process rate on a total plant basis for the five years after the calendar year for which this report is completed. If increase is due to new equipment, please list this equipment separately.

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Date Report Submitted: January 18, 1974ENVIRONMENTAL PROTECTION AGENCY
AIR POLLUTANT EMISSIONS REPORTFORM APPROVED
OMB NUMBER 198-R75

SECTION V - AIR CLEANING EQUIPMENT

(Page 1 of 2)

Plant, institution, or establishment name: Continental Oil Company VCM Plant

Source Code ^a	Type of Air Cleaning Equipment ^{b,c}	Installation Date ^e	Pollutant Removed ^{c,d}	Efficiency ^e		Inlet Gas Temperature, °F	Inlet Gas Flow Rate, ^f CFM	Exit Gas Pressure, PSI
				Design Percent	Operating Percent			
IV-a	014	1968	1,2 Dichloroethane	NA	NA	-10	10,865	48 psig
IV-a	052	1968	Hydrogen Chloride 1,2Dichloroethane	NA	NA	120	10,865	1-3" W.C.
IV-a	053	1971	Hydrogen Chloride 1,2Dichloroethane	NA	NA	100	11,580	1-3" W.C.
IV-a	047	1968	1,2 Dichloroethane	-	94	135	715	20
IV-b	047	1969	Vinyl Chloride	100	0 to 100	Varies	Varies	Varies
IV-k	047	1970	Vinyl Chloride	100	0 to 100	Varies	Varies	Varies
Future IV-a	046	1975	Ethylene	99+	NA	NA	NA	NA

- a. List code numbers corresponding to each emissions source reported in Sections II, III, and IV.
- b. Wet scrubber, electrostatic precipitator, fabric filter, etc. (See instructions for examples and use appropriate identification numbers; other non-listed type, specify.)
- c. Please list future equipment separately.
- d. The pollutants to be covered in this survey are specified in the accompanying instructions.
- e. Give efficiency in terms of pollutant removed.
- f. At actual flow conditions.

NOTE: Please read reverse side of this page. Use additional sheets if necessary. Retain last copy.

Date Report Submitted: January 18, 1974

ENVIRONMENTAL PROTECTION AGENCY
AIR POLLUTANT EMISSIONS REPORT

FORM APPROVED
OMB NUMBER 180-R78

SECTION V - AIR CLEANING EQUIPMENT
(Page 2 of 2)

Plant, institution, or establishment name: Continental Oil Company VCM Plant

Source Code ^a	Type of Air Cleaning Equipment ^{b,c}	Installation Date ^c	Pollutant Removed ^{c,d}	Efficiency ^e		Inlet Gas Temperature, °F	Inlet Gas Flow Rate, CFM	Exit Gas Pressure, PSI
				Design Percent	Operating Percent			
Future IV-b	047	1975	Vinyl Chloride	96.7	NA	NA	NA	NA
Future IV-k	047	1975	Vinyl Chloride	99	NA	NA	NA	NA

- List code numbers corresponding to each emissions source reported in Sections II, III, and IV.
- Wet scrubber, electrostatic precipitator, fabric filter, etc. (See instructions for examples and use appropriate identification numbers; other non-listed type, specify.)
- Please list future equipment separately.
- The pollutants to be covered in this survey are specified in the accompanying instructions.
- Give efficiency in terms of pollutant removed.
- At actual flow conditions.

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Date Report Submitted: January 18, 1974ENVIRONMENTAL PROTECTION AGENCY
AIR POLLUTANT EMISSIONS REPORTFORM APPROVED
OMB NUMBER 158-R75SECTION VI - STACK AND POLLUTANT EMISSIONS DATA
(Page 1 of 4)Plant, institution, or establishment name: Continental Oil Company VCM Plant

STACK DATA						ESTIMATE OF POLLUTANT EMISSIONS.			
Source Code ^a	Height Above Grade ft.	Inside Diameter at Top, ft.	Exit Gas Velocity, ^b ft./sec.	Exit Gas Temperature, ^b °F	Exit Gas Flow Rate, CFM ^c		Pollutant ^d	Quantity	
								Tons Per Year	Lbs. Per Hour
					Average	Maximum			Average Maximum
II-a	120	4.5	24.13	550	46020		1,2 Particulate Matter	9.12	2.228
II-b	120	4.5	24.13	550	46020		1,3 Sulfur Dioxide	0.179	0.0438
							1,2,4 Nitrogen Dioxide		
							1,5 Hydrocarbons		
IV-a	148	3.0	27.3	80 - 100	11580		5,6 Particulate Matter		
							4 Sulfur Dioxide		
							4 Nitrogen Dioxide		

- a. List code numbers corresponding to each emissions source reported in Sections II, III, and IV.
- b. Values should be representative of average flow conditions for hours of operation.
- c. At actual flow conditions.
- d. The pollutants to be covered in this survey are specified in the accompanying instructions.
- e. Give stack test data if available (indicate stack sampling method used), otherwise, specify basis used. If unknown, please do not complete these columns.
- Notes:**
1. Combined sources II-a, II-b.
 2. Calculated using M. I. Weisburd's "Air Pollution Control Field Manual" U. S. Government Printing Office Publication # 937, 1962.
 3. Calculated using Natural Gas Sulfur content.

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ENVIRONMENTAL PROTECTION AGENCY
AIR POLLUTANT EMISSIONS REPORTSECTION VI - STACK AND POLLUTANT EMISSIONS DATA
(Pag 2 of 4)Plant, institution, or establishment name: Continental Oil Company VCM Plant

STACK DATA							ESTIMATE OF POLLUTANT EMISSIONS.				
Source Code ^a	Height Above Grade ft.	Inside Diameter at Top, ft.	Exit Gas Velocity, ^b ft./sec.	Exit Gas Temperature, ^b °F.	Exit Gas Flow Rate, CFM ^c		Pollutants	Quantity			
					Average	Maximum		Tons Per Year		Lbs. Per Hour	
										Average	Maximum
IV-a							7 Hydro- carbons Methane	646.5	158	-	
							Ethane	20.5	5	-	
							Ethylene	1808.7	442	-	
							Ethyl Chloride	1853.7	453	-	
							1,2 Dichloroethane	2201.5	538	-	
							Vinyl Chloride	499.2	122	-	
							8 Miscellaneous	945.3	231	-	

- Notes: 4. Analyzed by an independent company with none found.
5. Unknown.
6. Should be low, since this stream passes through a high impact venturi water scrubber and a water spray tower.
7. Gas Chromatograph.
- a. List code numbers corresponding to each emissions source reported in Sections II, III, and IV.
b. Values should be representative of average flow conditions for hours of operation.
c. At actual flow conditions.
d. The pollutants to be covered in this survey are specified in the accompanying instructions.
e. Give stack test data if available (indicate stack sampling method used), otherwise, specify basis used. If unknown, please do not complete these columns.

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AIR POLLUTANT EMISSIONS REPORTFORM APPROVED
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SECTION VI - STACK AND POLLUTANT EMISSIONS DATA

(Page 3 of 4)

Plant, institution, or establishment name: Continental Oil Company VCM Plant

STACK DATA							ESTIMATE OF POLLUTANT EMISSIONS.				
Source Code ^a	Height Above Grade ft.	Inside Diameter at Top, ft.	Exit Gas Velocity, ^b ft./sec.	Exit Gas Temperature, ^b °F.	Exit Gas Flow Rate, CFM ^c		Pollutant ^d	Quantity			
					Average	Maximum		Tons Per Year		Lbs. Per Hour	
										Average	Maximum
9 IV-b	25	0.1667	Varies	50 - 90	Varies	-	Vinyl Chloride	303.2	-	1516	
9 IV-c	120	0.667	0.197	60 - 90	41.22	-	Propylene	55.6	13.6	-	
10 IV-d	50	0.5	4.64	85	-	55.68	1,2 Dichloroethane	-	-	55.9	
10 IV-e	50	0.5	3.41	85	-	40.92	1,2 Dichloroethane	-	-	50.6	
10 IV-f	25	0.5	1.71	85	-	20.52	1,2 Dichloroethane	-	-	30.8	
10 IV-g	25	0.5	0.57	85	-	6.84	1,2 Dichloroethane	-	-	0.6	
10 IV-h	25	0.5	0.99	135	-	11.40	1,2 Dichloroethane	-	-	5.6	

a. List code numbers corresponding to each emissions source reported in Sections II, III, and IV.

b. Values should be representative of average flow conditions for hours of operation.

c. At actual flow conditions.

d. The pollutants to be covered in this survey are specified in the accompanying instructions.

e. Give stack test data if available (indicate stack sampling method used), otherwise, specify basis used. If unknown, please do not complete these columns.

Notes: 8. Miscellaneous as 1,2 Dichloroethane.

9. See Discussion State of Louisiana "Emission Inventory Questionnaire", Remarks Page 9 dated 10/23/73.

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Date Report Submitted: January 18, 1974ENVIRONMENTAL PROTECTION AGENCY
AIR POLLUTANT EMISSIONS REPORTFORM APPROVED
OMB NUMBER 1505-0046SECTION VI - STACK AND POLLUTANT EMISSIONS DATA
(Page 4 of 4)Plant, institution, or establishment name: Continental Oil Company VCM Plant

STACK DATA							ESTIMATE OF POLLUTANT EMISSIONS*			
Source Code ^a	Height Above Grade ft.	Inside Diameter at Top, ft.	Exit Gas Velocity, ^b ft./sec.	Exit Gas Temperature, ^b °F.	Exit Gas Flow Rate, CFM ^c		Pollutant ^d	Quantity		
					Average	Maximum		Tons Per Year	Lbs. Per Hour	
									Average	Maximum
10 IV-1	50	0.5	1.48	120	-	17.76	1,2 Dichloroethane	-	-	8.0
10 IV-1	35	0.83	12.1	80	-	402	1,2 Dichloroethane	-	-	453.0
9 IV-k	50	0.1667	Varies	50 - 100	Varies	-	Vinyl Chloride	397	-	2738.0

a. List code numbers corresponding to each emissions source reported in Sections II, III, and IV.

b. Values should be representative of average flow conditions for hours of operation.

c. At actual flow conditions.

d. The pollutants to be covered in this survey are specified in the accompanying instructions.

e. Give stack test data if available (indicate stack sampling method used), otherwise, specify basis used. If unknown, please do not complete these columns.

Notes: 10. The maximum calculated out breathing rate is based on a 12-hour thermal expansion of the contained vapor plus the maximum filling rate of the individual tanks. As these do not reflect daily actual operations because of seasonal changes and intermittent filling of certain tanks averages and tons per year are unknown.

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CONTINENTAL OIL COMP NY
VCM PLANT
WESTLAKE, LOUISIANA

DOCK FACILITIES

DATE LIMITS
OF WESTLAKE
7, 1960

1-16-74

WESTLAKE

INTERSECTION
SAMPSON ST.
AND
SULPHUR AVE.

SWAMP

LOT 13

ORAGE
TANKS

LOT 4

LOT 3

LOT 2

LOT 1

LOT 4

LOT 5

LOT 6

LOT 7

LOT 8

LOT 12

LOT 11

LOT 10

LOT 9

LOT 8

MATHIESON ALKALI WORKS

SHIP SLIP

LOT 13

CALCASIEU

RIVER

IV-J

IV-k

KELLEY WEND COMPANY

SCALE 1" = 100'



CCR 000035467

IV-a

LOCATION:
0.65 KM NORTH OF
THE INTERSECTION OF
EAST ST. AND
OLD HIGHWAY 90

OFFICE

TOILET

LABORATORY

CONTROL ROOM

COOLING ENGINE

PIPING IN THIS AREA

PIPING IN THIS AREA

PIPING IN THIS AREA

IV-1

IV-2

IV-3

IV-4

LOCATION:
0.65 KM NORTH OF
THE INTERSECTION OF
EAST ST. AND
OLD HIGHWAY 90

**CONTINENTAL OIL COMPANY
CONOCO CHEMICALS
VCM PLANT
WESTLAKE, LOUISIANA**

1-16-74

**NOTE: EQUIPMENT LAYOUT IS
CONFIDENTIAL**

SCALE:
1" = 250'

The site plan includes the following labeled areas and features:

- Office**: Located in the upper central part of the plan.
- Laboratory**: Located to the left of the control room.
- Control Room**: Located in the center of the plan.
- Storage Tanks**: Labeled T-100A, T-100B, T-100C, T-100D, T-100E, T-100F, T-100G, T-100H, T-100I, T-100J, T-100K, T-100L, T-100M, T-100N, T-100O, T-100P, T-100Q, T-100R, T-100S, T-100T, T-100U, T-100V, T-100W, T-100X, T-100Y, T-100Z.
- Process Areas**: Labeled IV-1, IV-2, IV-3, IV-4, IV-5, IV-6, IV-7, IV-8, IV-9, IV-10, IV-11, IV-12, IV-13, IV-14, IV-15, IV-16, IV-17, IV-18, IV-19, IV-20, IV-21, IV-22, IV-23, IV-24, IV-25, IV-26, IV-27, IV-28, IV-29, IV-30, IV-31, IV-32, IV-33, IV-34, IV-35, IV-36, IV-37, IV-38, IV-39, IV-40, IV-41, IV-42, IV-43, IV-44, IV-45, IV-46, IV-47, IV-48, IV-49, IV-50, IV-51, IV-52, IV-53, IV-54, IV-55, IV-56, IV-57, IV-58, IV-59, IV-60, IV-61, IV-62, IV-63, IV-64, IV-65, IV-66, IV-67, IV-68, IV-69, IV-70, IV-71, IV-72, IV-73, IV-74, IV-75, IV-76, IV-77, IV-78, IV-79, IV-80, IV-81, IV-82, IV-83, IV-84, IV-85, IV-86, IV-87, IV-88, IV-89, IV-90, IV-91, IV-92, IV-93, IV-94, IV-95, IV-96, IV-97, IV-98, IV-99, IV-100.
- Other Features**: A north arrow pointing upwards, a scale bar indicating 1 inch equals 250 feet, and a note stating "EQUIPMENT LAYOUT IS CONFIDENTIAL".

CONTINENTAL OIL COMPANY
CONOCO CHEMICALS
VCM PLANT
WESTLAKE, LOUISIANA

1-16-74

NOTE: EQUIPMENT LAYOUT IS
CONFIDENTIAL

SCALE: 250'

250

Date Report Submitted: _____

ENVIRONMENTAL PROTECTION AGENCY
AIR POLLUTANT EMISSIONS REPORT
SECTION I - GENERAL INFORMATION

FORM APPROVED
OMB NUMBER 158-R75

For Official Use Only:

Date Sent: _____

Date Returned: _____

UTM Grid Coordinates: _____

SIC No.: _____

Source ID: _____

Plant, institution, or establishment name: _____

Plant, institution, or establishment address: _____
(Street or Box Number) (City) (State) (Zip)

Person to contact regarding this report: _____ Title: _____ Telephone: _____

Mailing address: _____
(Street or Box Number) (City) (State) (Zip)

Approximate number of employees at plant, institution, or establishment location: ☐ Less than 100 ☐ 100 or more.

Elevation of plant, institution, or establishment in relationship to mean sea level: _____ feet above mean sea level, _____ feet below mean sea level.

Information is representative of calendar year: _____

Land area at plant location: _____ acres. Enclose a sketch of layout if there is more than one building.

Plant location: (give nearest cross streets, describe by landmarks or enclose a map, engineering drawing, or sketch) _____

☐ Air pollutants of the type indicated in the instructions for the completion of this report, i.e., _____
are not emitted at this plant, institution or establishment. Therefore, no other Sections of the report need be completed.

(Signed) _____ (Title)

Please return all sections of this report to: _____

Additional forms may be obtained from the above address.

NOTE: Please read reverse side of
this page. Use additional sheets
if necessary. Retain last copy.

CCR 000035468

ENVIRONMENTAL PROTECTION AGENCY
AIR POLLUTANT EMISSIONS REPORT

SECTION II - FUEL COMBUSTION FOR GENERATION OF HEAT, STEAM, AND POWER (continued)

Plant, institution, or establishment name: Continental Oil Co., Inc.

Source Codes ^a	Type of Fuel ^b	Annual Consumption ^c					Hourly Consumption ^d		Percent Used for Space Heat	Heat Content BTU/Quan. ^e	Percent Sulfur ^f	Percent Ash (Solid Fuel Only) ^{e,f}	Delivered Cost of Fuel \$/Quantity	Future Uses
		Quantity ^d	Percent Distribution by Season				Maximum	Average						
			Spring March/ May	Summer June/ Aug.	Fall Sept./ Nov.	Winter Dec./ Febr.								
II-a	Natural Gas	495000 MSCF	25	25	25	25	60 MSCF	60.5 MSCF	0	1000/SCF	.0004	NA	(1)\$.8059 per MSCF	NA
II-b	Natural Gas	495000 MSCF	25	25	25	25	60 MSCF	60.5 MSCF	0	1000/SCF	.0004	NA	(1)\$.8059 per MSCF	NA

- a. List code numbers corresponding to each source referred to on page 2, (e.g., II-a, II-b, II-c, etc.), then enter required data on this page, and for the same code number sources in Sections V and VI.
- b. Coke, bituminous coal, anthracite coal, lignite; No. 1, 2, 4, 5 and 6 fuel oil; natural gas; LPG; refinery or coke oven gas; residual coke; wood; bark; sludge; etc. (Note: Indicate if two or more fuels are burned in the same boiler and provide all data pertinent to each fuel type.)
- c. Fuel data are to be reported on an "as burned" basis.
- d. Solid fuel, tons; liquid fuel, gallons; gaseous fuel, 1000 cubic feet.
- e. If unknown, please give name and address of fuel supplier.
- f. Sulfur and ash content for each fuel should be a weighted average.
- g. Estimated percent increase or decrease in fuel usage (by fuel type) per year for the five years after the calendar year for which this report is completed. If increase is due to new equipment, please list this equipment separately on page 2 and the expected fuel use on this page.

Note 1: Costs are confidential to Continental Oil Company. Since costs are changing rapidly, the VCM Plant requests exemption from the 5 day requirement to report changes in this item.

NOTE: Please read reverse side of this page. Use additional sheets if necessary. Retain last copy.

Date Report Submitted: January 13, 1974

ENVIRONMENTAL PROTECTION AGENCY
AIR POLLUTANT EMISSIONS REPORT

FORM APPROVED
OMB NUMBER 158-R75

SECTION II - FUEL COMBUSTION FOR GENERATION OF HEAT, STEAM, AND POWER

Plant, institution, or establishment name: Continental Oil Company - VGT Plant

Normal operating schedule for fuel use: 24 Hours per day 7 Days per week 52 Weeks per year 3168 Hours per year.

Dates of annually occurring shutdowns of operations: 1 day shutdown per eight or nine months Additional operating information enclosed ☐.

Source ^{a,c} Code	Number of Combustion Sources ^{b,e} (Boilers)	Size of Unit (Input) ^{c,e} 10 ⁶ BTU/hr.	Type of Unit ^{d,e}	Installation Date ^e	Percent Excess Air Used In Combustion (Design) ^e	Power Output Megawatts ^{e,f}
II-a	1		Grinding Furnace	1968	NA	NA
II-b	1		Grinding Furnace	1968	NA	NA

- List a separate code number to represent each source (e.g., II-a, II-b, II-c, etc.), then enter the same code number and the required data on the continuation of this Section on Page 3, and in Sections V and VI.
- Multiple sources may be grouped if units are similar in size and type, burn the same fuel, or are vented to the same stack.
- Nameplate data are sufficient (give rated or maximum capacity, whichever is greater).
- Hand-fired, underfeed, overfeed, traveling-grate or spreader stoker; cyclone furnace; pulverized, wet or dry bottom with or without fly ash reinjection; rotary or gun type oil burner; etc.
- List separately future equipment and expected date of installation.
- Power generation only.

NOTE: Please read reverse side of
this page. Use additional sheets
if necessary. Retain last copy.

Date Report Submitted: January 18, 1974

ENVIRONMENTAL PROTECTION AGENCY
AIR POLLUTANT EMISSIONS REPORT

FORM APPROVED
OMB NUMBER 158-R75

SECTION III - COMBUSTIBLE SOLID AND LIQUID WASTES DISPOSAL

Plant, institution, or establishment name: Continental Oil Company VCM Plant

Combustible solid and liquid wastes disposed of ☐ on site, ☐ off site, ☐ both on and off site. If off site, location of disposal site and/or name of hauler: PPG Industries, Inc. Nelson Industrial Services, Inc. (If disposal of solid and liquid wastes is partly or wholly on site, complete remainder of this page and Sections IV, V and VI; otherwise, skip to Section IV.)

Normal on-site combustion operating schedule: _____ Hours per day _____ Days per week _____ Weeks per year _____ Hours per year.

Seasonal and/or peak operation period: (Specify) _____

Dates of annually occurring shutdowns of operations: _____ Additional operating information enclosed ☐.

Source Code ^a	Waste Material			Method of Disposal ^d	Installation Date	Hourly Burning Rate, lbs.		Auxiliary Fuel Used ^e	Percent Excess Air Used in Combustion (Design)	Future Disposal ^f
	Type ^b	Amount Per Year ^c	Percent Combustible			Average	Maximum			

- List a separate code number to represent each source (e.g., III-a, III-b, III-c, etc.), then enter required data on this page and for the same code number sources in Section V and VI.
- Rubbish, garbage, mixed garbage and rubbish, waste paper, wood chips or sawdust, etc.
- Tons, pounds, or gallons/year.
- Open burning dump; incinerator, single chamber; etc. (See instructions for examples and use appropriate identification numbers; other non-listed methods, specify.)
- Indicate whether auxiliary fuel is used in incinerators and pit burning, and the amount.
- Estimated increase or decrease in combustible solid and liquid wastes disposal rate for the five years after the calendar year for which this report is completed. If increase is due to new equipment, please list this equipment separately.

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CCR 000035471

Date Report Submitted: January 18, 1974

ENVIRONMENTAL PROTECTION AGENCY

AIR POLLUTANT EMISSIONS REPORT

FORM APPROVED
OMB NUMBER 158-R75

SECTION IV - PROCESS/OPERATIONS EMISSIONS

Plant, institution, or establishment name: Continental Oil Company VCM Plant

Normal operating schedule: 24 Hours per day 5 Days per week 52 Weeks per year 8184 Hours per year.

Seasonal and/or peak operation period: NA

Dates of annually occurring shutdowns of operations: Varies - Generally one fifteen day shutdown per eight or nine months. Additional operating information enclosed ☒.

Note: See "Emission Inventory Questionnaire"

Source Codes	Processes or Operations Releasing Pollutants to the Atmosphere ^{b,c,d}	Date Installation Went on Line	Raw Materials Used for Processes of Operations				Products of Processes of Operations				Intermittent Operation Only: Average Hours/week ^h	Future Increase or Decrease in Process Rate
			Type	Quantity		Type	Annual Average ^f	Quantity				
				Annual Average ^f	Hourly Process Rate, lbs.			Hourly Process Rate, Lbs.				
				Design	Maximum			Design	Maximum			
IV-a	Vinyl Chloride Production	2/68	Chlorine	460 x 10 ³ lbs.	49000	56200	hydrogen chloride	427 x 10 ³ lbs.	44000	52,200	NA	NA
	1,2-Dichloroethane Production		Ethylene	358 x 10 ⁶ lbs.	36000	44000	1,2 Dichloroethane	1180x10 ³ lbs.	125000	144,200	NA	NA
	C-500 Vent Stack						Vinyl chloride	730 x 10 ³ lbs.	75000	89,200	NA	NA
IV-b	Tank Car Vent Recovery (H-625)	1969	NA				NA				8	-26.7%
IV-c	Propylene Vent (BL-501)	2/68	NA				NA					NA

- List a separate code number to represent each source (e.g., IV-a, IV-b, IV-c, etc.) then enter required data on this page and for the same code number sources in Sections V and VI.
- Multiple sources may be grouped if similar in size and type.
- Sulfuric acid-contact; aluminum smelting-crucible furnace; cement manufacturing-dry process; etc. (See instruction for examples and use appropriate identification numbers; other non-listed processes and operations, specify.)
- The pollutants to be covered in this report are listed in the accompanying instructions.
- Sulfur burned; pig, foundry returns, or scrap aluminum melted; limestone, cement rock, clay, iron ore used; etc.
- Pounds, tons, gallons, barrels, etc.
- Sulfuric acid produced; aluminum ingots produced; cement produced; etc.
- For intermittent processes, indicate average number of hours per week of operation so that estimates of yearly emissions may be obtained.
- Estimated percent increase or decrease in process rate on a total plant basis for the five years after the calendar year for which this report is completed. If increase is due to new equipment, please list this equipment separately.

NOTE: Please read reverse side of this page. Use additional sheets if necessary. Retain last copy.

Date Report Submitted: January 18, 1974

ENVIRONMENTAL PROTECTION AGENCY

AIR POLLUTANT EMISSIONS REPORT

FORM APPROVED
OMB NUMBER 158-B75

SECTION IV - PROCESS/OPERATIONS EMISSIONS
(Page 2 of 3)

Plant, institution, or establishment name: Continental Oil Company VCM Plant

Normal operating schedule: Hours per day Days per week Weeks per year Hours per year.

Seasonal and/or peak operation period:

Dates of annually occurring shutdowns of operations: Additional operating information enclosed ☐.

Source Code	Processes or Operations Releasing Pollutants to the Atmosphere ^{b,c,d}	Date Installation Went on Line	Raw Materials Used for Processes of Operations				Products of Processes of Operations				Intermittent Operation Only: Average Hours/week ^a	Future Increase or Decrease in Process Rate	
			Type	Quantity		Type	Annual Average ^f	Quantity					
				Annual Average ^f	Hourly Process Rate, lbs.			Hourly Process Rate, Lbs.	Design	Maximum			
					Design	Maximum				Design	Maximum		
IV-d	Dry Crude EDC Tank (T-450)	2/68	NA				NA					(1)	NA
IV-e	Pure EDC Tank (T-451)	2/68	NA				NA					(1)	NA
IV-f	Sales EDC Tank (T-452)	2/68	NA				NA					(1)	NA
IV-g	Slops EDC Tank (T-460)	2/68	NA				NA					(1)	NA
IV-h	Tars Tank (T-405)	2/68	NA				NA					(1)	NA

Note: 1. Will vent only upon filling or if a thermal change occurs.

- a. List a separate code number to represent each source (e.g., IV-a, IV-b, IV-c, etc.) then enter required data on this page and for the same code number sources in Sections V and VI.
- b. Multiple sources may be grouped if similar in size and type.
- c. Sulfuric acid-contact; aluminum smelting-crucible furnace; cement manufacturing-dry process; etc. (See instruction for examples and use appropriate identification numbers; other non-listed processes and operations, specify.)
- d. The pollutants to be covered in this report are listed in the accompanying instructions.
- e. Sulfur burned; pig, foundry returns, or scrap aluminum melted; limestone, cement rock, clay, iron ore used; etc.
- f. Pounds, tons, gallons, barrels, etc.
- g. Sulfuric acid produced; aluminum ingots produced; cement produced; etc.
- h. For intermittent processes, indicate average number of hours per week of operation so that estimates of yearly emissions may be obtained.
- j. Estimated percent increase or decrease in process rate on a total plant basis for the five years after the calendar year for which this report is completed. If increase is due to new equipment, please list this equipment separately.

NOTE: Please read reverse side of this page. Use additional sheets if necessary. Retain last copy.

Date Report Submitted: January 18, 1974

ENVIRONMENTAL PROTECTION AGENCY AIR POLLUTANT EMISSIONS REPORT

FORM APPROVED
OMB NUMBER 150-R75

SECTION IV - PROCESS/OPERATIONS EMISSIONS (Page 3 of 3)

Plant, institution, or establishment name: Continental Oil Company VCM Plant

Normal operating schedule: _____ Hours per day _____ Days per week _____ Weeks per year _____ Hours per year.

Seasonal and/or peak operation period: _____

Dates of annually occurring shutdowns of operations: _____ Additional operating information enclosed ☐.

Source Code ^a	Processes or Operations Releasing Pollutants to the Atmosphere ^{b,c,d}	Date Installation Went on Line	Raw Materials Used for Processes of Operations				Products of Processes of Operations				Intermittent Operation Only: Average Hours/week ^h	Future Increase or Decrease in Process Rate	
			Type	Quantity		Type	Annual Average ^g	Quantity					
				Annual Average ^g	Hourly Process Rate, lbs.			Hourly Process Rate, Lbs.	Design	Maximum			
					Design	Maximum				Design	Maximum		
IV-i	Wet Crude EDC Tank (T-453)	1968	NA				NA					(1)	NA
IV-j	Dock EDC Storage Tank (T-415)	1970	NA				NA					(1)	NA
IV-k	Dock VCM Recovery Vent (BL-409)	1970	NA				NA					290 hrs/yr	-99%

- List a separate code number to represent each source (e.g., IV-a, IV-b, IV-c, etc.) then enter required data on this page and for the same code number sources in Sections V and VI.
- Multiple sources may be grouped if similar in size and type.
- Sulfuric acid-contact; aluminum smelting-crucible furnace; cement manufacturing-dry process; etc. (See instruction for examples and use appropriate identification numbers; other non-listed processes and operations, specify.)
- The pollutants to be covered in this report are listed in the accompanying instructions.
- Sulfur burned; pig, foundry returns, or scrap aluminum melted; limestone, cement rock, clay, iron ore used; etc.
- Pounds, tons, gallons, barrels, etc.
- Sulfuric acid produced; aluminum ingots produced; cement produced; etc.
- For intermittent processes, indicate average number of hours per week of operation so that estimates of yearly emissions may be obtained.
- Estimated percent increase or decrease in process rate on a total plant basis for the five years after the calendar year for which this report is completed. If increase is due to new equipment, please list this equipment separately.

NOTE: Please read reverse side of this page. Use additional sheets if necessary. Retain last copy.

Date Report Submitted: January 13, 1974

ENVIRONMENTAL PROTECTION AGENCY
AIR POLLUTANT EMISSIONS REPORT
SECTION V - AIR CLEANING EQUIPMENT

FORM AP-102
OMB NUMBER 158-R75

Plant, institution, or establishment name: Continental Oil Company VOI Plant

Source Code ^a	Type of Air Cleaning Equipment ^{b,c}	Installation Date ^c	Pollutant Removed ^{c,d}	Efficiency ^e		Inlet Gas Temperature, °F	Inlet Gas Flow Rate, ^f CFM	Exit Gas Pressure, PSI
				Design Percent	Operating Percent			
IV-a	014	1968	1,2 Dichloroethane	NA	NA	-10	10,865	48 psig
IV-a	052	1963	Hydrogen Chloride	NA	NA	120	10,865	1-3" W.C.
IV-a	053	1971	1,2 Dichloroethane	NA	NA	100	11,580	1-3" W.C.
IV-a	047	1968	1,2 Dichloroethane	-	94	135	715	20
IV-b	047	1970	Vinyl Chloride	100	0 to 100	Varies	Varies	Varies
IV-k	047	1970	Vinyl Chloride	100	0 to 100	Varies	Varies	Varies
Future IV-a	046	1975	Ethylene	99	NA	NA	NA	NA

- a. List code numbers corresponding to each emissions source reported in Sections II, III, and IV.
b. Wet scrubber, electrostatic precipitator, fabric filter, etc. (See instructions for examples and use appropriate identification numbers; other non-listed type, specify.)
c. Please list future equipment separately.
d. The pollutants to be covered in this survey are specified in the accompanying instructions.
e. Give efficiency in terms of pollutant removed.
f. At actual flow conditions.

NOTE: Please read reverse side of this page. Use additional sheets if necessary. Retain last copy.

CCR 000035475

Date Report Submitted: January 18, 1974

ENVIRONMENTAL PROTECTION AGENCY
AIR POLLUTANT EMISSIONS REPORT

FORM APPROVED
OMB NUMBER 158-R75

SECTION V - AIR CLEANING EQUIPMENT
(Page 2 of 2)

Plant, institution, or establishment name: Continental Oil Company VCM Plant

Source Code ^a	Type of Air Cleaning Equipment ^{b,c}	Installation Date ^e	Pollutant Removed ^d	Efficiency ^e		Inlet Gas Temperature, °F	Inlet Gas Flow Rate, CFM	Exit Gas Pressure, PSI
				Design Percent	Operating Percent			
Future IV-b	047	1975	Vinyl Chloride	96.7	NA	NA	NA	NA
Future IV-k	047	1975	Vinyl Chloride	99	NA	NA	NA	NA

- a. List code numbers corresponding to each emissions source reported in Sections II, III, and IV.
- b. Wet scrubber, electrostatic precipitator, fabric filter, etc. (See instructions for examples and use appropriate identification numbers; other non-listed type, specify.)
- c. Please list future equipment separately.
- d. The pollutants to be covered in this survey are specified in the accompanying instructions.
- e. Give efficiency in terms of pollutant removed.
- f. At actual flow conditions.

NOTE: Please read reverse side of this page. Use additional sheets if necessary. Retain last copy.

Date Report Submitted: January 18, 1974ENVIRONMENTAL PROTECTION AGENCY
AIR POLLUTANT EMISSIONS REPORTFORM APPROVED
OMB NUMBER 158-R74

SECTION VI - STACK AND POLLUTANT EMISSIONS DATA

(Page 1 of 4)

Plant, institution, or establishment name: Continental Oil Company VCM Plant

STACK DATA							ESTIMATE OF POLLUTANT EMISSIONS			
Source Code ^a	Height Above Grade ft.	Inside Diameter at Top, ft.	Exit Gas Velocity, ^b ft./sec.	Exit Gas Temperature, ^b °F	Exit Gas Flow Rate, CFM ^c		Pollutants	Quantity		
					Average	Maximum		Tons Per Year	Lbs. Per Hour	
									Average	Maximum
II-a	120	4.5	24.13	550	46020		1,2 Particulate Matter	9.12	2.228	
II-b	120	4.5	24.13	550	46020		1,3 Sulfur Dioxide	0.179	0.0438	
							1,2,4 Nitrogen Dioxide			
							1,5 Hydrocarbons			
IV-a	148	3.0	27.3	80 - 100	11580		5,6 Particulate Matter			
							4 Sulfur Dioxide			
							4 Nitrogen Dioxide			

a. List code numbers corresponding to each emissions source reported in Sections II, III, and IV.

b. Values should be representative of average flow conditions for hours of operation.

c. At actual flow conditions.

d. The pollutants to be covered in this survey are specified in the accompanying instructions.

e. Give stack test data if available (indicate stack sampling method used), otherwise, specify basis used. If unknown, please do not complete these columns.

- Notes:
1. Combined sources II-a, II-b.
 2. Calculated using M. I. Weisburd's "Air Pollution Control Field Manual" U. S. Government Printing Office Publication # 937, 1962.
 3. Calculated using Natural Gas Sulfur content.

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CCR 000035477

Date Report Submitted: January 18, 1974ENVIRONMENTAL PROTECTION AGENCY
AIR POLLUTANT EMISSIONS REPORTFORM APPROVED
OMB NUMBER 158-R75SECTION VI - STACK AND POLLUTANT EMISSIONS DATA
(Page 2 of 4)Plant, institution, or establishment name: Continental Oil Company VCM Plant

STACK DATA							ESTIMATE OF POLLUTANT EMISSIONS.				
Source Code ^a	Height Above Grade ft.	Inside Diameter at Top, ft.	Exit Gas Velocity, ^b ft./sec.	Exit Gas Temperature, ^b °F.	Exit Gas Flow Rate, CFM ^c		Pollutants ^d	Quantity			
					Average	Maximum		Tons Per Year		Lbs. Per Hour	
										Average	Maximum
IV-a							7 Hydro- carbons Methane	646.5	158	-	
							Ethane	20.5	5	-	
							Ethylene	1808.7	442	-	
							Ethyl Chloride	1853.7	453	-	
							1,2 Dichloroethane	2201.5	538	-	
							Vinyl Chloride	499.2	122	-	
							8 Miscellaneous	945.3	231	-	

- Notes: 4. Analyzed by an independent company with none found.
5. Unknown.
6. Should be low, since this stream passes through a high impact venturi water scrubber and a water spray tower.
7. Gas Chromatograph.
- a. List code numbers corresponding to each emissions source reported in Sections II, III, and IV.
b. Values should be representative of average flow conditions for hours of operation.
c. At actual flow conditions.
d. The pollutants to be covered in this survey are specified in the accompanying instructions.
e. Give stack test data if available (indicate stack sampling method used), otherwise, specify basis used. If unknown, please do not complete these columns.

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CCR 000035478

Date Report Submitted: January 18, 1974

ENVIRONMENTAL PROTECTION AGENCY

AIR POLLUTANT EMISSIONS REPORT

FORM APPROVED
OMB NUMBER 168-R78

SECTION VI - STACK AND POLLUTANT EMISSIONS DATA

(Page 3 of 4)

Plant, institution, or establishment name: Continental Oil Company VCM Plant

STACK DATA							ESTIMATE OF POLLUTANT EMISSIONS.				
Source Code ^a	Height Above Grade ft.	Inside Diameter at Top, ft.	Exit Gas Velocity, ^b ft./sec.	Exit Gas Temperature, ^b °F.	Exit Gas Flow Rate, CFM ^c		Pollutants	Quantity			
					Average	Maximum		Tons Per Year		Lbs. Per Hour	
										Average	Maximum
9 IV-b	25	0.1667	Varies	50 - 90	Varies	-	Vinyl Chloride	303.2	-	1516	
9 IV-c	120	0.667	0.197	60 - 90	41.22	-	Propylene	55.6	13.6	-	
10 IV-d	50	0.5	4.64	85	-	55.68	1,2 Dichloroethane	-	-	55.9	
10 IV-e	50	0.5	3.41	85	-	40.92	1,2 Dichloroethane	-	-	50.6	
10 IV-f	25	0.5	1.71	85	-	20.52	1,2 Dichloroethane	-	-	30.8	
10 IV-g	25	0.5	0.57	85	-	6.84	1,2 Dichloroethane	-	-	0.6	
10 IV-h	25	0.5	0.99	135	-	11.40	1,2 Dichloroethane	-	-	5.6	

a. List code numbers corresponding to each emissions source reported in Sections II, III, and IV.

b. Values should be representative of average flow conditions for hours of operation.

c. At actual flow conditions.

d. The pollutants to be covered in this survey are specified in the accompanying instructions.

e. Give stack test data if available (indicate stack sampling method used), otherwise, specify basis used. If unknown, please do not complete these columns.

Notes: 8. Miscellaneous as 1,2 Dichloroethane.
9. See Discussion State of Louisiana "Emission Inventory Questionnaire", Remarks Page 9 dated 10/23/73.

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CCR 000035479

Date Report Submitted: January 18, 1974

ENVIRONMENTAL PROTECTION AGENCY

AIR POLLUTANT EMISSIONS REPORT

FORM APPROVED
OMB NUMBER 158-R75

SECTION VI - STACK AND POLLUTANT EMISSIONS DATA

(Page 4 of 4)

Plant, institution, or establishment name: Continental Oil Company VCM Plant

STACK DATA							ESTIMATE OF POLLUTANT EMISSIONS.			
Source Code ^a	Height Above Grade ft.	Inside Diameter at Top, ft.	Exit Gas Velocity, ^b ft./sec.	Exit Gas Temperature, ^b °F.	Exit Gas Flow Rate, CFM ^c		Pollutant ^d	Quantity		
					Average	Maximum		Tons Per Year	Lbs. Per Hour	
									Average	Maximum
10 IV-1	50	0.5	1.48	120	-	17.76	1,2 Dichloroethane	-	-	8.0
10 IV-1	35	0.83	12.1	80	-	402	1,2 Dichloroethane	-	-	453.0
9 IV-k	50	0.1667	Varies	50 - 100	Varies	-	Vinyl Chloride	397	-	2738.0

a. List code numbers corresponding to each emissions source reported in Sections II, III, and IV.

b. Values should be representative of average flow conditions for hours of operation.

c. At actual flow conditions.

d. The pollutants to be covered in this survey are specified in the accompanying instructions.

e. Give stack test data if available (indicate stack sampling method used), otherwise, specify basis used. If unknown, please do not complete these columns.

Notes: 10. The maximum calculated out breathing rate is based on a 12-hour thermal expansion of the contained vapor plus the maximum filling rate of the individual tanks. As these do not reflect daily actual operations because of seasonal changes and intermittent filling of certain tanks averages and tons per year are unknown.

NOTE: Please read reverse side of this page. Use additional sheets if necessary. Retain last copy.

Date Report Submitted: January 18, 1974

ENVIRONMENTAL PROTECTION AGENCY
AIR POLLUTANT EMISSIONS REPORT
SECTION I - GENERAL INFORMATION

FORM APPROVED
OMB NUMBER 158-R75

For Official Use Only:

Date Sent: _____

Date Returned: _____

UTM Grid Coordinates: _____

SIC No.: _____

Source ID: _____

Plant, institution, or establishment name: Continental Oil Company VCM Plant

Plant, institution, or establishment address: P.O. Box 605 Westlake Louisiana 70669
(Street or Box Number) (City) (State) (Zip)

Person to contact regarding this report: J. C. Lunn, Jr. Title: Process Engineer Telephone: 318/882-0550

Mailing address: P.O. Box 605 Westlake Louisiana 70669
(Street or Box Number) (City) (State) (Zip)

Approximate number of employees at plant, institution, or establishment location: ☐ Less than 100 ☒ 100 or more.

Elevation of plant, institution, or establishment in relationship to mean sea level: 15 feet above mean sea level, _____ feet below mean sea level.

Information is representative of calendar year: 1973

Land area at plant location: 18 acres. Enclose a sketch of layout if there is more than one building.

Plant location: (give nearest cross streets, describe by landmarks or enclose a map, engineering drawing, or sketch) See enclosed maps

☐ Air pollutants of the type indicated in the instructions for the completion of this report, i.e., _____
are not emitted at this plant, institution or establishment. Therefore, no other Sections of the report need be completed.

J. C. Lunn, Jr. (Signed) Process Engineer (Title)

Please return all sections of this report to: _____

Additional forms may be obtained from the above address.

NOTE: Please read reverse side of
this page. Use additional sheets
if necessary. Retain last copy.

CCR 000035481

Date Report Submitted: January 18, 1977

ENVIRONMENTAL PROTECTION AGENCY
AIR POLLUTANT EMISSIONS REPORT

FORM APPROVED
OMB NUMBER 180-270

SECTION II - FUEL COMBUSTION FOR GENERATION OF HEAT, STEAM, AND POWER

Plant, institution, or establishment name: Continental Oil Company - VCM Plant

Normal operating schedule for fuel use: 24 Hours per day Days per week Weeks per year 8184 Hours per year.

Dates of annually occurring shutdowns of operations: Varies - Generally one fifteen Additional operating information enclosed ☐.
day shutdown per eight or nine months

Source ^{1,2} Code	Number of Combustion Sources ^{3,4} (Excl. 100)	Size of Unit (Input) ^{5,6} 10 ⁶ BTU/hr.	Type of Unit ^{4,7}	Installation Date ⁸	Percent Excess Air Used In Combustion (Design) ⁹	Power Output Megawatts ¹⁰
II-a	1	68	Cracking Furnace	1968	NA	NA
II-b	1	68	Cracking Furnace	1968	NA	NA

- List a separate code number to represent each source (e.g., II-a, II-b, II-c, etc.), then enter the same code number and the required data on the continuation of this Section on Page 3, and in Sections V and VI.
- Multiple sources may be grouped if units are similar in size and type, burn the same fuel, or are vented to the same stack.
- Nameplate data are sufficient (give rated or maximum capacity, whichever is greater).
- Hand-fired, underfeed, overfeed, traveling-grate or spreader stoker; cyclone furnace; pulverised, wet or dry bottom with or without fly ash reinjection; rotary or gun type oil burner; etc.
- List separately future equipment and expected date of installation.
- Power generation only.

NOTE: Please read reverse side of this page. Use additional sheets if necessary. Retain last copy.

CCR 000035482

ENVIRONMENTAL PROTECTION AGENCY
AIR POLLUTANT EMISSIONS REPORT

SECTION II - FUEL COMBUSTION FOR GENERATION OF HEAT, STEAM, AND POWER (continued)

Plant, institution, or establishment name: Continental Oil Company

Source Code ^a	Type of Fuel ^b	Annual Consumption ^c					Hourly Consumption ^d		Percent Used for Space Heat	Heat Content BTU/Quan. ^e	Percent Sulfur ^f	Percent Ash (Solid Fuel Only) ^g	Delivered Cost of Fuel \$/Quantity	Future Uses
		Quantity ^d	Percent Distribution by Season				Maximum	Average						
			Spring March/ May	Summer June/ Aug.	Fall Sept./ Nov.	Winter Dec./ Febr.								
II-a	Natural Gas	495000 MSCF	25	25	25	25	68 MSCF	60.5 MSCF	0	1000/SCF	.0004	NA	(1)\$.8059 per MSCF	NA
II-b	Natural Gas	495000 MSCF	25	25	25	25	68 MSCF	60.5 MSCF	0	1000/SCF	.0004	NA	(1)\$.8059 per MSCF	NA

- a. List code numbers corresponding to each source referred to on page 2, (e.g., II-a, II-b, II-c, etc.), then enter required data on this page, and for the same code number sources in Sections V and VI.
- b. Coke, bituminous coal, anthracite coal, lignite; No. 1, 2, 4, 5 and 6 fuel oil; natural gas; LPG; refinery or coke oven gas; residual coke; wood; bark; sludge; etc. (Note: Indicate if two or more fuels are burned in the same boiler and provide all data pertinent to each fuel type.)
- c. Fuel data are to be reported on an "as burned" basis.
- d. Solid fuel, tons; liquid fuel, gallons; gaseous fuel, 1000 cubic feet.
- e. If unknown, please give name and address of fuel supplier.
- f. Sulfur and ash content for each fuel should be a weighted average.
- g. Estimated percent increase or decrease in fuel usage (by fuel type) per year for the five years after the calendar year for which this report is completed. If increase is due to new equipment, please list this equipment separately on page 2 and the expected fuel use on this page.

Note 1: Costs are confidential to Continental Oil Company. Since costs are changing rapidly, the VCM Plant requests exemption from the 5 day requirement to report changes in this item.

NOTE: Please read reverse side of this page. Use additional sheets if necessary. Retain last copy.

Date Report Submitted: January 18, 1971

ENVIRONMENTAL PROTECTION AGENCY
AIR POLLUTANT EMISSIONS REPORT

FORM APPROVED
OMB NUMBER 156-0070

SECTION III - COMBUSTIBLE SOLID AND LIQUID WASTES DISPOSAL

Plant, institution, or establishment name: Continental Oil Company VCM Plant

Combustible solid and liquid wastes disposed of ☐ on site, ☒ off site, ☐ both on and off site. If off site, location of disposal site and/or name of hauler: PPG Industries, Inc. Nelson Industrial Services, Inc. (If disposal of solid and liquid wastes is partly or wholly on site, complete remainder of this page and Sections IV, V and VI; otherwise, skip to Section IV.)

Normal on-site combustion operating schedule: _____ Hours per day _____ Days per week _____ Weeks per year _____ Hours per year.

Seasonal and/or peak operation period: (Specify) _____

Dates of annually occurring shutdowns of operations: _____ Additional operating information enclosed ☐.

Source Code ^a	Waste Material			Method of Disposal ^d	Installation Date	Hourly Burning Rate, lbs.		Auxiliary Fuel Used ^e	Percent Excess Air Used in Combustion (Design)	Future Disposal ^f
	Type ^b	Amount Per Year ^c	Percent Combustible			Average	Maximum			

- List a separate code number to represent each source (e.g., III-a, III-b, III-c, etc.), then enter required data on this page and for the same code number sources in Section V and VI.
- Rubbish, garbage, mixed garbage and rubbish, waste paper, wood chips or sawdust, etc.
- Tons, pounds, or gallons/year.
- Open burning dump; incinerator, single chamber; etc. (See instructions for examples and use appropriate identification numbers; other non-listed methods, specify.)
- Indicate whether auxiliary fuel is used in incinerators and pit burning, and the amount.
- Estimated increase or decrease in combustible solid and liquid wastes disposal rate for the five years after the calendar year for which this report is completed. If increase is due to new equipment, please list this equipment separately.

NOTE: Please read reverse side of this page. Use additional sheets if necessary. Retain last copy.

CCR 000035484

Date Report Submitted: January 18, 1974ENVIRONMENTAL PROTECTION AGENCY
AIR POLLUTANT EMISSIONS REPORTFORM APPROVED
OMB NUMBER 150-275SECTION IV - PROCESS/OPERATIONS EMISSIONS
(Page 1 of 3)Plant, institution, or establishment name: Continental Oil Company VCM PlantNormal operating schedule: 24 Hours per day Days per week Weeks per year 8184 Hours per year.Seasonal and/or peak operation period: NADates of annually occurring shutdowns of operations: Varies - Generally one fifteen day Additional operating information shutdown per eight or nine months ☒ Not : See "Emission Inventory Questionnaire"

Source Code ^a	Processes or Operations Releasing Pollutants to the Atmosphere ^{b,c,d}	Date Installation Went on Line	Raw Materials ^e Used for Processes of Operations				Products ^e of Processes of Operations				Intermittent Operation Only: Average Hours/week ^a	Future Increase or Decrease in Process Rate
			Type	Quantity		Type	Annual Average ^f	Quantity				
				Annual Average ^f	Hourly Process Rate, lbs.			Hourly Process Rate, Lbs.				
				Design	Maximum			Design	Maximum			
IV-a	Vinyl Chloride Production	2/68	Chlorine	460 x 10 ⁶ lbs.	49000	56200	hydrogen Chloride	427 x 10 ⁶ lbs.	44000	52,200	NA	NA
	1,2-Dichloroethane Production		Ethylene	358 x 10 ⁶ lbs.	36000	44000	1,2 Dichloroethane	1180x10 ⁶ lbs.	125000	144,200	NA	NA
	C-500 Vent Stack						Vinyl Chloride	730 x 10 ⁶ lbs.	75000	89,200	NA	NA
IV-b	Tank Car Vent Recovery(H-625)	1969	NA				NA				8	-96.7%
IV-c	Propylene Vent (BL-501)	2/68	NA				NA					NA

- List a separate code number to represent each source (e.g., IV-a, IV-b, IV-c, etc.) then enter required data on this page and for the same code number sources in Sections V and VI.
- Multiple sources may be grouped if similar in size and type.
- Sulfuric acid-contact; aluminum smelting-crucible furnace; cement manufacturing-dry process; etc. (See instruction for examples and use appropriate identification numbers; other non-listed processes and operations, specify.)
- The pollutants to be covered in this report are listed in the accompanying instructions.
- Sulfur burned; pig, foundry returns, or scrap aluminum melted; limestone, cement rock, clay, iron ore used; etc.
- Pounds, tons, gallons, barrels, etc.
- Sulfuric acid produced; aluminum ingots produced; cement produced; etc.
- For intermittent processes, indicate average number of hours per week of operation so that estimates of yearly emissions may be obtained.
- Estimated percent increase or decrease in process rate on a total plant basis for the five years after the calendar year for which this report is completed. If increase is due to new equipment, please list this equipment separately.

NOTE: Please read reverse side of this page. Use additional sheets if necessary. Retain last copy.

CCR 000035485

Date Report Submitted: January 18, 1974ENVIRONMENTAL PROTECTION AGENCY
AIR POLLUTANT EMISSIONS REPORTFORM APPROVED
OMB NUMBER 104-279SECTION IV - PROCESS/OPERATIONS EMISSIONS
(Page 2 of 3)Plant, institution, or establishment name: Continental Oil CompanyVCM Plant

Normal operating schedule: _____ Hours per day _____ Days per week _____ Weeks per year _____ Hours per year.

Seasonal and/or peak operation period: _____

Dates of annually occurring shutdowns of operations: _____ Additional operating information enclosed ☐.

Source Code ^a	Processes or Operations Releasing Pollutants to the Atmosphere ^{b,c,d}	Date Installation Went on Line	Raw Materials Used for Processes of Operations				Products of Processes of Operations				Intermittent Operation Only: Average Hours/week ^h	Future Increase or Decrease in Process Rate		
			Type	Quantity		Type	Annual Average ^f	Quantity						
				Annual Average ^f	Hourly Process Rate, lbs.			Hourly Process Rate, Lbs.						
					Design	Maximum				Design	Maximum			
IV-d	Dry Crude EDC Tank (T-450)	2/68	NA					NA					(1)	NA
IV-e	Pure EDC Tank (T-451)	2/68	NA					NA					(1)	NA
IV-f	Sales EDC Tank (T-452)	2/68	NA					NA					(1)	NA
IV-g	Slops EDC Tank (T-460)	2/68	NA					NA					(1)	NA
IV-h	Tars Tank (T-405)	2/68	NA					NA					(1)	NA

Note: 1. Will vent only upon filling or if a thermal change occurs.

- a. List a separate code number to represent each source (e.g., IV-a, IV-b, IV-c, etc.) then enter required data on this page and for the same code number sources in Sections V and VI.
- b. Multiple sources may be grouped if similar in size and type.
- c. Sulfuric acid-contact; aluminum smelting-crucible furnace; cement manufacturing-dry process; etc. (See instruction for examples and use appropriate identification numbers; other non-listed processes and operations, specify.)
- d. The pollutants to be covered in this report are listed in the accompanying instructions.
- e. Sulfur burned; pig, foundry returns, or scrap aluminum melted; limestone, cement rock, clay, iron ore used; etc.
- f. Pounds, tons, gallons, barrels, etc.
- g. Sulfuric acid produced; aluminum ingots produced; cement produced; etc.
- h. For intermittent processes, indicate average number of hours per week of operation so that estimates of yearly emissions may be obtained.
- j. Estimated percent increase or decrease in process rate on a total plant basis for the five years after the calendar year for which this report is completed. If increase is due to new equipment, please list this equipment separately.

NOTE: Please read reverse side of this page. Use additional sheets if necessary. Retain last copy.

CCR 000035486

Date Report Submitted: January 18, 1974

ENVIRONMENTAL PROTECTION AGENCY

AIR POLLUTANT EMISSIONS REPORT

FORM APPROVED
OMB NUMBER 104-0179

SECTION IV - PROCESS/OPERATIONS EMISSIONS

(Page 3 of 3)

Plant, institution, or establishment name: Continental Oil Company VCM Plant

Normal operating schedule: _____ Hours per day _____ Days per week _____ Weeks per year _____ Hours per year.

Seasonal and/or peak operation period: _____

Dates of annually occurring shutdowns of operations: _____ Additional operating information enclosed ☐.

Source Codes	Processes or Operations Releasing Pollutants to the Atmosphere ^{b,c,d}	Date Installation Went on Line	Raw Materials Used for Processes of Operations				Products of Processes of Operations				Intermittent Operation Only: Average Hours/week ^h	Future/ Increase or Decrease in Process Rate
			Type	Quantity		Type	Annual Average ^f	Quantity				
				Annual Average ^f	Hourly Process Rate, lbs.			Hourly Process Rate, Lbs.	Design	Maximum		
IV-1	Wet Crude EDC Tank (T-453)	1968	NA				NA				(1)	NA
IV-j	Dock EDC Storage Tank (T-415)	1970	NA				NA				(1)	NA
IV-k	Dock VCM Recovery Vent (BL-409)	1970	NA				NA				290 hrs/yr	-99%

- List a separate code number to represent each source (e.g., IV-a, IV-b, IV-c, etc.) then enter required data on this page and for the same code number sources in Sections V and VI.
- Multiple sources may be grouped if similar in size and type.
- Sulfuric acid-contact; aluminum smelting-crucible furnace; cement manufacturing-dry process; etc. (See instruction for examples and use appropriate identification numbers; other non-listed processes and operations, specify.)
- The pollutants to be covered in this report are listed in the accompanying instructions.
- Sulfur burned; pig, foundry returns, or scrap aluminum melted; limestone, cement rock, clay, iron ore used; etc.
- Pounds, tons, gallons, barrels, etc.
- Sulfuric acid produced; aluminum ingots produced; cement produced; etc.
- For intermittent processes, indicate average number of hours per week of operation so that estimates of yearly emissions may be obtained.
- Estimated percent increase or decrease in process rate on a total plant basis for the five years after the calendar year for which this report is completed. If increase is due to new equipment, please list this equipment separately.

NOTE: Please read reverse side of this page. Use additional sheets if necessary. Retain last copy.

CCR 000035487

Date Report Submitted: January 18, 1974

ENVIRONMENTAL PROTECTION AGENCY

AIR POLLUTANT EMISSIONS REPORT

FORM APPROVED
OMB NUMBER 1505-R75

SECTION V - AIR CLEANING EQUIPMENT

(Page 1 of 2)

Plant, institution, or establishment name: Continental Oil Company VCM Plant

Source Code ^a	Type of Air Cleaning Equipment ^{b,c}	Installation Date ^e	Pollutant Removed ^{c,d}	Efficiency ^e		Inlet Gas Temperature, °F	Inlet Gas Flow Rate, t CFM	Exit Gas Pressure, PSI
				Design Percent	Operating Percent			
IV-a	014	1968	1,2 Dichloroethane	NA	NA	-10	10,865	48 psig
IV-a	052	1968	Hydrogen Chloride 1,2Dichloroethane	NA	NA	120	10,865	1-3" W.C.
IV-a	053	1971	Hydrogen Chloride 1,2Dichloroethane	NA	NA	100	11,580	1-3" W.C.
IV-a	047	1968	1,2 Dichloroethane	-	94	135	715	20
IV-b	047	1969	Vinyl Chloride	100	0 to 100	Varies	Varies	Varies
IV-k	047	1970	Vinyl Chloride	100	0 to 100	Varies	Varies	Varies
Future IV-a	046	1975	Ethylene	99+	NA	NA	NA	NA

- List code numbers corresponding to each emissions source reported in Sections II, III, and IV.
- Wet scrubber, electrostatic precipitator, fabric filter, etc. (See instructions for examples and use appropriate identification numbers; other non-listed type, specify.)
- Please list future equipment separately.
- The pollutants to be covered in this survey are specified in the accompanying instructions.
- Give efficiency in terms of pollutant removed.
- At actual flow conditions.

NOTE: Please read reverse side of this page. Use additional sheets if necessary. Retain last copy.

CCR 000035488

Date Report Submitted: January 18, 1974

ENVIRONMENTAL PROTECTION AGENCY
AIR POLLUTANT EMISSIONS REPORT

FORM APPROVED
OMB NUMBER 104-2

SECTION V - AIR CLEANING EQUIPMENT
(Page 2 of 2)

Plant, institution, or establishment name: Continental Oil Company VCM Plant

Source Code ^a	Type of Air Cleaning Equipment ^{b,c}	Installation Date ^c	Pollutant Removed ^d	Efficiency ^e		Inlet Gas Temperature, °F	Inlet Gas Flow Rate, CFM	Exit Gas Pressure, PSI
				Design Percent	Operating Percent			
Future IV-b	047	1975	Vinyl Chloride	96.7	NA	NA	NA	NA
Future IV-k	047	1975	Vinyl Chloride	99	NA	NA	NA	NA

- List code numbers corresponding to each emissions source reported in Sections II, III, and IV.
- Wet scrubber, electrostatic precipitator, fabric filter, etc. (See instructions for examples and use appropriate identification numbers; other non-listed type, specify.)
- Please list future equipment separately.
- The pollutants to be covered in this survey are specified in the accompanying instructions.
- Give efficiency in terms of pollutant removed.
- At actual flow conditions.

NOTE: Please read reverse side of this page. Use additional sheets if necessary. Retain last copy.

CCR 000035489

Date Report Submitted: January 18, 197ENVIRONMENTAL PROTECTION AGENCY
AIR POLLUTANT EMISSIONS REPORTFORM APPROVED
OMB NUMBER 158-R78SECTION VI - STACK AND POLLUTANT EMISSIONS DATA
(Page 1 of 4)Plant, institution, or establishment name: Continental Oil Company VCM Plant

STACK DATA							ESTIMATE OF POLLUTANT EMISSIONS.			
Source Code ^a	Height Above Grade ft.	Inside Diameter at Top, ft.	Exit Gas Velocity, ^b ft./sec.	Exit Gas Temperature, ^b °F	Exit Gas Flow Rate, CFM ^c		Pollutants	Quantity		
					Average	Maximum		Tons Per Year	Average	Maximum
II-a	120	4.5	24.13	550	46020		1,2 Particulate Matter	9.12	2.228	
II-b	120	4.5	24.13	550	46020		1,3 Sulfur Dioxide	0.179	0.0438	
							1,2,4 Nitrogen Dioxide			
							1,5 Hydrocarbons			
IV-a	148	3.0	27.3	80 - 100	11580		5,6 Particulate Matter			
							4 Sulfur Dioxide			
							4 Nitrogen Dioxide			

a. List code numbers corresponding to each emissions source reported in Sections II, III, and IV.

b. Values should be representative of average flow conditions for hours of operation.

c. At actual flow conditions.

d. The pollutants to be covered in this survey are specified in the accompanying instructions.

e. Give stack test data if available (indicate stack sampling method used), otherwise, specify basis used. If unknown, please do not complete these columns.

- Notes: 1. Combined sources II-a, II-b.
2. Calculated using M. I. Weisburd's "Air Pollution Control Field Manual" U. S. Government Printing Office Publication # 937, 1962.
3. Calculated using Natural Gas Sulfur content.

NOTE: Please read reverse side of this page. Use additional sheets if necessary. Retain last page.

ENVIRONMENTAL PROTECTION AGENCY
AIR POLLUTANT EMISSIONS REPORTSECTION VI - STACK AND POLLUTANT EMISSIONS DATA
(Page 2 of 4)Plant, institution, or establishment name: Continental Oil Company VCM Plant

STACK DATA							ESTIMATE OF POLLUTANT EMISSIONS.			
Source Code	Height Above Grade ft.	Inside Diameter at Top, ft.	Exit Gas Velocity, ft./sec.	Exit Gas Temperature, °F.	Exit Gas Flow Rate, CFM.		Pollutant ⁴	Quantity		
					Average	Maximum		Tons Per Year	Average	Maximum
IV-a							7 Hydrocarbons Methane	646.5	158	-
							Ethane	20.5	5	-
							Ethylene	1808.7	442	-
							Ethyl Chloride	1853.7	453	-
							1,2 Dichloroethane	2201.5	538	-
							Vinyl Chloride	499.2	122	-
							8 Miscellaneous	945.3	231	-

- a. List code numbers corresponding to each emissions source reported in Sections II, III, and IV.
b. Values should be representative of average flow conditions for hours of operation.
c. At actual flow conditions.
d. The pollutants to be covered in this survey are specified in the accompanying instructions.
e. Give stack test data if available (indicate stack sampling method used), otherwise, specify basis used. If unknown, please do not complete these columns.

- Notes: 4. Analyzed by an independent company with none found.
5. Unknown.
6. Should be low, since this stream passes through a high impact venturi water scrubber and a water spray tower.
7. Gas Chromatograph.

NOTE: Please read reverse side of this page. Use additional sheets if necessary. Retain last copy.

Date Report Submitted: January 18, 1974

ENVIRONMENTAL PROTECTION AGENCY

AIR POLLUTANT EMISSIONS REPORT

FORM APPROVED
OMB NUMBER 156-875

SECTION VI - STACK AND POLLUTANT EMISSIONS DATA

(Page 3 of 4)

Plant, institution, or establishment name: Continental Oil CompanyVCM Plant

STACK DATA							ESTIMATE OF POLLUTANT EMISSIONS.			
Source Code	Height Above Grade ft.	Inside Diameter at Top, ft.	Exit Gas Velocity, ft./sec.	Exit Gas Temperature, °F.	Exit Gas Flow Rate, CFM.		Pollutants	Quantity		
					Average	Maximum		Tons Per Year	Lbs. Per Hour	
									Average	Maximum
9 IV-b	25	0.1667	Varies	50 - 90	Varies	-	Vinyl Chloride	303.2	-	1516
9 IV-c	120	0.667	0.197	60 - 90	41.22	-	Propylene	55.6	13.6	-
10 IV-d	50	0.5	4.64	85	-	55.68	1,2 Dichloroethane	-	-	55.9
10 IV-e	50	0.5	3.41	85	-	40.92	1,2 Dichloroethane	-	-	50.6
10 IV-f	25	0.5	1.71	85	-	20.52	1,2 Dichloroethane	-	-	30.8
10 IV-g	25	0.5	0.57	85	-	6.84	1,2 Dichloroethane	-	-	0.6
10 IV-h	25	0.5	0.99	135	-	11.40	1,2 Dichloroethane	-	-	5.6

a. List code numbers corresponding to each emissions source reported in Sections II, III, and IV.

b. Values should be representative of average flow conditions for hours of operation.

c. At actual flow conditions.

d. The pollutants to be covered in this survey are specified in the accompanying instructions.

e. Give stack test data if available (indicate stack sampling method used), otherwise, specify basis used. If unknown, please do not complete these columns.

Notes: 8. Miscellaneous as 1,2 Dichloroethane.

9. See Discussion State of Louisiana "Emission Inventory Questionnaire", Remarks Page 9 dated 10/23/73.

NOTE: Please read reverse side of this page. Use additional sheets if necessary. Retain last copy.

Date Report Submitted: January 18, 1974ENVIRONMENTAL PROTECTION AGENCY
AIR POLLUTANT EMISSIONS REPORTFORM APPROVED
OMB NUMBER 150-R76SECTION VI - STACK AND POLLUTANT EMISSIONS DATA
(Page 4 of 4)Plant, institution, or establishment name: Continental Oil Company VCM Plant

STACK DATA							ESTIMATE OF POLLUTANT EMISSIONS.			
Source Codes	Height Above Grade ft.	Inside Diameter at Top, ft.	Exit Gas Velocity, ^b ft./sec.	Exit Gas Temperature, ^b °F.	Exit Gas Flow Rate, CFM.		Pollutants	Quantity		
					Average	Maximum		Tons Per Year	Lbs. Per Hour	
									Average	Maximum
10 IV-1	50	0.5	1.48	120	-	17.76	1,2 Dichloroethane	-	-	8.0
10 IV-1	35	0.83	12.1	80	-	402	1,2 Dichloroethane	-	-	453.0
9 IV-k	50	0.1667	Varies	50 - 100	Varies	-	Vinyl Chloride	397	-	2738.0

- a. List code numbers corresponding to each emissions source reported in Sections II, III, and IV.
- b. Values should be representative of average flow conditions for hours of operation.
- c. At actual flow conditions.
- d. The pollutants to be covered in this survey are specified in the accompanying instructions.
- e. Give stack test data if available (indicate stack sampling method used), otherwise, specify basis used. If unknown, please do not complete these columns.

Notes: 10. The maximum calculated out breathing rate is based on a 12-hour thermal expansion of the contained vapor plus the maximum filling rate of the individual tanks. As these do not reflect daily actual operations because of seasonal changes and intermittent filling of certain tanks averages and tons per year are unknown.

NOTE: Please read reverse side of this page. Use additional sheets if necessary. Retain last copy.

CCR 000035493