Inspections

Lake Michigan, proximal to the outfalls appeared clear, no observed floating solids, no oil sheen.

This time of year, Amoco WWTP is at low flow, and the two 10,500,000 gal equalization tanks were able to receive and store residual and excess surface waters from the facility.

Amoco WWTP has not experience an upset in the treatment plant during this weeks events.

Amoco, joint commission to investigate the line brakes, weather related events. etc.

enclosure:

1) MSDS fire suppressor 4pp
2) Fire Report 1 pp

eld

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live

Evan Bayh
Governor
Kathy Prosser
Commissioner

504 North Broadway
Suite 418
Gary, Indiana 46402
Telephone 219/881-6712
Environmental Helpline 1-800-451-6027

C. Fractionation tower.
. Frozen line, Small leak
. Floor drains active, drains to WWTP

D. Pipe Ally
. Broken flange, due to pressure and low temp't
. Pipe Ally has no central collection system in place to collect spills, fate of the oil is to surface and ground water. Monitoring wells are strategicly in place ??????

E) Fuel storage tank 3916
. Spilled occurred Thursday, not weather related, flange failure.
. Spill contained within the soil dike, vac trucks used to pick up the oil. Trucks froze, and sand was used.
. Spill 7560 gals, recovered 5670 gals.

F) Outfall 002, non-contact cooling water appeared clear, colorless, no observed solids no observed oil sheen.
Outfall 001, process water appeared clear, colorless, no solids no oil sheen.

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504 North Broadway
Suite 418
Gary, Indiana 46402
Telephone 219/881-6712
Environmental Helpline 1-800-451-6027

January 25, 1994

TO: DMD

FROM: ELD

cc: S.Boswell
R.Pearson

REF: Amoco after the Fire

A) DDU: New unit, start up in June 93, no asbestos used
alternate insulation applied to the units

- diesel fuel was let to burn into atmosphere
- foam was used as a fire suppressor.
- no remnants of foam observed, lots of water, snow melt and oil sheen on the floors,
- floor drains are active, drains to WWTP oil recovery/separator system.
- weather related, line freeze
- This unit will be down for awhile.

B) # 11 Pipe Still

- light naphtha, lo pressure line, collected moisture and froze.
- flange broke/separated, naphtha escaped, gas concentrated above fans and motor, ignition.
- insulations, mixed asbestos and non-asbestos insulations. all insulations appeared contained and saturated with water, Asbestos released less than 1 1/2 lb. (wet) loss. Outside contractors for asbestos abatement.
- No residual foam observed, lots of water and snow melt.
- Floor drains appeared active, drains to WWTP oil recovery separator unit.
- weather related, moisture and sub-zero temp't

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File

EPA

United States Environmental Protection Agency
Washington, D. C. 20460

NPDES Compliance Inspection Report

Form Approved
OMB No. 2040-0073
Approval Expires 7-31-85

Section A: National Data System Coding

Transaction Code	NPDES	yr/mo/day	Inspection Type	Inspector	Fac Type
5	IN0000108	940124	R	5	2

Remarks

Reserved	Facility Evaluation Rating	BI	QA	Reserved
	3	N	N	

Section B: Facility Data

Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Amoco Oil Company American Oil Co. 2815 Indianapolis Blvd Whiting, IN 46394	10:30 ☒ AM ☐ PM	3/2/90
	Exit Time/Date	Permit Expiration Date 2/28/95

Name(s) of On-Site Representative(s)	Title(s)	Phone No(s)
J.E. Naccache	Environmental mgr. Water	219 473-3179

Name, Address of Responsible Official	Title	Contacted
John White	Environmental, Health + Safety mgr	☒ Yes ☐ No
	Phone No. 219-473-3179	

Section C: Areas Evaluated During Inspection
(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

S	Permit	S	Flow Measurement	N/A	Pretreatment	N	Operations & Maintenance
N	Records/Reports	N	Laboratory	N/A	Compliance Schedules	N	Sludge Disposal
M	Facility Site Review (1)	S	Effluent/Receiving Waters (2)	N/A	Self-Monitoring Program	(1)	Other:

Section D: Summary of Findings/Comments (Attach additional sheets if necessary)

(1) This Recom inspection was performed 48 HRS. After the fire at the Amoco facility, Whiting, INDIANA. The weather was cold and rainy. Surface water throughout the facility was observed to contain oil sheen. See Report Amoco After the FIRE 1/25/94.

(2) Effluent and Receiving waters appeared clear, colorless and no observed oil sheen at outfall 001 + 002

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone	Date
[signature]	IDEM-OWM	1/25/94

Signature of Reviewer	Agency/Office	Date
[signature]	IDEM	2/23/94

Regulatory Office Use Only

Action Taken	Date	Compliance Status
		☐ Noncompliance ☐ Comoliance

EPA Form 3560-3 (Rev. 3-85) Previous editions are obsolete.

JC

TABLE A-4. Summary of Test Conditions for the Algal Growth Test.

1. Test type:	Static
2. Temperature:	24 ± 2°C
3. Light Quality:	"Cool White" flourescent lighting
4. Light Intensity:	400 ± 40 ft-c
5. Photoperiod:	Continuous illumination
6. Test flask size:	250 mL
7. Test Solution Volume:	100 mL
8. Age of stock culture used for inoculum:	7 to 10 days
9. Initial cell density:	10,000 ± 500 cells/mL
10. Number of replicates per concentration:	3
11. Shaking rate:	Twice daily by hand
12. Dilution water:	Algal stock culture medium w/o EDTA
13. Dilution factor:	Approximately 0.3
14. Test concentrations:	0, 3, 10, 30, 60 and 100%
15. Test Duration:	96 hrs
16. Effect measured:	Growth (cell counts), to determine % inhibition

TABLE A-3. Summary of Test Conditions for *Ceriodaphnia* Survival and Reproduction Test.

1. Test Type:	Static renewal
2. Temperature:	25 ± 1° C
3. Light Quality:	Ambient environmental chamber
4. Light Intensity:	50-100 ft-c
5. Photoperiod:	16 hrs light, 8 hrs dark
6. Test Chamber Size:	29.6 mL
7. Test Solution Volume:	15 mL
8. Test Solution Renewal:	Daily
9. Age of Test Organism:	Less than 24 hrs old, all released within a 6 hr time period
10. No. of Replicate Test Chambers per Concentration	10
11. No. of Test Organisms per Replicate	1
12. Feeding Regime:	Daily, 100 ul
13. Aeration:	None
14. Dilution Water:	Moderatly hard, reconstituted Milli-Q water
15. Test Concentrations:	0, 6.25, 12.5, 25.0, 50.0, and 100% effluent
16. Dilution Factor:	ca 0.5
17. Test Duration:	168 hrs
18. Effects Measured:	Survival; reproduction

TABLE A-2. Summary of Test Conditions for the Fathead Minnow (*Pimephales promelas*) Larval Survival and Growth Test.

1. Test Type:	Static renewal
2. Temperature:	25 ± 1° C
3. Light Quality:	Ambient environmental chamber
4. Light Intensity:	50-100 ft-c
5. Photoperiod:	16 hrs light, 8 hrs dark
6. Test Chamber Size:	600 mL
7. Test Solution Volume:	400 mL
8. Renewal of Test Solution:	Every 48 hrs
9. Age of Test Organism:	1-5 days old
10. No. of Embryos/Chamber	10
11. No. of Replicate Test Chambers/Concentration:	3
12. Embryos/Concentration:	30
13. Feeding Regime:	Feeding required -0.1ml of <24 hr old *Artemia* nauplii three times daily
14. Aeration:	None, unless DO falls below 4.0 mg/L
15. Dilution Water:	Dechlorinated micro-filtered tapwater
16. Test Concentrations:	Control, 3, 10, 30, 60, 100%
17. Dilution:	ca. 0.3
18. Test Duration:	7 days
19. Measured Effects:	Percent larval survival; larval growth rate

TABLE A-1. Summary of Test Conditions for the Fathead Minnow (*Pimephales promelas*) Embryo-Larval Survival and Teratogenicity Test.

1. Test Type:	Static renewal
2. Temperature:	25 ± 1° C
3. Light Quality:	Ambient environmental chamber
4. Light Intensity:	50-100 ft-c
5. Photoperiod:	16 hrs light, 8 hrs dark
6. Test Chamber Size:	600 mL
7. Test Solution Volume:	200 mL
8. Renewal of Test Solution:	Daily
9. Age of Test Organism:	< 48hrs
10. No. of Embryos/Chamber	25
11. No. of Replicate Test Chambers/Concentration:	4
12. Embryos/Concentration:	100
13. Feeding Regime:	Feeding not required
14. Aeration:	None
15. Dilution Water:	Dechlorinated micro-filtered tapwater
16. Test Concentrations:	Control, 3, 10, 30, 60, 100%
17. Dilution:	ca. 0.3
18. Test Duration:	168 hrs (7 days)
19. Measured Effects:	Percent hatch; percent survival; percent teratogenic response in live and/or dead larvae

TABLE 3. Water Chemistry Data for Amoco Oil (CD00998).

	Test Conc.		Chronic Fathead Minnow Test (Range)	Chronic Ceriodaphnia (Range)
Dissolved Oxygen (mg/l)	0%	Int.	5.3-7.7	7.5-8.2
		Final	4.5-7.4	7.6-8.0
	100%	Int.	8.6-10.5	8.4-8.9
		Final	4.3-7.0	8.1-8.2
pH (Std. Units)	0%	Int.	7.30-7.96	7.89-8.08
		Final	7.68--8.13	7.51-7.96
	100%	Int.	7.54-8.23	7.39-8.04
		Final	7.72-8.14	7.75-7.85
Temperature (C)	0%		23.7-25.9	25.2-25.3
	100%		23.1-25.1	24.4-25.1
Alkalinity (mg/l $CaCO_3$)	0%		82	82
	100%		1150	1150
Hardness (mg/l $CaCO_3$)	0%		116	84-95
	100%		364	364
Specific Conductivity (uS)	0%		239	176
	100%		1108	1108
Total Residual Chlorine	None Determined			

TABLE 2. Ceriodaphnia Survival and Reproduction Test Results for Amoco Oil (CDO 0988).

Effluent		% Survival	Neonate Reproduction	Std Dev
0		90.0	15.44	6.87
6.25	*	66.6	10.56	4.61
12.5	@	40.0	8.90	7.05
25.0	@	10.0	9.10	5.51
50.0	@	0.0	2.7	2.58
100.0	@	0.0	0.0	0.0

(@) The mortality observed in this group was significantly greater than the mortality in the control. This group was not included in the analysis of live offspring.

(*) The mean number of live offspring for this group was significantly less than the control mean at alpha 0.05 (1-sided) by Steel's test.

Chronic Toxicity

Survival

NOEC = 6.25%

LOEC = 12.50%
ChV = 8.84%

TUc = 16.0
LC50 = 9.62%
TUc = 10.4

Reproduction

NOEC = Not determined by experimental design, assume 3.13%
LOEC = 6.25%
ChV = ≤4.42 (theoretical)

TUc = ≥31.95 (theoretical)
IC50 = 27.0% (6.2-38.6)
IC25 = 8.5 (3.1-28.9)

TABLE 1. Fathead Minnow Larval Growth and Survival Test for Amoco Oil (CDO 0988).

Eff. Conc.	Rep.	Survival (%)	Conc. Mean	Rep. Growth Mean Adjusted Dry Weight (mg)	Conc. Growth Mean Dry Weight (mg)
Control	A	90		.452	
	B	91		.411	
	C	90		.397	
	D	90		.490	
			92		.44
6.25%	A	90		.321	
	B	91		.397	
	C	80		.451	
	D	100		.329	
			92		.37
12.5%	A	100		.405	
	B	100		.403	
	C	100		.398	
	D	100		.479	
			100		.42
25.0%	A	100		.399	
	B	100		.371	
	C	100		.409	
	D	100		.442	
			100		.40
50.0%	A	60		.322	
	B	45		.322	
	C	40		.130	
	D	20		.190	
			41 *		.24 *
100%	A	0		--	
	B	0		--	
	C	0		--	
	D	0		--	
			0 *		-- *

(*) Indicates a significant difference from controls.

<u>Chronic Toxicity</u>

<u>Survival</u>

NOEC = 25.0 %
LOEC = 50.0%
ChV = 35.4%
TUc = 4
LC50 = 46.5

<u>Growth</u>

NOEC = 25.0%
LOEC = 50.0%
ChV = 35.4%
TUc = 4

Ceriodaphnia Survival and Reproduction Test

Neonates of Ceriodaphnia dubia were exposed to a dilution series of Amoco Oil sample for a period of seven days. Results are summarized in Table 2. Statistical evaluation of the survival data, by Probit Analysis, resulted in a calculated LC50 value of 9.62% affluent (95% C.I. 2.64 - 16.66). Fisher's Exact test was used to determine a NOEC of 6.25% and a LOEC of 12.5%. The chronic value was 8.84%. Based on the NOEC, the TUc was calculated to be 16.0. Using the LC50, the TUc was calculated at 10.4.

Reproduction was a more sensitive endpoint. Data was analyzed using Dunnett's Procedure and the Bootstrap Technique. The LOEC was 6.25%, the lowest test concentration. No NOEC was determined. For purposes of discussion, it is assumed that if an additional lower concentration had ben run, it would have been the NOEC. This allows the calculating "best case" values of ≤4.42% for the chronic value, and ≥31.95 for the TUc. The IC50 was 27.0 and the IC25 was 8.5.

Algal Assay

This test was not requested as part of the chronic test battery on this sample.

concentrations and the control population. The teratogenicity observed in this test is "relative teratogenicity" since the point at which the embryos are exposed to the test solution varies between tests. Thus, during blastulation and egg cleavage a greater response to toxic chemicals will be exhibited as an observed teratogenic response than would be at later stages of development.

After exposure to various test concentrations, percent survival and growth response are the end-points of the fathead minnow larval growth and survival test. Test data are statistically compared to determine if a significant difference existed between the test concentrations and the control. Significantly different values are than used to determine the LOEC, NOEC, and chronic value.

Two end-points are measured in the Ceriodaphia test, these are percent survival and reproduction rates. The values obtained for each test concentration is statistically compared to the control value to determine if there is a significant difference. Based on these differences a LOEC and NOEC are identified and used to calculate the chronic value (ChV). Reproduction response can also be evaluated using a point estimate technique, the Inhibition Concentration (IC).

In the algal growth test the end point measured is total cell production in each concentration. The value obtained for each test concentration is compared to the control to determine the percent growth inhibition. Differences in cell counts are then compared statistically to determine if differences were significant.

RESULTS

Fathead Minnow Larval Growth and Survival Test

Table 1 contains the results of the larval growth and survival test performed on the Amoco Oil sample. There were no significant deviations from normal SOP requirements. Water chemistry variability was within the normal range.

Results for both endpoints, survival and growth, were the same. When statistically evaluated, using the Dunnett's procedure, the NOEC was 25% effluent and the LOEC was 50% effluent. These values were used to calculate a chronic value of 35.4%. The chronic toxic unit (TUc) was 4.0. In addition, a LC50 (point estimate) was calculated using the binomial test. The value obtained as 46.5% effluent.

Fathead Minnow Embryo-Larval Survival and Teratogenicity Test

This particular test was not requested as a part of this survey.

INTRODUCTION

A water sample from Amoco Oil, Whiting, Indiana was tested for its chronic effect by utilizing a battery of two chronic toxicity tests. These tests were conducted by the U.S. Environmental Protection Agency, Central Regional Laboratory in Chicago, Illinois for the Region V, Water Division.

GENERAL TEST METHODS

The U.S. Environmental Protection Agency, Region V, Central Regional Laboratory (CRL) chronic test battery, used to characterize a sample, is designed to test as many as three trophic levels by employing up to four separate chronic toxicity tests. The chronic tests include a static renewal exposure of fathead minnows (Pimephales promelas) in an 7 day embryo-larval survival and teratogenicity test, a static renewal exposure of larval fathead minnows in a 7 day growth and survival test, Ceriodaphia dubia in a seven day survival and reproduction test, and Selenastrum capricornutum in an algal growth test. General test conditions are summarized in Appendix Tables A-1, A-2, A-3 and A-4, respectively.

Dilution water for the embryo-larval and the larval growth test is dechlorinated micro-filtered tapwater, originally obtained from Lake Michigan. Dilution water for the Ceriodaphnia test is a moderately hard dilute mineral water (DMW).

Algal assay media, prepared as described in the SOP, is used as the dilution water in the algal growth test. In addition, the filtered effluent is spiked with nutrient reagent solutions to assure that minimum acceptable concentrations of macro- and micro-nutrients for proper growth are available in all test concentrations.

Select physical and chemical characteristics of the dilution waters and samples are monitored at the initiation of the test and each day at the time of test solution renewal. Parameters include pH, hardness, specific conductivity, dissolved oxygen, temperature and alkalinity (Table 3). Total residual chlorine is analyzed in the sample prior to test initiation. Test initiation is begun within 36 hours of the termination of sample collection.

In the fathead minnow embryo-larval test, embryos and their successfully hatched larvae are subjected to various concentrations of sample. Three end-points are analyzed for in the embryo-larval survival and teratogenicity test. These include percent hatchability, relative percent teratogenicity, and percent survival. The chronic value (ChV) is the geometric mean of the lowest observed effect concentration (LOEC) and the no observed effect concentration (NOEC). These values are derived based on statistically significant differences between the test

Review Record for A[illegible]oco Oil (CDO 0988)

8-25-92

Team Leader and Date (X) Reviewed ( ) Unreviewed

for Chi Tang 8-25-92

Section Chief and Date (X) Reviewed ( ) Unreviewed

James H. Adams, II. 8/25/92

QC Coordinator and Date ( ) Reviewed ( ) Unreviewed

Sylvia Griffin 8-25-92

Data Management Coordinator and Date Received

Date Transmitted AUG 25 1992

Please sign and date this form below and return it with any comments to:

Sylvia Griffin
Data Management Coordinator
Region 5 Central Regional Laboratory
SL - 10C

9-8-92

Received by and Date

Comments:

CHRONIC TOXICITY STUDY FY'92

AMOCO OIL

WHITING, INDIANA

Data Set: CDO 0988
Sample No: 92CM13S01

ORGANIC LABORATORY SECTION--BIOLOGY TEAM
U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION V, CENTRAL REGIONAL LABORATORY
536 SOUTH CLARK STREET
CHICAGO, ILLINOIS 60605

AUGUST 24, 1992

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.: 92CW13
PROJECT NAME: Amoco Oil Co., Whiting, Ind.
SAMPLERS: (Signature) J. Dzuneyelner

D920000988
AFE 124; 9E

STA. NO.	DATE 1992	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	BIO-Chronic						REMARKS
													TAG # CD0988
S01	7-7,8	11:00	✓		Outfall 001	1	1						S-036647

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
J. Dzuneyelner	7-8-92 1125	William Lewis			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	
		William Lewis	7/8/92 1226pm		

Distribution: White — Accompanies Shipment; Pink — Coordinator Field Files; Yellow — Laboratory File

5-06362

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION V
Surveillance and Analysis Division
536 South Clark St.
Chicago, Illinois 60605

CENTRAL DISTRICT OFFICE

RV 3460.1 (10/30/74)

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION V
CENTRAL DISTRICT OFFICE
FIELD RECORD

CUSTODY
NON-CUSTODY

DISCHARGER Amoco Oil Company
NPDES NUMBER IN0000108
ADDRESS Whiting, Indiana

CONTACT Joseph E. Naccarde 219-473-3746

SAMPLING LOCATION Outfall 001, sampling station - wet well - prior to discharge pump
OUTFALL NUMBER: 001
LAT ___ ° ___ ' ___ " LONG ___ ° ___ ' ___ "
RECEIVING WATER: Lake Michigan
M.P. OF DISCHARGE INTO STREA

SAMPLE INFORMATION:

☐ Municipal ☐ Industrial

Other

☐ Influent ☑ Effluent
☐ Grab ☑ Cont. Comp.
___ hr. Comp. at 24 hr. ~~Intervals~~ every 30 minutes
☐ Time Comp. ☐ Comp. by Flow
☐ CST ☐ CDT ☐ EST ☐ EDT

SAMPLER:

☐ MANUAL ☑ AUTOMATIC ☐ EPA ☐ DISCHARGER
TYPE
FLOW MEASUREMENT: Ammcor
Flume/Weir Type & Size
Integrator Finish
Integrator Start
Intg. F ( ) x Diff. ( ) =
☐ EPA ☐ DISCHARGER ☐ OTHER
☑ TOTALIZER ☐ INSTANTANEOUS ☐ AVERAGE DAILY
☐ PLANT RECORDS ☐ ESTIMATE ☐ OTHER

SAMPLE COLLECTION

	Composite	Grab						PRES. CODE [2]	
SAMPLED BY	S. Wyrwycheski								
CDO Log Numbers	92CW13501		501					Microbiology	00
STORET Stn. No.								Gen. Chem.	01
DATE	7-7-92 / 7-8-92		7-7-92					Petro. Prod.	02
TIME	11:00 / 10:30		10:10					Pest. Org. PCBs	03
DEPTH								Nutrients	04
FLOW (MGD) [1]	10.6							Tot. Diss. Phos.	05
TOT. Cl2 RES. mg/l								Oil & Grease	06
TEMP °C.			32.1					Tot. Metals	07
pH (field)			7.20					Diss. Metals	08
D.O. (mg/l)								Phenolics	09
CONDUCTANCE								Cyanide	10
% FROM RT. BANK UPSTR.									
SAMPLING MILE POINT									
PRESERVATIVE AND/OR PRESERVATIVE CODE			temp pH						

[1] Use Avg. Flow for Composites and Inst. Flow for Grabs
[2] Circle or Indicate Analysis and Enter Preservative Code

REMARKS:

SAMPLER'S SIGNATURE S. Wyrwycheski

DUTY TIME

Initial Time	Final Time	Initial Time	Final Time	Initial Time	Final Time

11/6/89 - Revision

NPDES BIOMONITORING INSPECTION
SUPPLEMENTAL DATA

1. Facility name and address: 1. Amoco Oil Company
Whiting, Indiana

2. NPDES Number: 2. IN 0000 108

3. SIC Code: 3. 2911

4. Date and time sampled: 4. July 7 to 8, 1992 at 11:00 a.m. on July 7, 1992 to 10:30 a.m. on July 8, 1992

5. Outfall No. samples: 5. Outfall 001

6. Daily average flow of discharge at time of sampling: 6. 10 to 11 MGD

7. Design average flow of treatment system or average flow of discharge: 7. 16 to 18 MGD

8. Sampling location description: 8. Facility's sampling station - wet well - prior to discharge pipe

9. Type of effluent sampled: 9. Treated Refinery process water including stormwater run-off

10. Description of treatment facilities online at time of sampling: 10. All treatment units were operational. Incinerator was down and clarifier sludge water was not being discharged through outfall 001

11. Were production level and treatment operations normal? 11. Yes X No

If Not, Describe

12. Effluent appearance: 12. Effluent was clear with slight yellowish in color, slight foam at the receiving waters, and no oil sheen.

NPDES BIOMONITORING INSPECTION
SUPPLEMENTAL DATA
(Continued)

13. Infield measurements: 13. Temp 32.1 °C

pH 7.20 s.u

Chlorine —

14. Name of receiving water: 14. Lake Michigan

15. $7Q_{10}$ Low flow of receiving water at nearest upstream USGS station: 15. N/A cfs

16. Was the plant chlorinating the effluent at time of sampling? 16. Yes ____ No X

17. Description of effluent sample preservation and transport procedures: 17. Preservation: Sample was preserved with the ice during sampling & transporting

Transport: via GSH car to ERL

18. Name of person collecting sample: 18. S. WYNNYCHENKO

United States Environmental Protection Agency
Washington, D. C. 20460

EPA NPDES Compliance Inspection Report

Form Approved
OMB No. 2040-0003
Approval Expires 7-31-85

Section A: National Data System Coding

Transaction Code	NPDES	yr/mo/day	Inspection Type	Inspector	Fac Type
1 N 2 5	3 IN0000108 11	12 920707 17	18 B	19 R	20 2

Remarks 21 — 66

Reserved	Facility Evaluation Rating	BI	QA	Reserved
67 — 69	70	71 D	72 N	73 — 74 / 75 — 80

Section B: Facility Data

Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Amoco Oil Company 2815 Indianapolis Blvd., Whiting, Indiana	9:00 ☑ AM ☐ PM Exit Time/Date: 11:00 a.m., 7-8-92	April 1, 1990 Permit Expiration Date: Feb 28, 1995

Name(s) of On-Site Representative(s)	Title(s)	Phone No(s)
Joseph E. Naccache	Superintendent, Env. Control Water Quality	219-473-3740
Shawn E. McVey	Env. Engineer	219-473-3459

Name, Address of Responsible Official	Title	Contacted
Frank J. Citek	Refinery Manager	☐ Yes ☑ No
	Phone No. 219-473-3179	

Section C: Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

	Permit		Flow Measurement		Pretreatment		Operations & Maintenance
	Records/Reports		Laboratory		Compliance Schedules		Sludge Disposal
	Facility Site Review		Effluent/Receiving Waters		Self-Monitoring Program		Other:

Section D: Summary of Findings/Comments *(Attach additional sheets if necessary)*

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone	Date
J. Dymmelere,	USEPA / ESD/CDO 353-9153	9-8-92
Signature of Reviewer	**Agency/Office**	**Date**
Howard A. G. Caine	U.S. EPA RE2-5/ESD/CDO	9/9/92

Regulatory Office Use Only

Action Taken	Date	Compliance Status
		☐ Noncompliance ☐ Compliance

If you have any questions regarding this inspection, please contact me at 353-9153. Questions regarding toxicity tests should be directed to Charles Steiner of US EPA, CRL at 353-9070.

Attachments:
* - EPA Form 3560-3
* - NPDES Biomonitoring Inspection Supplemental Data Sheets
* - CRL Chronic Toxicity Study Report
* - CDO Field Sheet
* - Chain-of-Custody Sheet
* - Attachment I - (a) Location of Dicharge, (b) Water and Wastewater Flow Diagram, and (c) Wastewater Treatment Plant Water Flows
* - Attachment II - Description of Existing Discharge
* - State Notification Sheet

III. WASTEWATER SOURCES AND WASTEWATER TREATMENT

The process wastewater and run-off stormwater from the process areas, including stormwater from the oil-water separation (Outfall #004) and the clarified scrubber water from the incinerator, are treated at the facility's treatment plant and are discharged to Lake Michigan via Outfall #001. Also, the clarified scrubber water from the incinerator is dicharged through Outfall #001. The facility's treatment plant is a secondary activated sludge treatment plant with pH control (caustic soda) and multimedia filters. Unit processes employed in the treatment of wastewater at this plant are shown in Attachment I (Pages #4, #5, and #6). Attachment II (Pages #7, #8, and #9) provides a detailed description of the existing facilities and all four outfalls.

At the time of this inspection, the incinerator was down. Consequently, there was no clarified scrubber water discharged through Outfall #001.

During the time of this visit, the discharge flowrate was 10.81 MGD.

IV. SAMPLING PROCEDURES

Composite sample (92CW13S01) for the chronic toxicity screening, was obtained from the treated effluent discharge stream at the facility's sampling station (interceptive well prior to the discharge pipe) Outfall #001. One ISCO sampler was programmed to take 380 ml aliquots every 30 minutes for 24 hours (from 11:00 am on July 7, 1992 to 10:30 am on July 8, 1992). The discharge flow rate during this sampling period was 10.6 MGD. The treated wastewater temperature was 32.1 deg. C and the pH was 7.2 s.u. The effluent at Outfall #001 was clear to a slight yellowish color, had no oil sheen, and exhibited some slight foam at the receiving waters.

The treated effluent composite sample was collected in a 5 gallon cubitainer. The cubitainer was kept on ice during compositing and transportation. The sample was maintained using Chain-of-Custody procedures until it was delivered to the Central Regional Laboratory (CRL).

V. SAMPLING RESULTS

The US EPA Region 5, CRL, conducted a series of the following two chronic toxicity tests to characterize the effluent:

* - Fathead Minnow Larval Growth and Survival Test
* - Ceriodaphnia Survival and Reproduction Test

The results of the toxicity tests and field records are attached to the report.

File

Gus Jumaw

Gary Stanek

TP
Chang

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
CENTRAL DISTRICT OFFICE
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604-3590

SEP 10 1992

MEMORANDUM

SUBJECT: Compliance Biomonitoring Inspection (CBI) Report, Amoco Oil Company, 2815 Indianapolis Blvd., Whiting, Indiana (IN0000108) (AFE124:9E)

FROM: Stephan Wynnychenko, Environmental Scientist
Central District Office (SC-9C)

TO: Michael Mikulka, Chief
Compliance Section (WC-15J)

THRU: John F. Connell, Acting Chief
Central District Office (SC-9C)

__Permit Related Issues

I. INTRODUCTION

On July 7-8, 1992, I conducted a Compliance Biomonitoring Inspection (CBI) at the subject facility in response to Water Division's request for FY'92 inspections. In conjunction with this CBI, a Compliance Evaluation Inspection (CEI) was conducted on July 7-8, 1992. A time composite sample was obtained for chronic toxicity testing (biomonitoring) from the permittee's effluent Outfall #001. The Indiana Department of Environmental Management (IDEM) was notified of the date and time of this inspection, but did not participate. The information contained in this report was provided by Mr. Joseph E. Naccache, Superintendent - Environmental Control Water Quality, and Mr. Shawn E. McVey, Environmental Engineer. I presented my credentials to Mr. Naccache and Mr. McVey prior to the inspection.

The CEI report was submitted to you under a separate cover.

II. FACILITY DESCRIPTION

The Amoco Oil Company, SIC code #2911, is engaged in the production of a variety of refined products from crude petroleum. The facility receives crude petroleum by pipeline and refines it into a variety of products including gasoline, heating fuel, jet fuel, asphalt, and waxes. Currently, 1600 people are employed at this facility.

OFFICE OF WATER MANAGEMENT - INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
WASTEWATER TREATMENT PLANT INSPECTION FORM

NPDES PERMIT # IN0040762

MUNICIPALITY WINDFALL Person Interviewed TERRY COOPER

COMMENTS and/or RECOMMENDATIONS:

1. THE COMMINUTOR IS OUT OF SERVICE. CONDOMS WERE PHOTOGRAPHED IN THE CLARIFIER, THE CHLORINE CONTACT TANK, AND ON RIPRAP AT THE OUTFALL. CAUSING SUCH OBJECTIONABLE MATERIALS TO DISCHARGE TO WATERS OF THE STATE IS A VIOLATION OF STATE & FEDERAL LAW.

2. SCREENINGS ARE TO BE CLEANED REGULARLY AND PROPERLY DISPOSED OF. GRIT AND SUCH DETRITUS IS TO BE CLEANED FROM THE HEADWORKS. THESE MATERIALS ARE EXPOSED TO AIR & THUS, INSECTS, MOST OF THE TIME DUE TO CYCLICAL NATURE OF THE LIFT PUMP OPERATION.

3. THE OPERATOR REPORTS REMOVAL OF A LARGE "HAIRBALL" WHICH CAUSED CLOGGING IN THE DIGESTOR & INTERFERED WITH SOLIDS HANDLING. THE MIXED LIQUOR IS THUS "OLD" AND SCUMMING ON THE CLARIFIER.

4. FREQUENT INFLOW-RELATED WASHOUTS AND BULKING HAVE LOADED THE W.S.P. TO A POINT THAT IT IS NO LONGER SERVICEABLE. WATER IN THE LAGOON IS BLACK & COVERED WITH DUCKWEED & SCUM ALGAE. THE PERMIT REQUIRES THE LAGOON BE MAINTAINED IN OPERATING CONDITION. IT IS THE UNDERSTANDING OF THE INSPECTOR THE TOWN PROPOSES TO USE THE W.S.P. TO MEET DECHLORINATION REQUIREMENTS.

Inspector: R.D. ALLEY.

STATE FORM 44229 (7-90)

RLP → P FILE

OFFICE OF WATER MANAGEMENT - INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
WASTEWATER TREATMENT PLANT INSPECTION FORM

NPDES Permit # IN0040762

Municipality - WINDFALL Person Interviewed TERRY COOPER Title

Type of Treatment - CONTACT STABILIZATION Design Flow (mgd) - .13 Class. - I

Receiving Stream - ROUND PRAIRIE DITCH 1980 Pop. - 920

Permit Conditions, Monthly Values: BOD 10/15 SS. 10/15 pH 6-9 F.Coli. ____ Cl_2 .5-1 Phos-P ____ NH_3-N 1.24/1.86 1.86/2.79

S - Satisfactory M - Marginal U - Unsatisfactory

	S	M	U	
				PERMIT: 5/1/93 - 3/31/98
(4) Sewer type and maintenance			✓	SANITARY WITH HIGH I/I
Lift stations and alarms (3)	—			LIGHT ALARMS - NOT CHECKED
~~Combined sewer overflows~~				
~~Bypasses~~				
(1) Comminutor			✓	OUT. CONDOMS AT OUTFALL
(2) Screens		✓		NEEDS CLEANED
(2) Grit removal		✓		NEED GRIT MATERIALS CLEANED FROM
Flow meter and recorder	✓			3" PARSHALL FLUMES. HEADWORKS
Meter calibration	—			NOT CHECKED
~~Primary clarifier~~				
Aeration tank/~~ditch~~	✓			SLUDGE AGE HIGH, COLOR DARK.
~~Trickling filter~~				
~~RBC~~				
(3) Secondary clarifier		✓		SCUM FROM OLD SLUDGE WITH LOSS
				TO WEIRS. SAMPLE SLIGHTLY CLOUDY.
(4) AST/AWT facilities		~~✓~~	✓	OUT OF SERVICE
Chlorination equipment		✓		DOSING EXCESSIVE.
Chlorine contact tank		✓		NEEDS SCUM, SOLIDS REMOVED.
(1) FINAL EFFLUENT	✓			EFFLUENT CLEAR.
Aerobic digester	✓			CLOGGING CORRECTED LAST WEEK. FULL
~~Anaerobic digester~~				
(3) Sludge handling		✓		NEED SOLIDS REMOVED FROM SYSTEM
Sludge disposal	—			LAND APPLICATION. NOT CHECKED.
Hydraulic loading	✓			$\bar{x}$ = .079 mgd MX = .115 mgd.
Organic loading	✓			BOD $\bar{x}$ = 75 MX = 120 mg/L TSS $\bar{x}$ = 104 MX = 175 mg/L
BOD removal	✓			$\bar{x}$ = 5.2 mg/L MX = 8.8 mg/L 86%
SS removal		✓		$\bar{x}$ = 14.6 mg/L MX = 33 mg/L 93%
~~Phosphorus~~ AMMONIA removal	✓			
~~Industrial waste~~				
Laboratory methods	—			NOT CHECKED. INFLUENT, EFFLUENT
Quality control	—			SAMPLES SPLIT WITH FACILITY.
Calibration of equipment	—			
MRO and records	✓			CURRENT.
Sample type and frequency	✓			2PT COMPOSITE 2X WEEKLY
Maintenance program	—			NOT EVALUATED. OP. WORKING ON BLOWERS.
(2) Housekeeping		✓		HEADWORKS, SKIMMINGS.

APRIL 94

(4) N.P.D.E.S. Compliance	2 TSS VIOLATIONS 4/94. EFFLUENT DEGRADATION
Notice of Violation	N/A FROM W.S.P.
Order of Compliance	CONSTRUCTION PERMIT REQUEST DUE 7-1-94 FOR
Consent Decree	N/A DECHLORINATION
Cross connections	NOT CHECKED
Properly certified operator	" "
Weather conditions	SUNNY 87°
Letter needed	YES

Inspected by - R.D. ALLEY Date - 6-16-94 Cert. Op. Name TERRY COOPER

STATE FORM 44228 (7-90) Class & No. #6868

Pfile

United States Environmental Protection Agency
Washington, D. C. 20460

EPA NPDES Compliance Inspection Report

Form Approved
OMB No. 2040-0003
Approval Expires 7-31-85

Section A: National Data System Coding

Transaction Code	NPDES	yr/mo/day	Inspection Type	Inspector	Fac Type
1 [ ] 2 [5]	3 [IN0047621] 11	12 [940616] 17	18 [R]	19 [S]	20 [1]

Remarks 21 [ ] 66

Reserved	Facility Evaluation Rating	BI	QA	Reserved
67 [ ] 69	70 [Z]	71 [ ]	72 [ ]	73 [ ] 74 75 [ ] 80

Section B: Facility Data

Name and Location of Facility Inspected	Entry Time	Permit Effective Date
WINDFALL POTW RAILROAD AVE S.E.	8:30 [X] AM [ ] PM	5-1-93
	Exit Time/Date 10:30 6/16	Permit Expiration Date 3-31-98

Name(s) of On-Site Representative(s)	Title(s)	Phone No(s)
TERRY COOPER	SUPT	(317) 945-8118

Name, Address of Responsible Official	Title	Contacted
JOHN W. HARDEN P.O. BOX 486 WINDFALL CITY IN 46076	TOWN COUNCIL PRESIDENT Phone No. (317) 945-8381	[ ] Yes [X] No

Section C: Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

S	Permit	S	Flow Measurement	N/A	Pretreatment	M	Operations & Maintenance
S	Records/Reports	N	Laboratory	M	Compliance Schedules	M	Sludge Disposal
M	Facility Site Review	S/U	Effluent/Receiving Waters	M	Self-Monitoring Program		Other:

Section D: Summary of Findings/Comments *(Attach additional sheets if necessary)*

HOUSEKEEPING BORDERS ON NEGLECT. 2 PIECES OF EQUIPMENT (COMMINUTER, WSP) OUT OF SERVICE DUE TO PRACTICES ASSOCIATED WITH OPERATIONAL POLICY HAVE CAUSED VIOLATIONS OF PERMIT, CLEAN WATERS ACT.

THE OPINION OF THE OPERATOR IS THAT THE COMPLIANCE SCHEDULE IN THE PERMIT WILL NOT BE MET.

OLD SLUDGE IN SYSTEM IS CAUSING SOLIDS LOSS TO CHLORINE CONTACT TANK.

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone	Date
R.D. ALLET	IDEM/OWM (317) 243-5134	6/16/94
Signature of Reviewer	**Agency/Office**	**Date**
RH Pearson	IDEM	6/23/94

Regulatory Office Use Only

Action Taken	Date	Compliance Status
		[ ] Noncompliance [ ] Compliance

EPA Form 3560-3 (Rev. 3-85) Previous editions are obsolete.

JC

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)

NAME AMOCO OIL COMPANY

ADDRESS 2615 INDIANAPOLIS BLVD

WHITING IN 46394

FACILITY

LOCATION

ATTN: MR. J.E. NACCACHE

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

(2-16) IN0000108 PERMIT NUMBER

(17-19) 002 A DISCHARGE NUMBER

MAJOR

F - FINAL

Form Approved. OMB No. 2040-0004. Approval expires 6-30-91.

MONITORING PERIOD	YEAR	MO	DAY		YEAR	MO	DAY
FROM	94	05	01	TO	94	05	31
	(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

*** NO DISCHARGE |__| ***

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card Only) QUANTITY OR LOADING (46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
TEMPERATURE, WATER DEG. CENTIGRADE 00010 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	******	******	**** ****	******	29	32	(04) DEG.C	0	07/07	CONT
	PERMIT REQUIREMENT	******	******		******	REPORT MO AVG	REPORT DAILY MX			5 TIME /WEEK	CONTIN
TEMPERATURE, WATER DEG. CENTIGRADE 00010 7 0 0 INTAKE FROM STREAM	SAMPLE MEASUREMENT	******	******		******	13	17	(04) DEG.C	0	07/07	CON
	PERMIT REQUIREMENT	******	******	**** ****	******	REPORT MO AVG	REPORT DAILY MX			5 TIME /WEEK	CONTIN
WASTE HEAT REJECTION RATE 00179 2 0 0 EFFLUENT NET VALUE	SAMPLE MEASUREMENT	1160	1240	(05) MBTU/HR	******	******	******		0	07/07	CONT
	PERMIT REQUIREMENT	1700 MO AVG	2000 MX DA AV		******	******	******	**** ****		5 TIME /WEEK	CONTIN
PH 00400 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	******	******		8.2	******	8.3	(12) SU	0	03/07	GRAB
	PERMIT REQUIREMENT	******	******	**** ****	7 MINIMUM	******	9 MAXIMUM			THREE/WEEK	GRAB
OIL AND GREASE FREON EXTR-IR METH 00556 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	******	******		******	1.3	2.6	(19) MG/L	0	03/07	GRAB
	PERMIT REQUIREMENT	******	******	**** ****	******	REPORT MO AVG	REPORT DAILY MX			THREE/WEEK	GRAB
OIL AND GREASE FREON EXTR-IR METH 00556 2 0 0 EFFLUENT NET VALUE	SAMPLE MEASUREMENT	******	******		******	1.0	2.3	(19) MG/L	0	03/07	GRA
	PERMIT REQUIREMENT	******	******	**** ****	******	REPORT MO AVG	5.0 DAILY MX			THREE/WEEK	GRAB
OIL AND GREASE FREON EXTR-IR METH 00556 7 0 0 INTAKE FROM STREAM	SAMPLE MEASUREMENT	******	******		******	<0.3	0.4	(19) MG/L	0	03/07	GRAB
	PERMIT REQUIREMENT	******	******	**** ****	******	REPORT MO AVG	REPORT DAILY MX			THREE/WEEK	GRAB

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER: T. Scruggs, Refinery Manager (TYPED OR PRINTED)

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN, AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 USC § 1001 AND 33 USC § 1319. (Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT: T. Scruggs

TELEPHONE: AREA CODE 219 NUMBER 473-3179

DATE: YEAR 94 MO 6 DAY 22

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

Facility Name/Location (if different)

NAME AMOCO OIL COMPANY

ADDRESS 2815 INDIANAPOLIS BLVD

WHITING IN 46394

FACILITY

LOCATION

ATTN: MR. J.E. NACCACHE

DISCHARGE MONITORING REPORT (DMR)

(2-16)	(17-19)
IN0000108	001 A
PERMIT NUMBER	DISCHARGE NUMBER

MAJOR

F - FINAL

Form Approved.
OMB No. 2040-0004.
Approval expires 6-30-91.

MONITORING PERIOD	YEAR	MO	DAY		YEAR	MO	DAY
FROM	94	05	01	TO	94	05	31
	(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

*** NO DISCHARGE |__| ***

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card Only) (46-53) QUANTITY OR LOADING (54-61) AVERAGE	MAXIMUM	UNITS	(4 Card Only) (38-45) QUALITY OR CONCENTRATION (46-53) MINIMUM	AVERAGE	MAXIMUM	UNITS	NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
CHROMIUM, HEXAVALENT (AS CR)	SAMPLE MEASUREMENT	0.1	0.1	(26)	******	0.001	0.001	(19)	0	01/07	COMP
01032 1 0 0	PERMIT REQUIREMENT	2.01 MO AVG	4.48 DAILY MX	LBS/DY	******	REPORT MO AVG	REPORT DAILY MX	MG/L		WEEKLY	COMP24
EFFLUENT GROSS VALUE											
CHROMIUM, TOTAL (AS CR)	SAMPLE MEASUREMENT	<1.2	<1.4	(26)	******	<0.01	<0.01	(19)	0	01/07	COMP
01034 1 0 0	PERMIT REQUIREMENT	23.9 MO AVG	68.53 DAILY MX	LBS/DY	******	REPORT MO AVG	REPORT DAILY MX	MG/L		WEEKLY	CO 24
EFFLUENT GROSS VALUE											
PHENOLICS, TOTAL RECOVERABLE	SAMPLE MEASUREMENT	0	0	(26)	******	<0.01	<0.01	(19)	0	03/07	COMP
32730 1 0 0	PERMIT REQUIREMENT	20.33 MO AVG	73.01 DAILY MX	LBS/DY	******	REPORT MO AVG	REPORT DAILY MX	MG/L		THREE/WEEK	COMP24
EFFLUENT GROSS VALUE											
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	15.1	17.9	(03)	******	******	******		0	07/07	CONT
50050 1 0 0	PERMIT REQUIREMENT	REPORT MO AVG	REPORT DAILY MX	MGD	******	******	******	***** *****		DAILY	CONTI
EFFLUENT GROSS VALUE											
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	******	******		******			(19)		00/00*	
50060 1 0 0	PERMIT REQUIREMENT	******	******	***** *****	******	REPORT MO AVG	0.05 DAILY MX	MG/L		5 TIME/WEEK	GRAB
EFFLUENT GROSS VALUE											
COLIFORM, FECAL GENERAL	SAMPLE MEASUREMENT	******	******		******			(13)		00/00**	
74055 1 0 0	PERMIT REQUIREMENT	******	******	***** *****	******	200 MO AVG	400 DAILY MX	#/100ML		5 TIME/WEEK	GP
EFFLUENT GROSS VALUE											
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

T. Scruggs, Refinery Manager

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN, AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 USC § 1001 AND 33 USC § 1319 (Penalties under these statutes may include fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
219	473-3179	94	6	22
AREA CODE	NUMBER	YEAR	MO	DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

*Chlorine testing required only when chlorinating this stream.
**Fecal coliform testing required only when refinery sanitary sewers are discharging to the Amoco WWTP.

Facility Name/Location (if different)
NAME AMOCO OIL COMPANY
ADDRESS 2815 INDIANAPOLIS BLVD
WHITING IN 46394

FACILITY
LOCATION
ATTN: MR. J.E. MACCACHE

DISCHARGE MONITORING REPORT (DMR)

(2-16) PERMIT NUMBER: IN0000108
(17-19) DISCHARGE NUMBER: 001 A

MAJOR
F - FINAL

Form Approved.
OMB No. 2040-0004.
Approval expires 6-30-91.

MONITORING PERIOD

	YEAR	MO	DAY		YEAR	MO	DAY
FROM	94	05	01	TO	94	05	31
	(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

*** NO DISCHARGE | __ | ***

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BOD, 5-DAY (20 DEG. C) 00310 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	171	468	(26)	******	1.4	4.8	(19)	0	05/07	COMP
	PERMIT REQUIREMENT	4161 MO AVG	8164 DAILY MX	LBS/DY	******	REPORT MO AVG	REPORT DAILY MX	MG/L		5 TIME /WEEK	COMP2
OXYGEN DEMAND, CHEM (LOW LEVEL) (COD) 00335 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	3940	5431	(26)	******	31	40	(19)	0	03/07	COMP
	PERMIT REQUIREMENT	30323 MO AVG	58427 DAILY MX	LBS/DY	******	REPORT MO AVG	REPORT DAILY MX	MG/L		THREE/ WEEK	C 22
PH 00400 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	******	******		7.6	******	7.9	(12)	0	03/07	GRAB
	PERMIT REQUIREMENT	******	******	**** ****	6.5 MINIMUM	******	9 MAXIMUM	SU		THREE/ WEEK	GRAB
SOLIDS, TOTAL SUSPENDED 00530 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	725	2982	(26)	******	6	20	(19)	0	05/07	COMP
	PERMIT REQUIREMENT	3646 MO AVG	5694 DAILY MX	LBS/DY	******	REPORT MO AVG	REPORT DAILY MX	MG/L		5 TIME /WEEK	COMP2
OIL AND GREASE FREON EXTR- IR MET 00556 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	56	136	(26)	******	0.5	1.4	(19)	0	05/07	GRAB
	PERMIT REQUIREMENT	1368 MO AVG	2600 DAILY MX	LBS/DY	******	REPORT MO AVG	REPORT DAILY MX	MG/L		5 TIME /WEEK	GRAB
NITROGEN, AMMONIA TOTAL (AS N) 00610 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	<15	67	(26)	******	<0.13	0.69	(19)	0	05/07	COMP
	PERMIT REQUIREMENT	1030 MO AVG	2060 DAILY MX	LBS/DY	******	REPORT MO AVG	REPORT DAILY MX	MG/L		5 TIME /WEEK	C P2
SULFIDE, TOTAL (AS S) 00745 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	1	2	(26)	******	0.01	0.02	(19)	0	01/07	COMP
	PERMIT REQUIREMENT	23.1 MO AVG	51.4 DAILY MX	LBS/DY	******	REPORT MO AVG	REPORT DAILY MX	MG/L		WEEKLY	COMP2

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER: T. Scruggs, Refinery Manager
TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN, AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 USC § 1001 AND 33 USC § 1319 (Penalties under these statutes may include fines up to $10,000 and, or maximum imprisonment of between 6 months and 5 years.)

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT: T. Scruggs

TELEPHONE: AREA CODE 219, NUMBER 473-3179

DATE: YEAR 94, MO 6, DAY 22

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

AMOCO OIL COMPANY, WHITING REFINERY
2815 INDIANAPOLIS BLVD., WHITING, INDIANA 46394

{WLSTAT}

PERMIT NO. IN0000108 5/94 MAY STORM WATER RUNOFF

OUTFALL 004

*** NOTE: TO BE SAMPLED AFTER EACH RAIN EVENT IF DISCHARGE OCCURS - ONCE PER WEEK MAXIMUM

PARAMETER		TOC	OIL	pH
CODE:		C00680	C00550	C00400
LIMITS: MAX.		110	15	6-9
DATA		MG/L	MG/L	
OPEN	1	60	1.9	8.1
	2			
	3			
	4			
	5			
	6			
	7			
	8			
	9			
	10			
	11			
	12			
	13			
	14			
	15			
CLOSED	16			
	17			
	18			
	19			
	20			
	21			
	22			
	23			
	24			
	25			
	26			
	27			
	28			
	29			
	30			
	31			
AVERAGE		60	1.9	8.1
HIGHEST VAL.		60	1.9	8.1
LOWEST VAL.		60	1.9	8.1
OVER LIMIT		0	0	0

CERTIFIED OPERATOR : George T. Cook NO. 5404 DATE : 6-22-94 AUTHORIZED AGENT : [illegible]

AMOCO OIL COMPANY, WHITING REFINERY
2815 INDIANAPOLIS BLVD., WHITING, INDIANA 46394

{WLSTAT}

PERMIT NO. IN0000108 5/94 MAY STORM WATER RUNOFF

OUTFALL 003

*** NOTE: TO BE SAMPLED AFTER EACH RAIN EVENT IF DISCHARGE OCCURS - ONCE PER WEEK MAXIMUM

PARAMETER CODE:	TOC C00680	OIL C00550	pH C00400
LIMITS: MAX.	110	15	6-9
DATA	MG/L	MG/L	
1	38	2.0	7.9
2			
3			
4			
5			
6			
7			
8	40	1.6	7.9
9			
10			
11			
12			
13			
14			
15	48	3.1	7.9
16			
17			
18			
19			
20			
21			
22	14	0.4	7.9
23			
24			
25			
26			
27			
28			
29	17	0.4	7.8
30			
31			
AVERAGE	31	1.5	7.9
HIGHEST VAL.	48	3.1	7.9
LOWEST VAL.	14	0.4	7.8
OVER LIMIT	0	0	0

CERTIFIED OPERATOR : George T. Cook NO. 5404 DATE : 6-22-94 AUTHORIZED AGENT : [illegible]

AMOCO OIL COMPANY, WHITING REFINERY (WLSTAT)
2815 INDIANAPOLIS BLVD., WHITING, INDIANA 46394

PERMIT NO. IN0000108 OUTFALL 002 5/94 MAY COOLING WATER EFFLUENT

PARAMETER	FLOW	pH	IN-TOC	OUT-TOC	DELTA TOC	IN-TEMP	TEMP	HEAT	RESID-CL	IN-OIL	OIL	DELTA OIL
CODE	Q50050	C00400	C99680	C00680			C00010	C99003			C00550	
SAMPLE TYPE												
PERMIT	CONT	GRAB	GRAB	GRAB	GRAB	CONT	CONT	CONT	GRAB	GRAB	GRAB	GRAB
ACTUAL	CONT	GRAB	GRAB	GRAB	GRAB	CONT	CONT	CONT	GRAB	GRAB	GRAB	GRAB
FREQUENCY												
PERMIT	CONT	3/7	5/7	5/7	5/7	5/7	5/7	5/7	1/7	3/7	3/7	3/7
ACTUAL	CONT	3/7	5/7	5/7	5/7	CONT	CONT	CONT	1/7	3/7	3/7	3/7
LIMITS: AVG.								1.70				
MAX.		7-9			5			2.00	.05			5
DATE	MG/D	pH	mg/l	mg/l	mg/l	DEG C	DEG C	GIGA BTU/HR		mg/l	mg/l	mg/l
1	111.5	--	--	--	--	11	26	1.04	--	--	--	--
2	112.1	8.2	2	3	1	11	27	1.12	--	<0.3	2.6	2.3
3	113.0	--	2	2	0	12	27	1.06	--	--	--	--
4	113.1	8.2	2	2	0	12	27	1.06	<0.04	<0.3	2.3	2.0
5	113.3	--	2	2	0	13	28	1.06	--	--	--	--
6	114.0	8.2	2	2	0	12	27	1.07	--	0.4	1.8	1.4
7	113.8	--	--	--	--	12	28	1.14	--	--	--	--
8	116.2	--	--	--	--	12	28	1.16	--	--	--	--
9	117.0	8.2	2	2	0	12	27	1.10	--	<0.3	1.3	1.0
10	118.0	--	2	2	0	12	28	1.18	--	--	--	--
11	118.3	8.2	2	2	0	12	28	1.18	<0.04	<0.3	0.8	0.5
12	117.4	--	2	2	0	13	28	1.10	--	--	--	--
13	117.1	8.2	2	2	0	12	29	1.24	--	<0.3	0.8	0.5
14	118.5	--	--	--	--	12	28	1.18	--	--	--	--
15	118.7	--	--	--	--	12	28	1.19	--	--	--	--
16	118.0	8.3	2	2	0	13	29	1.18	--	<0.3	1.4	1.1
17	118.9	--	2	2	0	14	30	1.19	--	--	--	--
18	118.9	8.2	2	2	0	13	29	1.19	<0.04	0.3	1.4	1.1
19	118.7	--	2	2	0	13	29	1.19	--	--	--	--
20	118.0	8.3	2	2	0	13	29	1.18	--	<0.3	0.8	0.5
21	117.2	--	--	--	--	13	30	1.24	--	--	--	--
22	117.5	--	--	--	--	14	30	1.17	--	--	--	--
23	118.0	8.2	2	2	0	15	31	1.18	--	<0.3	0.9	0.6
24	118.4	--	2	2	0	17	32	1.11	--	--	--	--
25	119.0	8.3	2	2	0	15	31	1.19	<0.04	<0.3	1.1	0.8
26	119.5	--	3	2	-1	15	31	1.19	--	--	--	--
27	120.4	8.3	2	2	0	14	30	1.20	--	<0.3	0.3	0.0
28	121.9	--	--	--	--	16	32	1.22	--	--	--	--
29	121.0	--	--	--	--	15	31	1.21	--	--	--	--
30	122.0	8.3	2	2	0	14	30	1.22	--	<0.3	1.1	0.8
31	120.9	--	2	2	0	14	30	1.21	--	--	--	--
AVERAGE	117.4	8.2	2	2	0	13	29	1.16	<0.04	<0.3	1.3	1.0
HIGHEST VAL.	122.0	8.3	3	3	1	17	32	1.24	<0.04	0.4	2.6	2.3
LOWEST VAL.	111.5	8.2	2	2	-1	11	26	1.04	<0.04	<0.3	0.3	0.0
OVER LIMIT		0			0			0	0			0

CERTIFIED OPERATOR : George T. Cook NO. 5404 DATE : 6-22-94 AUTHORIZED AGENT : J. Hemp

--MEANS NOT TESTED THIS DATE

AMOCO OIL COMPANY,WHITING REFINERY {WLSTAT}
2815 INDIANAPOLIS BLVD., WHITING, INDIANA 46394

PERMIT NO. IN0000108 OUTFALL 001 5/94 MAY PROCESS WATER EFFLUENT page 2.

PARAMETER	NH3-N	SULFIDE	TL.CHRM	HX.CHRM	SELENIUM	FECAL C	2378-CDD	2378-CDF
CODE	Q00610	Q00745	Q00034	Q01032	C01147	**		
SAMPLE TYPE								
PERMIT	24	24	24	24	24	GRAB		
ACTUAL	24	24	24	24	24	GRAB		
FREQUENCY								
PERMIT	5/7	1/7	1/7	1/7	2/YR	5/7	1/QTR	1/QTR
ACTUAL	5/7	1/7	1/7	1/7	2/YR	5/7	1/QTR	1/QTR

LIMITS	AVG.	1030	23.1	23.90	2.01	200		
	MAX.	2060	51.4	68.53	4.8	400		

DATE	NH3-N mg/l	NH3-N LB/D	SULFIDE mg/l	SULFIDE LB/D	TL.CHRM mg/l	TL.CHRM LB/D	HX.CHRM mg/l	HX.CHRM LB/D	SELENIUM ug/L	SELENIUM LB/D	FECAL C COLONIES	2378-CDD pg/L	2378-CDF pg/L
1	--	--	--	--	--	--	--	--					
2	<0.10	<10	0.02	2	--	--	--	--					
3	<0.10	<9	--	--	--	--	--	--					
4	0.69	67	--	--	<0.01	<1.0	0.001	0.1					
5	--	--	--	--	--	--	--	--					
6	0.15	18	--	--	--	--	--	--					
7	<0.10	<13	--	--	--	--	--	--					
8	--	--	--	--	--	--	--	--					
9	<0.10	<11	0.02	2	--	--	--	--					
10	<0.10	<12	--	--	--	--	--	--					
11	<0.10	<12	--	--	<0.01	<1.2	0.001	0.1					
12	--	--	--	--	--	--	--	--					
13	<0.10	<12	--	--	--	--	--	--					
14	<0.10	<13	--	--	--	--	--	--					
15	--	--	--	--	--	--	--	--					
16	<0.10	<13	0.01	1	--	--	--	--					
17	<0.10	<13	--	--	--	--	--	--					
18	<0.10	<13	--	--	<0.01	<1.3	0.001	0.1					
19	--	--	--	--	--	--	--	--					
20	<0.10	<13	--	--	--	--	--	--					
21	<0.10	<12	--	--	--	--	--	--					
22	--	--	--	--	--	--	--	--					
23	<0.10	<13	0.01	1	--	--	--	--					
24	<0.10	<14	--	--	--	--	--	--					
25	<0.10	<14	--	--	<0.01	<1.4	0.001	0.1					
26	--	--	--	--	--	--	--	--					
27	<0.10	<15	--	--	--	--	--	--					
28	<0.10	<14	--	--	--	--	--	--					
29	--	--	--	--	--	--	--	--					
30	<0.10	<13	0.01	1	--	--	--	--					
31	<0.10	<14	--	--	--	--	--	--					
AVERAGE	<0.13	<15	0.01	1	<0.01	<1.2	0.001	0.1					
HIGHEST VAL.	0.69	67	0.02	2	<0.01	<1.4	0.001	0.1					
LOWEST VAL.	<0.10	<9	0.01	1	<0.01	<1.0	0.001	0.1					
OVER LIMIT		0		0		0		0					

CERTIFIED OPERATOR : George T. Cook NO. 5404 DATE : 6-22-94 AUTHORIZED AGENT : T. Henry

--Means Not Tested this Date. **Fecal Coliform are limited from April 1 to Oct. 1, when Refinery Sanitary Sewers are discharging to AMOCO WWTP

AMOCO OIL COMPANY, WHITING REFINERY (WLSTAT)
2815 INDIANAPOLIS BLVD., WHITING, INDIANA 46394

PERMIT NO. IN0000108 OUTFALL 001 5/94 MAY PROCESS WATER EFFLUENT

PARAMETER	FLOW	PH	BOD	TSS	COD	OIL	PHENOL
CODE	Q50050	C00400	Q00310	Q00547	Q00340	Q00550	Q32730
SAMPLE TYPE							
PERMIT	CONT	GRAB	24	24	24	3/DAY	24
ACTUAL	CONT	GRAB	24	24	24	3/DAY	24
FREQUENCY							
PERMIT	CONT	3/7	5/7	5/7	3/7	5/7	3/7
ACTUAL	CONT	3/7	5/7	5/7	3/7	5/7	3/7

LIMITS	AVG.			4161		3646		30323		1368		20.33
	MAX.		6.5-9	8164		5694		58427		2600		73.00
DATE		MG/D	pH	mg/l	LB/D	mg/l	LB/D	mg/l	LB/D	mg/l	LB/D	mg/l	LB/D
	1	13.1	--	1.1	120	4	436	--	--	--	--	<0.01	0.0
	2	12.5	7.6	1.5	156	5	521	--	--	0.3	<31	--	--
	3	10.4	--	1.9	165	3	260	40	3465	0.7	61	<0.01	0.0
	4	11.7	7.7	4.8	468	4	390	--	--	1.4	136	--	--
	5	14.0	--	2.1	245	4	466	--	--	0.6	70	<0.01	0.0
	6	14.4	7.7	--	--	--	--	27	3239	0.5	60	--	--
	7	15.5	--	--	--	--	--	38	4906	--	--	--	--
	8	14.4		1.5	180	6	720	--	--	--	--	<0.01	0.0
	9	13.7	7.8	1.2	137	5	571	--	--	0.3	<34	--	--
	10	13.9	--	1.1	127	3	347	30	3474	0.3	<35	<0.01	0.0
	11	14.2	7.8	1.2	142	6	710	--	--	0.7	83	--	--
	12	14.5		1.1	133	4	483	--	--	0.5	60	<0.01	0.0
	13	14.9	7.8	--	--	--	--	18	2234	0.3	<37	--	--
	14	15.4	--	--	--	--	--	31	3977	--	--	--	--
	15	15.6	--	1.1	143	5	650	--	--	--	--	<0.01	0.0
	16	16.0	7.8	1.0	133	6	800	--	--	0.4	53	--	--
	17	15.5	--	1.2	155	7	904	32	4132	0.3	<39	<0.01	0.0
	18	16.0	7.7	1.0	133	6	800	--	--	0.5	67	--	--
	19	15.5	--	1.3	168	5	646	--	--	0.4	52	<0.01	0.0
	20	15.5	7.7					36	4648	0.4	52	--	--
	21	14.5	--	--	--	--	--	29	3503	--	--	--	--
	22	15.5	--	1.2	155	6	775	--	--	--	--	<0.01	0.0
	23	16.2	7.7	1.3	175	6	810	--	--	0.3	<40	--	--
	24	16.3		1.2	163	6	815	40	5431	0.5	68	<0.01	0.0
	25	16.7	7.8	0.9	125	3	417	--	--	0.4	56	--	--
	26	17.9	--	1.7	253	20	2982	--	--	<0.3	<45	<0.01	0.0
	27	17.6	7.9	--	--	--	--	23	3372	0.5	73	--	--
	28	17.0						29	4107				
	29	17.7	--	0.4	59	3	442	--	--	--	--	<0.01	0.0
	30	15.3	7.6	1.3	166	6	765	--	--	<0.3	<38	--	--
	31	16.7	--	1.6	223	7	974	34	4730	0.3	<42	<0.01	0.0
AVERAGE		15.1	7.7	1.4	171	6	725	31	3940	0.5	56	<0.01	0.0
HIGHEST VAL.		17.9	7.9	4.8	468	20	2982	40	5431	1.4	136	<0.01	0.0
LOWEST VAL.		10.4	7.6	0.4	59	3	260	18	2234	<0.3	<31	<0.01	0.0
OVER LIMIT			0		0		0		0		0		0

CERTIFIED OPERATOR : George Cook NO. 5404 DATE : 6-22-94 AUTHORIZED AGENT : J Hengy

--MEANS NOT TESTED THIS DATE.

Amoco Oil Company
Whiting Refinery
2815 Indianapolis Boulevard
Post Office Box 710
Whiting, Indiana 46394-0710
219-473-7700

T. T. Scruggs
Refinery Manager

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

June 22, 1994

Indiana Department of Environmental Management
Office of Water Management
100 North Senate Street
P.O. Box 6015
Indianapolis, IN 46206-6015

NPDES Permit No. 0000108, Serials 001, 002, 003, and 004

Effluent quality data and Discharge Monitoring Report (DMR) forms from Amoco Oil Company's Whiting Refinery for the month of May, 1994 are attached.

Effluent quality was excellent and no permit exceedances were recorded at the Lakefront Wastewater Treatment Plant (WWTP).

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

T. T. Scruggs
Refinery Manager

Attachments

Article No. P-037-144-902

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)
NAME AMOCO OIL COMPANY
ADDRESS 2815 INDIANAPOLIS BLVD
WHITING IN 46394
FACILITY
LOCATION
ATTN: MR. J.E. NACCACHE

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

(2-16) IN0 0010 8 — PERMIT NUMBER
(17-19) 001 A — DISCHARGE NUMBER

MAJOR
F - FINAL

Form Approved.
OMB No. 2040-0004.
Approval expires 6-30-91.

MONITORING PERIOD

FROM YEAR (20-21)	MO (22-23)	DAY (24-25)	TO YEAR (26-27)	MO (28-29)	DAY (30-31)
94	04	01	94	04	30

*** NO DISCHARGE [ ] ***

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(5 Card Only) QUANTITY OR LOADING (46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(4 Card Only) QUALITY OR CONCENTRATION (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
CHROMIUM, HEXAVALENT (AS CR) 01032 1 0 0 EFFLUENT GROSS VALU	SAMPLE MEASUREMENT	0.1	0.2	LBS/D (26)	******	0.001	0.001	MG/L (19)	0	01/07	COMP
	PERMIT	2.01	4.46			REPORT	REPORT			NEW	ONLY
CHROMIUM, TOTAL (AS CR) 01034 1 0 0 EFFLUENT GROSS VALU	SAMPLE MEASUREMENT	<1.3	<2	LBS/D (26)	******	<0.01	<0.01	MG/L (19)	0	01/07	COMP
	PERMIT	23.9	[illegible]			REPORT	REPORT			NEW	ONLY
PHENOLICS, TOTAL RECOVERABLE 32730 1 0 0 EFFLUENT GROSS VALU	SAMPLE MEASUREMENT	0	0	LBS/D (26)	******	<0.01	<0.01	MG/L (19)	0	03/07	COMP
	PERMIT	0.0	0.01			REPORT	REPORT			NEW	ONLY
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0 EFFLUENT GROSS VALU	SAMPLE MEASUREMENT	13.4	24.2	MGD (03)	******	******	******	MG/L **** ****	0	07/07	CONT
	PERMIT	REPORT	REPORT							DAILY	CONT
CHLORINE, TOTAL RESIDUAL 50060 1 0 0 EFFLUENT GROSS VALU	SAMPLE MEASUREMENT	******	******	**** ****	******			(19)		00/00*	
	PERMIT						0.05			DAILY	
COLIFORM, FECAL GENERAL 74055 1 0 0 EFFLUENT GROSS VALU	SAMPLE MEASUREMENT	******	******	**** ****	******			MG/L (13)		00/00**	
	PERMIT					200	400	#/100ML		5/7	
	SAMPLE MEASUREMENT										
	PERMIT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
T. Scruggs, Refinery Manager
TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN; AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 USC § 1001 AND 33 USC § 1319. (Penalties under these statutes may include fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE AREA CODE	NUMBER	DATE YEAR	MO	DAY
219	473-3179	94	05	24

SIGNATURE AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

*Chlorine testing required only when chlorinating this stream
*Fecal coliform testing required only when refinery sanitary sewers are discharging to the Amoco WWTP

EPA Form 3320-1 (Rev. 9-88) Previous editions may be used. (REPLACES EPA FORM 7-40 WHICH MAY NOT BE USED.)