PASSAIC VALLEY SEWERAGE COMMISSIONERS
790 Broad Street
Newark, N. J. 07102

Date: May 15, 1972

Plant Ref. No. PPEO 457

WASTE EFFLUENT SURVEY

(For Industries Served by the Passaic Valley Sewerage Commissioners)

Plant Name: Atlas Refinery, Inc.

Address: 142 Lockwood Street, Newark, N. J. Zip 07105

Person and Title to whom any further inquiries should be directed: J. Bihun, Technical Director

Phone No.: (201) 589-2002

Number of Employees: 36

Number of Working Days Per Week: 5

Number of Shifts Per Day: 1

Area of Property: 1.78 Acres, or ____ Sq. Ft.

Type of Industry and 4 digit U. S. Standard Industrial Classification No.: 2843
Surface Active Agents, Finishing Agents, Sulfonated Oils and Assistants

Finished Product(s): Oils for Leather, Textile and Paper Industry

Average Production: 12,000,000 Lbs/Year

Raw Materials Used: Animal, Vegetable, and Marine Oils, Mineral Oils

Brief Description of Operations: Refining of Animal Oils, Sulfation and Sulfonation of Animal, Vegetable, and Marine Oils; Compounded Oils; Sulfation and Sulfonation of Straight Chain Unsaturated Hydrocarbons.

FJF000112

Water received in *Gallons* (Note: multiply cu. ft. x 7.48)

Purchased water in 1971 from: City of Newark

1st Quarter 777,172 Gallons
2nd Quarter 528,844 "
3rd Quarter 415,140 "
4th Quarter 492,184 "

Total Purchased 1971: 2,210,340 Gallons

Well Water

1st Quarter
2nd Quarter
3rd Quarter
4th Quarter

Total well water received in 1971:

River Water

1st Quarter
2nd Quarter
3rd Quarter
4th Quarter

Total river water taken in in 1971:

TOTAL OF ALL WATER RECEIVED IN 1971: 2,210,340 Gallons

Water Use in 1971:

Water to Product (include evaporated and lost water): Approx. 500,000 Gallons

Water to Sanitary Sewer: Approx. 1,700,000 Gallons

Water to Storm Sewer, River or Ditch:

TOTAL WATER USE IN 1971: 2,210,340 Gallons

Name of River, Stream, or Tributary, and location of storm sewer or ditch outlet to river, stream, or tributary: FJF000113

ANSWER THE FOLLOWING QUESTIONS ONLY IF THE PLANT WASTE INCLUDES WASTE ATTRIBUTABLE TO INDUSTRIAL OPERATIONS

(Note: Analyses should be based on a 24-hour composite sample)

Characteristics of Plant Waste discharged to sanitary or combined sewer, after treatment if any. Indicate units of measure where applicable (e.g. Mg/l).

a) pH: 1.3 at 20°C b) Turbidity: 140 JTU

c) Temperature: 80°F d) Radioactive? Yes ..... No X

e) Solids Concentration:

1) Total Solids 74.06 gm/l Volatile 7.35 gm/l Mineral 66.71 gm/l

2) Suspended Solids 104 mg./l Volatile 25 mg/l Mineral 79 mg/l

f) Oil and Grease Concentration:

1) Floatable Oils 27 mg/l

2) Emulsified Oils <1 mg/l ND

g) Chlorides 17,193 gm/l

h) Chemical Oxygen Demand (C.O.D.): 3259 mg/l

i) 5-day Bio-chemical Oxygen Demand (B.O.D.): 72 mg/l

j) Total organic carbon (T.O.C.): 167 mg/l

k) Metallic Ions—Name and concentration (Important—list each metal in waste, e.g., chromium hex. and triv. Antimony, Lead, Mercury, Copper, Vanadium, Nickel; give concentration and total daily discharge of each metal.)

Copper 4438 micrograms/l Iron 40250 micrograms/l

Lead 7175 " Sodium 11500 "

l) Toxic Material—Name and concentration e.g., cyanide salts, etc.): NA

m) Solvents—Name and concentration: NA

n) Resins—Name and concentration (Lacquers, Varnishes, Synthetics): NA

o) Date and time span of sample April 17, 18, 19, 20, 1972 (Between 7:30 AM & 4:00 PM)

Explain hours, method of discharge of waste to Sanitary Sewer and peak rate of flow, e.g., (continuing for 8 hours per day, 5 days per week at 100 gal./day rate) (batch twice a day for 20 minutes at 100 gal./min.) (Continuous 24 hours steady or with peaks at 2 P.M., peak rate 3 M.G.D.) etc.

Water waste is discharged to sanitary sewer continuing for 8 hours daily, 5 days per week at a peak rate flow of 2000 gallons/hour, between 7:30 and 8:30 AM.

FJF000114

Characteristics of Plant Discharge to Storm Sewer, River, or Ditch, after treatment if any. Indicate units of measure where applicable (e.g., Mg/l).

a) pH: ..... b) Turbidity: .....

c) Temperature: ..... d) Radioactive? Yes ..... No .....

e) Solids Concentration:

1) Total Solids ..... Volatile ..... Mineral .....

2) Suspended Solids ..... Volatile ..... Mineral .....

f) Oil and Grease Concentration:

1) Floatable Oils .....

2) Emulsified Oils .....

g) Chlorides .....

h) Chemical Oxygen Demand (C.O.D.): .....

i) 5-day Bio-chemical Oxygen Demand (B.O.D.): .....

j) Total Organic Carbon (T.O.C.): .....

k) Metallic Ions—Name and concentration (Important—list each metal in waste, e.g., chromium hex. and triv. Antimony, Lead, Mercury, Copper, Vanadium, Nickel; give concentration and total daily discharge of each metal.):

.....

.....

l) Toxic Material—Name and concentration (e.g., cyanide salts, etc.): .....

.....

m) Solvents—Name and concentration: .....

.....

n) Resins—Name and concentration (Lacquers, Varnishes, Synthetics): .....

.....

o) Date and time span of sample: .....

Do you pretreat any waste before discharge? .....

If so, describe process and disposal of residue removed: .....

.....

.....

.....

Certification of Laboratory doing sampling and making analyses shall be given. Procedures shall be those shown in the 13th edition of Standard Methods for the Examination of Water and Wastewater, where applicable. If no procedure is applicable, the laboratory is to describe method and procedure used in analyses.

Terry R. Riker

FJF000115 Signature and title of person preparing report

PASSAIC VALLEY SEWERAGE COMMISSIONERS
DEPARTMENT OF SANITATION CONTROL

LABORATORY REPORT

STANDARD METHODS OF ANALYSIS A.P.H.A.
RESULTS EXPRESSED IN ~~PARTS PER MILLION (ppm)~~ Milligrams per liter (mg/l)

DATE OF SAMPLE May 17, 1972 TIME P. M. SAMPLE NO 185

SAMPLE OF Atlas Refinery, back yard ditch to sanitary sewer, 142 Lockwood St. Newark, N. J. TAKEN BY R. Altiero

TOTAL SOLIDS:—		BIOCHEMICAL OXYGEN DEMAND (B.O.D.)	
TOTAL MINERAL		TURBIDITY	
TOTAL VOLATILE		CHLORINE RESIDUAL	
SOLUBLE SOLIDS:—		COLIFORM ~~MPN/100 ML~~ Bacteria per ml.	
SOLUBLE MINERAL		FLAMMABLE	
SOLUBLE VOLATILE		EXPLOSIMETER READING (PERCENT)	
SUSPENDED SOLIDS:—		SETTLEABLE SOLIDS (mls. Per Liter)	
SUSPENDED MINERAL		pH	7.7 vo
SUSPENDED VOLATILE		PHOSPHATE (ORTHO)	
ORGANIC NITROGEN		PHOSPHATE (TOTAL)	
AMMONIA NITROGEN		TEMPERATURE °F.	
NITRITE NITROGEN		HEAVY METALS	
NITRATE NITROGEN			
TOTAL NITROGEN		30 % OIL BY VOLUME asg	
CHLORIDES AS CHLORINE			
ALKALINITY AS $CaCO_3$			
OXYGEN CONSUMED (C.O.D.)			
DISSOLVED OXYGEN (D.O.)			

DESCRIPTION

Light tan supernatant emulsion.

Oily odor.

NOTE: Oil extracted identified by the plant manager Mr. Lou Barta as pig oil, which is a light liquid oil extracted from pigs and used in the tennery industry.

REMARKS:

FJF000116

APPROVED
Director of Sanitation Control

3

ANNUAL REPORT

by

Chief Engineer
S. A. LUBETKIN

to the

PASSAIC VALLEY SEWERAGE COMMISSIONERS

FOR THE YEAR

1972

Violation and Elimination - Atlas Refinery, Inc., 142 Lockwood Street, Newark, N.J.
June 6- August 4, 1972 (J. Mc Laughlin)

Oil and other industrial material going into the storm catch basin on Blanchard Street, thence to the Passaic River, was noticed by Inspector J. Mc Laughlin. He traced it back to the Atlas Refinery, Inc.

Mr. Mc Laughlin reported that this was a case of poor housekeeping, where spillage from this company flows onto the Central Railroad tracks east of Blanchard Street, where it usually stays until a rain caused it to flow to Blanchard Street. Both Inspector Mc Laughlin and Supervisor Cuccinello notified representatives of the company concerning this matter.

On June 16, Mr. Lubetkin wrote to the company, directing them to clean the area to halt the pollution.

On June 27, Mr. A. Schroeder, Jr. replied, stating that the material on the tracks was caused by a broken sanitary sewer which had to be repaired.

When the broken pipe was discovered, it was immediately disconnected to halt further flow. Mr. Schroeder also stated that they have contracted to install a catch basin in the area to intercept any flow and separate the oil and grease before discharging. At the plant they will also separate and remove the oil and grease, and the effluent will go to the sanitary sewer. They believed the whole job could be done in 90 days (September 27) subject to reaching an agreement with the Central Railroad of New Jersey.

On July 25, 1972, Mr. Schroeder wrote, informing the PVSC that their contractor, John Marzano and Sons had received word from Central Railroad that they would raise the tracks while Atlas cleaned the area and installed permanent drainage of the surface water to the storm sewer. At the same time they would install a fibre glass receiving tank and pump system to increase the capacity of their oil separator system before discharging to sanitary sewer. Inspector Mc Laughlin reported that the violation was eliminated as of August 4, 1972 by cleaning up of the grounds and by the repair of the broken pipe.

The installation of the additional oil separator system had been delayed because of non-delivery of the tank,however, as of the end of 1972,delivery was expected within two weeks.

STREAM CONTAMINATION REPORT

DISTRICT NO. 9 DATE: 8-5-77 TIME: 1230 PM

WEATHER: _____

COMPANY NAME: atlas Refinery Inc

ADDRESS: 138 Lockwood St Newark N.J.

TELEPHONE: _____

NAME & TITLE OF PERSON CONTACTED: Mr Berry & Mr Markinski Engineering Dept of Newark N.J.

NATURE OF BUSINESS: _____

NO. OF OUTLETS: _____

METHOD OF WASTE DISPOSAL: Sanitary Sewer _____ Combined Sewer _____

Storm Sewer, River or Ditch _____

IF NPDES PERMIT IS REQUIRED: Draft Permit _____ Final Permit _____

VIOLATION: Dye testing lines on atlas Refinery Inc.

1. Color: _____
2. Odor: _____
3. Turbidity: _____
4. Estimated Flow (G.P.M.): _____
5. Collection on Banks: _____
6. Surface Scum, Foam or Oil:, _____
7. Approximate Distance Extending Into Stream or River; Width Upstream or Downstream: _____
8. pH Reaction With Test Paper _____ Sample Taken _____
9. Why Sample Not Taken: _____

(COMPLETE NARRATIVE ON REVERSE SIDE)

FJF000126

8-5-77

Received a Call to proceed to atlas Refinery Inc 138 Lockwood St Newark.

I accompanied Mr Berry & Mr Narkinski from the Engineering Dept of Newark.
They were Dye testing pipes on property to determine whether or not these pipes were entering storm sewer. They will return the week of 8/8/77 to do more dye testing. I will keep you informed of future progress.

Matthew Cardasco

FJF000127

PASSAIC VALLEY SEWERAGE COMMISSIONERS
DEPARTMENT OF SANITATION CONTROL

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LABORATORY REPORT

City of Newark, STANDARD METHODS OF ANALYSIS

RESULTS EXPRESSED IN MILLIGRAMS PER LITER (mg/l)

DATE OF SAMPLE 8/5/77 TIME 11:15a.m. SAMPLE No. H-112

SAMPLE OF Atlas Refinery Co. 138 Lockwood St. Newark. Storm Sewer at 2nd Manhole Upstream. TAKEN BY David Marlinski

TOTAL SOLIDS		TURBIDITY (J.T.U.)	3400 mjf
TOTAL VOLATILE		pH	6.9 eb
TOTAL MINERAL		FLAMMABLE	
SUSPENDED SOLIDS	308 jm	EXPLOSIMETER (PERCENT)	
SUSPENDED VOLATILE	168 jm	ORTHOPHOSPHATE (DISSOLVED)	
SUSPENDED MINERAL	140 jm	TOTAL PHOSPHATES	
DISSOLVED SOLIDS		TEMPERATURE °F	
SETTLEABLE SOLIDS (ml/L)		COLIFORMS PER ml	
TOTAL NITROGEN		FECAL COLIFORMS PER 100 ml	
AMMONIA NITROGEN		THRESHOLD ODOR NUMBER	
ORGANIC NITROGEN		GREASE AND OIL	
NITRATE NITROGEN		TOTAL ORGANIC CARBON	1020 eb
NITRITE NITROGEN			
CHLORIDES AS CHLORINE	1070 mjf		
ALKALINITY AS $CaCO_3$			
CHEMICAL OXYGEN DEMAND	3508 mjf		
BIOCHEMICAL OXYGEN DEMAND	1147 jm		
CHLORINE DEMAND			
CHLORINE RESIDUAL			

DESCRIPTION:
Brown Opaque Liquid
Fine Brown Suspended Matter
Fine Brown Sediment
Industrial Odor

REMARKS:

FJF000128

ALEXANDER S. GOLDBERG
DIRECTOR OF SANITATION CONTROL

PASSAIC VALLEY SEWERAGE COMMISSIONERS
DEPARTMENT OF SANITATION CONTROL

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LABORATORY REPORT

City of Newark. STANDARD METHODS OF ANALYSIS

RESULTS EXPRESSED IN MILLIGRAMS PER LITER (mg/l)

DATE OF SAMPLE 8/5/77 TIME 11:30a.m. SAMPLE No. H-113

SAMPLE OF Atlas Refinery Co. 138 Lockwood St. Newark.

(From Oil Seperator) TAKEN BY David Marlinski

TOTAL SOLIDS		TURBIDITY (J.T.U.) ✓	3600 mjf
TOTAL VOLATILE		pH	7.0 eb
TOTAL MINERAL		FLAMMABLE	
SUSPENDED SOLIDS	516 jm	EXPLOSIMETER (PERCENT)	
SUSPENDED VOLATILE	304 jm	ORTHOPHOSPHATE (DISSOLVED)	
SUSPENDED MINERAL	212 jm	TOTAL PHOSPHATES	
DISSOLVED SOLIDS		TEMPERATURE °F	
SETTLEABLE SOLIDS (ml/L)		COLIFORMS PER ml	
TOTAL NITROGEN		FECAL COLIFORMS PER 100 ml	
AMMONIA NITROGEN		THRESHOLD ODOR NUMBER	
ORGANIC NITROGEN		GREASE AND OIL	
NITRATE NITROGEN		TOTAL ORGANIC CARBON ✓	2480 eb
NITRITE NITROGEN			
CHLORIDES AS CHLORINE	50 mjf		
ALKALINITY AS $CaCO_3$			
CHEMICAL OXYGEN DEMAND	7900 mjf		
BIOCHEMICAL OXYGEN DEMAND ✓	2145 jm		
CHLORINE DEMAND			
CHLORINE RESIDUAL			

DESCRIPTION:
Brownish Gray Opaque Liquid
Fine Gray Suspended Matter
Fine Gray Sediment
Industrial Odor

REMARKS:

FJF000129

ALEXANDER S. GOLDBERG
DIRECTOR OF SANITATION CONTROL

STREAM CONTAMINATION REPORT & ELIMINATION

DISTRICT NO. 9 DATE: 8/8/77 TIME: 10:30 A.M.

WEATHER: Clear

COMPANY NAME: ATLAS REFINERY INC.

ADDRESS: 139 Lockwood St., Newark, N.J.

TELEPHONE: _____

NAME & TITLE OF PERSON CONTACTED: Mr. Benz & Mr. Warlinski, Engineering Dept. City of Newark

NATURE OF BUSINESS: _____

NO. OF OUTLETS: _____

METHOD OF WASTE DISPOSAL: Sanitary Sewer _____ Combined Sewer _____

Storm Sewer, River or Ditch _____

IF NPDES PERMIT IS REQUIRED: Draft Permit _____ Final Permit _____

VIOLATION: Dye testing sanitary lines

1. Color: _____
2. Odor: _____
3. Turbidity: _____
4. Estimated Flow (G.P.M.): _____
5. Collection on Banks: _____
6. Surface Scum, Foam or Oil:, _____
7. Approximate Distance Extending Into Stream or River; Width Upstream or Downstream: _____
8. pH Reaction With Test Paper _____ Sample Taken _____
9. Why Sample Not Taken: _____

(COMPLETE NARRATIVE ON REVERSE SIDE) FJF000130

Met with Mr. Benz and Mr. Marlinski of the City of Newark, Engineering Dept. We proceeded to dye test sanitary lines at Atlas Refinery Inc., 138 Lockwood St., Newark.

We found lines in plant hooked directly to sanitary sewers, therefore eliminating any violation.

Matthew Cordasco

Matthew Cordasco
River Inspector

FJF000131

PASSAIC VALLEY SEWERAGE COMMISSIONERS
DEPARTMENT OF SANITATION CONTROL

LABORATORY REPORT

STANDARD METHODS OF ANALYSIS

RESULTS EXPRESSED IN MILLIGRAMS PER LITER (mg/l)

DATE OF SAMPLE 8/8/77 TIME 11:10a.m. SAMPLE No. H-144

SAMPLE OF Sample taken from 6 inch Pipe inside of Storm Sewer.

Atlas Refinery Co. 138 Lockwood St. Newark. TAKEN BY M.Cordasco

TOTAL SOLIDS		TURBIDITY (J. T. U.)	2700 mjf
TOTAL VOLATILE		pH	4.8 eb
TOTAL MINERAL		FLAMMABLE	
SUSPENDED SOLIDS	1010 jm	EXPLOSIMETER (PERCENT)	
SUSPENDED VOLATILE	922 jm	ORTHOPHOSPHATE (DISSOLVED)	
SUSPENDED MINERAL	88 jm	TOTAL PHOSPHATES	
DISSOLVED SOLIDS		TEMPERATURE °F	86
SETTLEABLE SOLIDS (ml/L)		COLIFORMS PER ml	
TOTAL NITROGEN		FECAL COLIFORMS PER 100 ml	4,000 gm
AMMONIA NITROGEN		THRESHOLD ODOR NUMBER	
ORGANIC NITROGEN		GREASE AND OIL	
NITRATE NITROGEN		TOTAL ORGANIC CARBON	1480 eb
NITRITE NITROGEN			
CHLORIDES AS CHLORINE	14 mjf		
ALKALINITY AS $CaCO_3$			
CHEMICAL OXYGEN DEMAND	2905 mjf		
BIOCHEMICAL OXYGEN DEMAND	2136 jm		
CHLORINE DEMAND			
CHLORINE RESIDUAL			

DESCRIPTION:
Gray Translucent Liquid
Gray Suspended Matter
Gray Sediment
Industrial Odor

FJF000132

REMARKS:

Alexander S. Goldberg
ALEXANDER S. GOLDBERG
DIRECTOR OF SANITATION CONTROL

PASSAIC VALLEY SEWERAGE COMMISSIONERS
DEPARTMENT OF SANITATION CONTROL

LABORATORY REPORT

STANDARD METHODS OF ANALYSIS

RESULTS EXPRESSED IN MILLIGRAMS PER LITER (mg/l)

DATE OF SAMPLE 8/8/77 TIME 11:10a.m. SAMPLE No. H-1144

SAMPLE OF Sample taken from 6 inch Pipe inside of Storm Sewer.

Atlas Refinery Co. 138 Lockwood St. TAKEN BY M.Cordasco
Newark.

TOTAL SOLIDS		TURBIDITY (J.T.U.)	2700 m
TOTAL VOLATILE		pH	4.8 eb
TOTAL MINERAL		FLAMMABLE	
SUSPENDED SOLIDS	1010 jm	EXPLOSIMETER (PERCENT)	
SUSPENDED VOLATILE	922 jm	ORTHOPHOSPHATE (DISSOLVED)	
SUSPENDED MINERAL	88 jm	TOTAL PHOSPHATES	
DISSOLVED SOLIDS		TEMPERATURE °F	86
SETTLEABLE SOLIDS (ml/L)		COLIFORMS PER ml	
TOTAL NITROGEN		FECAL COLIFORMS PER 100 ml	4,000
AMMONIA NITROGEN		THRESHOLD ODOR NUMBER	
ORGANIC NITROGEN		GREASE AND OIL	
NITRATE NITROGEN		TOTAL ORGANIC CARBON	1480 e
NITRITE NITROGEN			
CHLORIDES AS CHLORINE	14 mjf		
ALKALINITY AS $CaCO_3$			
CHEMICAL OXYGEN DEMAND	2905 mjf		
BIOCHEMICAL OXYGEN DEMAND	2136 jm		
CHLORINE DEMAND			
CHLORINE RESIDUAL			

DESCRIPTION:
Gray Translucent Liquid
Gray Suspended Matter
Gray Sediment
Industrial Odor

REMARKS:

FJF000133

Alexander S. Goldberg

ALEXANDER S. GOLDBERG
DIRECTOR OF SANITATION CONTROL

STREAM CONTAMINATION REPORT

DISTRICT NO. 9 DATE: 8-5-77 TIME: 12:30 PM

WEATHER: _____

COMPANY NAME: Atlas Refinery Inc

ADDRESS: 138 Lockwood St Newark N.J.

TELEPHONE: _____

NAME & TITLE OF PERSON CONTACTED: Mr Berry & Mr Martinelli Engineering Dept of Newark N.J.

NATURE OF BUSINESS: _____

NO. OF OUTLETS: _____

METHOD OF WASTE DISPOSAL: Sanitary Sewer _____ Combined Sewer _____

Storm Sewer, River or Ditch _____

IF NPDES PERMIT IS REQUIRED: Draft Permit _____ Final Permit _____

VIOLATION: Dye testing lines on Atlas Refinery Inc.

1. Color: _____
2. Odor: _____
3. Turbidity: _____
4. Estimated Flow (G.P.M.): _____
5. Collection on Banks: _____
6. Surface Scum, Foam or Oil:, _____ FJF000134
7. Approximate Distance Extending Into Stream or River; Width Upstream or Downstream: _____
8. pH Reaction With Test Paper _____ Sample Taken _____
9. Why Sample Not Taken: _____

(COMPLETE NARRATIVE ON REVERSE SIDE)

8-5-77

Received a Call to proceed to Atlas Refining Inc 138 Lockwood St Newark.

I accompanied Mr Berry & Mr Lsaclenski from the Engineering Dept of Newark. They were Dye testing pipes on property to determine whether or not these pipes were entering storm lines. They will return the week of 8/8/77 to do more dye testing. I will keep you informed of future progress.

Matthew Cordasco

FJF000135

TIERRA-B-013255

Newark

Kenneth A. Gibson
Mayor

Department of Engineering

920 Broad Street
Newark, New Jersey 07102
201 733-8520

Alvin L. Zach, P.E.; L.S.
Director

August 25, 1977

f00 - 5 5 4

Mr. Joseph Cofasso
Atlas Refinery, Inc.
138 Lockwood Street
Newark, N. J. 07105

Re: Recent Inspections of Lockwood Street Refinery

Dear Mr. Cofasso:

Pursuant to several inspections that have been performed by representatives of this department on and around your company's property, we are hereby formally notifying you that:

1) A drain of approximately four inches in diameter leading from your firm's property on Lockwood Street has been noted to be discharging objectionable material to a separate storm sewer in violation of municipal ordinances;

2) Numerous spills of oily material have been noted on your firm's property and on adjacent railroad tracks, posing a hazard to the health and safety of your employees and the general public.

Both of the above conditions require immediate remedial attention. We realize that your firm occupies a complex of older buildings whose original drainage system and physical layout met earlier standards for pollution control and spill prevention. We are aware of your past efforts to upgrade Atlas' physical plant to meet modern environmental regulations. We are encouraged by these efforts and recognize your desire to eliminate all non-compliant conditions at the Lockwood Street refinery.

In pursuit of the above objectives, we understand that you propose to permanently seal the offending drain referenced in Item 1, above, and that you further propose to clean up all spilled oil and waste products noted in Item 2. Such a plan meets with our satisfaction. We request, therefore, that you forward a timetable to this office delineating the steps that you will take to effect the above objectives. We believe that a period of one

FJF000136

August 25, 1977

Re: Recent Inspections of Lockwood Street Refinery

month from the date of this correspondence will allow sufficient time to abate the non-compliant conditions. However, if you believe that a longer period will be necessary, please note this fact and support it with a succinct explanation. We expect your written reply to our request within one week from the date of this letter.

In addition to the above, we would like to note that representatives of this department will be inspecting separate storm drains in your area during the coming months. We will appreciate your cooperation with these investigations in the same spirit that you have shown thus far.

Very truly yours

Alivn L. Zach, P.E., Director
Department of Engineering

ALA:RB:ms

cc: Frank D'Ascensio Passaic Valley Sewerage Commissioner

CC
S. A. L UBETKIN
A GOLDBERG
F. CUPS
L. CUCCINELLO ✓
INSPECTOR

FJF000137

PASSAIC VALLEY SEWERAGE COMMISSIONERS
600 WILSON AVENUE
NEWARK, N.J. 07105
(201) 344-1800

September 21, 1977

Passaic Valley Sewerage Commissioners
600 Wilson Avenue
Newark, New Jersey 07105

Re: Bi-Monthly Report
July and August 1977

Gentlemen:

The following is my report which covers the months of July and August 1977, and consists of three parts:

FJF000141

PART III

VIOLATIONS

The following are reports on polluting discharges still in existence as of the end of August 1977, into the streams and storm sewers under the jurisdiction of the Passaic Valley Sewerage Commissioners, together with information on what is being done to abate such pollution and the name of the River Inspector assigned to the case.

Violation - Atlas Refinery, Inc., 138 Lockwood Street, Newark, N. J.

August 5-31, 1977 (M. Cordasco)

On August 5, 1977, PVSC received a call from the City of Newark that they had uncovered a possible source of pollution of the Lockwood Street storm sewer (see City of Newark, page 41) Inspector Cordasco went to Atlas Refinery and accompanied Messrs. Benz and Marlinski (City of Newark) in dye-testing sanitary lines to determine if illegal connections existed.

On August 8, they returned to the plant and when they introduced dye into one of the oil separators, it appeared in the Lockwood Street storm sewer. Although the company plugged up the illegal connection, the yard area flooded when it rained, indicating additional connections, and the line was then reopened.

On August 24, Mr. Al Zack wrote to Atlas Refinery and directed them to permanently seal the connection to the storm sewer (to eliminate the pollution) and improve the housekeeping. He also requested that they furnish a schedule for eliminating the violation within 30 days.

Violation - Town of Belleville, Chestnut Street Storm Sewer

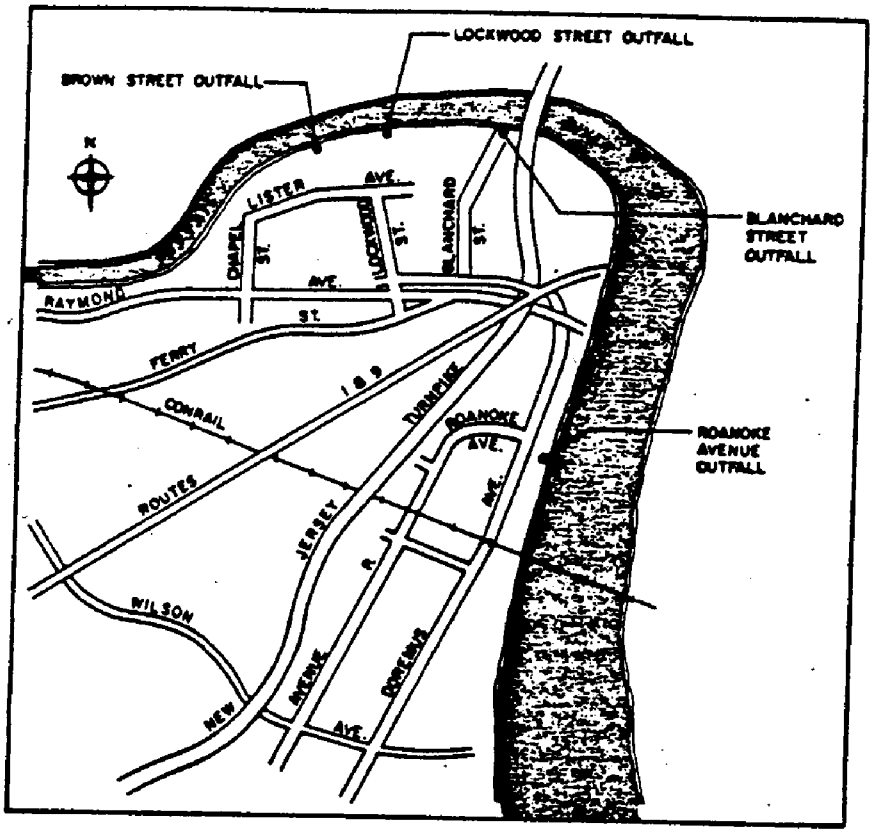
(D. DeMarco)
April 13, 1976 - Aug. 31, 1977 (M. Cordasco)

See the PVSC 1976 Annual Report, page 180. Mr. D'Ascensio called Mr. Soldo on January 12, 1977 and requested further information on Belleville's efforts to eliminate the violation. Although the cold weather prevented further sampling surveys, Mr. Soldo stated he would furnish Mr. D'Ascensio with a copy of a Belleville tax map to be used in an attempt to locate the source of the pollution. It should be noted that this was a small volume, intermittent type of pollution which appeared to emanate in a residential area. The section of the storm sewer involved has very few manholes and runs through the rear yards of many homes, making the source of the pollution difficult to trace.

City of Newark, New Jersey

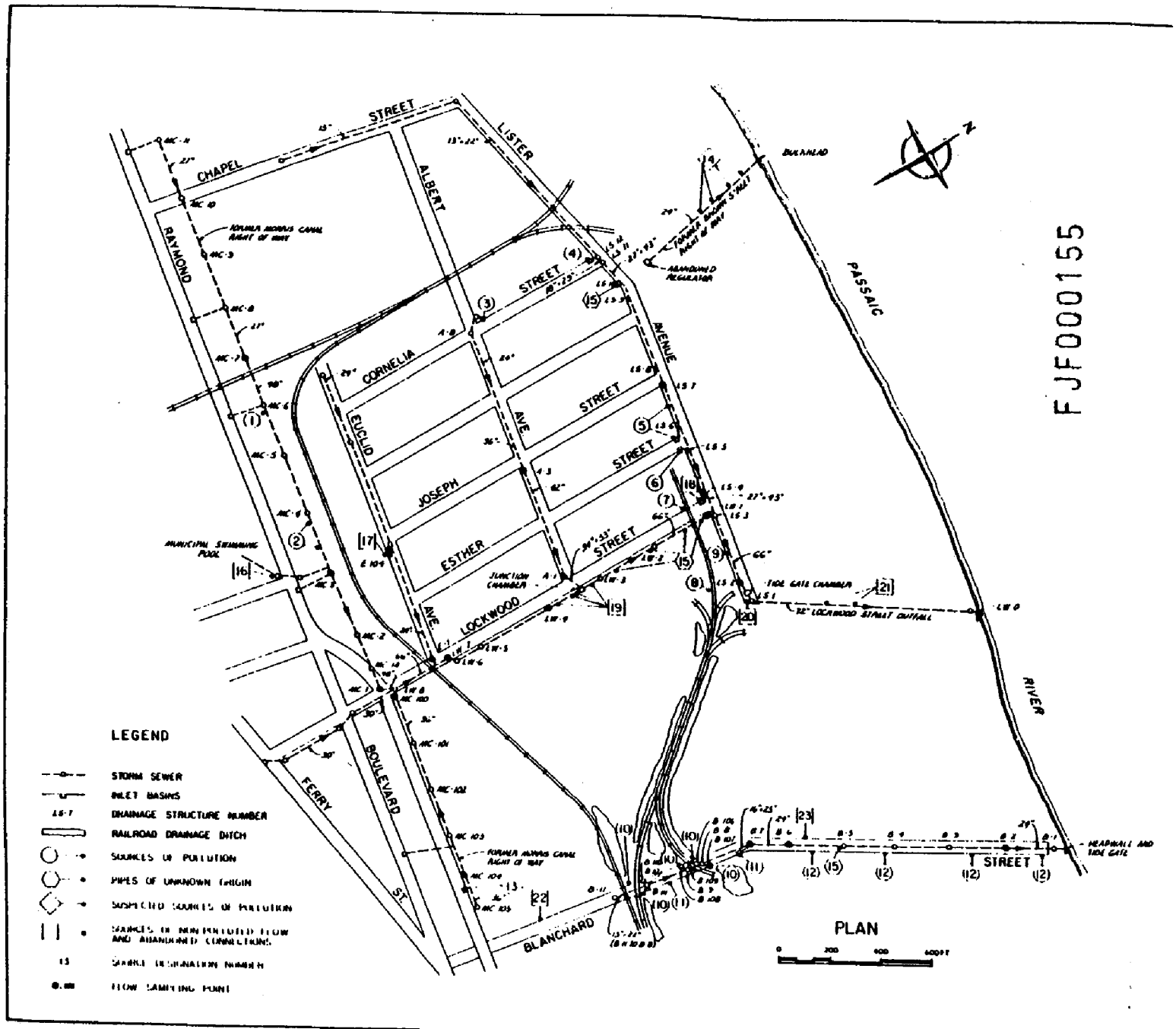
Feasibility Study

POLLUTION ABATEMENT PROGRAM



Clinton Bogert Associates
Consulting Engineers

September, 1978
Revised January, 1979


CHAPEL
STREET
RAYMOND
ALBERT
LISTER
AVENUE
CORNELIA
EUCLID
AVE
JOSEPH
ESTHER
LOCKWOOD
STREET
MUNICIPAL SWIMMING POOL
JUNCTION CHAMBER
TIDE GATE CHAMBER
32" LOCKWOOD STREET OUTFALL
PASSAIC
RIVER
BULKHEAD
ABANDONED REGULATOR
FERRY
BOULEVARD
ST.
BLANCHARD
HEADWALL AND TIDE GATE
LEGEND
STORM SEWER
INLET BASINS
DRAINAGE STRUCTURE NUMBER
RAILROAD DRAINAGE DITCH
SOURCES OF POLLUTION
PIPES OF UNKNOWN ORIGIN
SUSPECTED SOURCES OF POLLUTION
SOURCES OF NON-POINTED FLOW AND ABANDONED CONNECTIONS
SAMPLE DESIGNATION NUMBER
FLOW SAMPLING POINT
PLAN
0
200
400
600FT

FJF000155

DESIGNATION NUMBER	SOURCE DESCRIPTION
1	INTERMITTENT DUMPING OF PAINT INTO INLET AT ASSOCIATED AUTO BODY AND TRUCKS INC.
2	CAR WASH DRAINS AT GUNOCO STATION CONNECTED TO STORM SEWER.
3	INTERMITTENT, LOW VOLUME DISCHARGE OF OIL AND WATER ENTERING INLET FROM CELLOMER CORP.
4	CONTINUOUS FLOW OF ORANGE VISCOUS CHEMICALS ENTERING INLET FROM CELLOMER CORP.
5	CONTINUOUS FLOW OF BLACK OILY CHEMICALS ENTERING INLETS FROM B-LINE TRUCKING COMPANY.
6	INTERMITTENT, LOW VOLUME DISCHARGE OF OIL AND WATER ENTERING INLET FROM FIBRE BROTHERS REFINING COMPANY.
7	INTERMITTENT DISCHARGE OF BLACK OILY CHEMICALS ENTERING INLET FROM FIBRE BROTHER REFINING COMPANY RAILROAD SIDING.
8	CHEMICAL SPILLAGE AT ATLAS REFINERY INC. RAILROAD SIDING CONTAMINATING GROUND AND ENTERING RAILROAD DRAINAGE DITCHES DURING WET WEATHER.
9	RAILROAD DRAINS AND OIL SEPARATOR AT ATLAS REFINERY INC. CONNECTED TO STORM SEWER.
10	INTERMITTENT FLOW OF WATER AND CHEMICALS ENTERING INLETS FROM RAILROAD DRAINAGE DITCHES.
11	FREQUENT OVERFLOW OF SEWAGE FROM SANITARY MANHOLES ENTERING INLETS.
12	OCCASIONAL OVERFLOW OF SEWAGE FROM SANITARY MANHOLES ENTERING INLETS.
13	CONTINUOUS DISCHARGE FROM BENJAMIN BOXBOARD COMPANY.
14	INLETS AND DRAINS AT SHERWIN WILLIAMS COMPANY CONNECTED TO STORM SEWER.
15	PIPES OF UNKNOWN ORIGIN.
16	CONTINUOUS FLOW FROM MUNICIPAL SWIMMING POOL (SEASONAL).
17	CONTINUOUS FLOW OF COOLING WATER ENTERING INLET FROM HERCOMAY MANUFACTURING COMPANY.
18	INTERMITTENT DISCHARGE OF COOLING WATER ENTERING INLET FROM FIBRE BROTHERS REFINING COMPANY.
19	ROOF DRAIN CONNECTIONS FROM THE MESSINGER WAREHOUSE AND TRUCKING COMPANY AND ABANDONED INLET CONNECTION.
20	ABANDONED RAILROAD DRAIN CONNECTED TO MANHOLE L4-1
21	ROOF DRAIN CONNECTIONS FROM THE BENJAMIN MOORE COMPANY.
22	CONTINUOUS, LOW VOLUME DISCHARGE OF COOLING WATER ENTERING GUTTER FROM BENJAMIN BOXBOARD COMPANY.
23	INTERMITTENT DISCHARGE OF GROUNDWATER ENTERING GUTTER FROM SUMP PUMP AT FAIRMOUNT CHEMICAL COMPANY.

HEADWALL AND TIDE GATE

NEWARK POLLUTION ABATEMENT FEASIBILITY STUDY

SOURCES OF POLLUTION IN STORM SEWER SYSTEMS ON BLANCHARD, LOCKWOOD AND BROWN STREETS

CLINTON BOGERT ASSOCIATES
CONSULTING ENGINEERS

PLATE 2

FJF000156

IV. Blanchard Street

A. Physical Inspection Findings

Blanchard Street is served by separate storm and sanitary sewers. The 24-inch storm sewer (see Plate 2), constructed in 1917, discharges to the Passaic River. In 1970, the storm sewer was extended and the sanitary sewer was rebuilt. The sanitary sewer connects to a trunk sewer in Raymond Boulevard. The sanitary sewer is clogged by grease, tallow, paper and black oily waste. Several sanitary manholes were observed to surcharge and overflow into the street. These overflows usually occurred between 11:00 a.m. and 3:00 p.m. on weekdays. The frequency of overflow varies depending on industrial discharge rates. It does not appear to be related to rainfall events. Overflows were observed at least once a week and were noted on ten consecutive weekdays in April 1978. Intermittent overflows may have occurred during the last few years. These sanitary overflows are a major source of pollutants in the Blanchard Street storm sewer. City forces had been cleaning the Blanchard Street sanitary sewer when backups and overflows were reported. Equipment breakdowns and manpower shortages caused a suspension of cleaning operations in 1978.

Prior to cleaning, the storm sewer contained between 1.0 and 1.5 feet of primarily granular sediment mixed with black oil. The oil, which comes from the overflowing sanitary sewer, coats the inside of the pipes and manholes. Several inlets were filled with debris and sediment. The tide gate is mounted on a headwall on the river bank. The gate was being held open by sediment and debris during the first field inspection. The gate appeared to be fully operational after City personnel removed the sediment in April 1978. In subsequent inspections floating debris had lodged again under the gate indicating the need for frequent maintenance. A continuous waste

discharge was noted. Dry weather flow rates, varying between 10,000 gpd and 100,000 gpd were estimated using depth measurements. The source of this flow appears to be groundwater. Dry weather flow was observed above manhole B-7 only when the sanitary sewer was overflowing or the drainage ditches along the Conrail industrial spurs were flooded.

Inlets B-106, B-107, B-108, B-109, B-110 and B-111 receive flow from the railroad spurs and sidings. The ditches along these tracks drain wet lands which were observed to contribute continuous flow for up to two weeks during wet periods. Chemical spillage was observed on the tracks and in the adjacent ditches. The source of the chemicals appears to be leakage from railroad tank cars. No leaking cars were observed, however. Major spills were noted from the Atlas Refinery Inc. railroad siding. Rain washes some of this spillage through the drainage ditches and railroad ballast into the Blanchard Street storm inlets. Since no leaking cars were found on the Conrail spurs, it is not possible to link other specific industries to the spillage. Valves may not always be closed when the cars are unloaded and chemicals may drip out while the cars are standing on the spurs in a totally random pattern. The Fairmount Chemical Company, the Benjamin Moore Company, Atlas Refinery Inc, and the Fiske Brothers Refining Company all receive tank cars through this railroad spur.

Four pipes were observed along the railroad tracks west of Blanchard Street. Two of the pipes drain the Delissa Pallet storage area and are not sources of pollution. The other two are filled with earth and appear to be old railroad culverts. Railroad drainage ditches are connected to inlets B-106 and B-108 by pipes. The pipe at B-108 is clogged with earth; this causes partial flooding of the siding during rainfall events. Leaks were found in the walls and under the frames of inlet B-106 and B-107 when the ground was saturated. The sanitary sewer is adjacent to inlet B-107 at an elevation lower than the leaks observed. The inlet was inspected in dry

weather when the sanitary sewer was surcharged and no leakage was observed. During another inspection made during a rainfall event, the sanitary sewer was not surcharged but the inlets walls were leaking, implying that the leakage in inlet B-107 is not caused by sanitary sewer exfiltration. Inlet B-106 is on the opposite side of the street and has the same type of leakage, implying that the leakage is groundwater.

Two minor sources of flow were observed. Neither is believed to be a significant source of pollution. Newark Boxboard Company discharges a small volume of cooling water into the gutter adjacent to their loading dock area. A sump pump at Fairmont Chemical Company intermittently discharges groundwater into the gutter near manhole B-6. The City of Newark is aware of this discharge and had previously inspected the facility. No discharging was observed during the field inspections but water was noted along the curb. The water was clear and there was no evidence of chemical contamination. Algal growth was noted in the water along the curb.

B. Dry Weather Sampling and Flow Rates.

Samples were obtained at the following locations:

B-2 300 feet south of the Passic River
B-6 1100 feet south of the Passic River
B-7 1300 feet south of the Passaic River

Samples were obtained at B-2 and B-6 on May 2, 1978 and at B-2, B-6 and B-7 on June 14, 1978. The May samples were taken two hours before low tide with tide water in B-2. The June samples were obtained at low tide while the Passaic River level was below the invert of the discharge pipe. Appendix A shows the results of laboratory analysis of the samples. The May samples show higher levels of pollution at B-6 than at B-2 downstream. This difference can be attributed to dilution of the pollutants by tide water at B-2. (note chloride concentrations) There was no tidal flow in the line when the June samples were taken. The pollutant concentrations at B-6 and B-7 were similar. There was a substantial increase in pollutants at B-2. This increase may result from leaching from abandoned septic tanks in the area. The sanitary sewer was not overflowing and the storm sewer was not receiving flow from the railroad drainage ditches when the samples were obtained. The flow rate during both sampling operations was estimated at 50,000 gpd.

C. Smoke Testing

Smoke testing of the entire storm and sanitary sewer system was planned. However, the sanitary sewer was surcharged and badly clogged with grease so that smoke could not be pumped through it. The sanitary sewer could not be dye tested to observe exfiltration due to the oil and hardened grease sealing the manholes above the top of the pipe. The entire storm sewer was smoke tested at low tide. Smoke did not pass between manholes and was observed only at inlets connected to points where smoke was blown in. It appeared that there were blockages or severe misalignments in the storm sewer. No smoke entered industrial facilities and no smoke was observed at roof drains. The absence of smoke in adjacent buildings does not preclude the existance of illegal connections with water traps.

D. Television Inspection

Illegal connections were suspected downstream of manhole B-7. Television inspection was planned for 1250 feet of 24-inch storm sewer between manholes B-1 and B-7. The line required cleaning with bucket machines prior to the television inspection. The bucket machine operation encountered obstructions in the pipe which caused the buckets to become lodged frequently. In no single section could a 24-inch tool be passed. Openings varying between 12-inch and 18-inch were cleared. Most of the sediment was removed, but pieces of the 24-inch pipe were also brought out in the buckets which caused suspension of this operation. The obstructions encountered could be the result of joint misalignments, partial cave-ins and pipe fragments lodged in the line. Further cleaning operations could have caused collapse of the street.

Television inspection was attempted without further cleaning. Several attempts were made to pull the camera through various portions of the line. In every case but one, the camera went under water within 10 feet of the manhole and the skids lodged on obstructions. The first 45 feet of line downstream of manhole B-2 were visible. The pipe was cracked and a partial collapse was observed approximately 45 feet downstream of the manhole. Pieces of pipe had fallen into the line and the camera could not pass over them. An 8-inch connection was found in manhole B-5 below the sediment level during the cleaning operations. This connection was filled with sediment and was inactive. The problems encountered during cleaning and television inspections operations are described in greater detail in Appendix B. The 24-inch storm sewer is not structurally sound. This sewer was constructed in 1917 and has been subjected to very heavy truck traffic for the last several decades. A partial collapse of the street could occur as this pipe continues to deteriorate.

E. Conclusions and Recommendations

1. The frequent overflow of sanitary sewage may be considered the most serious source of pollutants found in the storm sewer. The 2500 linear feet of sanitary sewer should be cleaned to prevent future surcharging and overflows. Contracting this work would cost approximately $10,000. Area industries should be required to conform to discharge quality standards and cease discharging grease, tallow, paper and oil into the sanitary sewer. After cleaning, the sanitary sewer should be dye tested to determine if sewage is exfiltrating into the storm drainage system.

2. Industries that receive and ship chemicals in railroad tank cards should be required to control spillage and leakage. All tank car valves should be closed prior to moving the unloaded cars back onto the Conrail spurs. Atlas Refinery should be required to clean up the spillage at its siding and prevent future spills.

3. The 24-inch storm sewer, downstream of manhole B-7, should be replaced. The problems encountered during the cleaning and television work indicate that the sewer is cracked, misaligned, and partially collapsed in places. Sizing a new sewer is beyond the scope of this study, however, a 30-inch replacement was assumed for estimating purposes. The 1978 construction cost of 1300 linear feet of 30-inch storm sewer, manholes, tide gate chamber, and headwall would be approximately $450,000. Replacing this sewer will prevent the collapse of the roadway, locate any illegal connections, and eliminate the infiltration of contaminated groundwater.

4. The existance of illegal connections could not be verified because the condition of the storm sewer prevented internal inspection. Illegal connections may exist downstream of manhole B-7. However, because of the age and condition of the 24-inch storm sewer, its proximity to abandoned septic fields and high groundwater in the area, contaminated groundwater is also a probable source of pollutants in the storm sewer. Pollutants may also be leaching directly into the river. Further studies should be made of groundwater pollution in the entire study area.

5. The Fairmount Chemical Company should be required to redirect its sump pump discharge into an inlet.

6. The connection found in manhole B-5 should be sealed.

V. Lockwood Street Outfall

A. Physical Inspection Findings

The storm sewers in Lockwood Street, Lister Avenue, Chapel Street, Albert Avenue, Euclid Avenue and the Morris Canal Right-of-Way all drain through the Lockwood Street outfall (see Plate 2). Drainage from parts of Raymond Boulevard, Ferry Street, and the Pulaski Skyway ramp are also connected to the Lockwood Street system. Separate sanitary sewers serve the entire area. All storm manholes and inlets in the study area were inspected. The limits of tidal flow were identified and all sources of dry weather flow were isolated. Chemical spills at industrial facilities were noted. The Morris Canal storm sewer west of Lockwood Street (LW-8 to MC-11) was lamped.

(1) Lister Avenue Sewer

The manholes, inlets and pipes on Lister Avenue were coated with a black oily material. Sediment depth varied between 0.5 and 1.5 feet. The source of the oil was spillage at the B-Line Trucking Company. Tank trucks are allowed to drain while parked at this facility. Black oily chemicals flow into inlets on Lister Avenue and Esther Street. The flow into Esther Street is continuous and the curb has been broken out to facilitate it.

A continuous flow of viscous orange chemicals was observed entering an inlet on Cornelia Street. This material came from leaking drums stored on the Cellomer Corporation property. These chemicals were entering the Lister Avenue storm sewer. Intermittent spillage of black oily chemicals was noted at the Fiske Brothers Refining Company railroad siding and a very small volume of water and oil from that industry was being discharged into Esther Street. Both flows

were entering the Lister Avenue storm sewer. A cooling water discharge pipe from Fiske Borthers was found at the inlet on the southwest corner of Lockwood Street and Lister Avenue. A 2-inch ± connection was found entering inlet LS-10. Because of its diameter, it is improbable that this line contains wastes. It was not flowing when inspected. The only building near LS-10 is occupied by the State Produce Company. No dry weather flow was observed upstream of manhole LS-12 and no sources of pollution are suspected above that point.

(2) Morris Canal Sewers

Continuous flow was observed in the Morris Canal storm sewers east and west of Lockwood Street. The flow in the easterly line (LW-8 to MC-105) was traced to the Newark Boxboard Company. This flow was estimated at 0.16 mgd using depth measurements. The municipal swimming pool on Waydell Street was discharging an estimated 0.07 mgd into the westerly line upstream of manhole MC3. The car wash drains at the Sunoco Station on Raymond Boulevard were found to be connected to the storm sewer between manholes MC3 and MC-4. Personnel at Associated Auto Body and Trucks Inc. were observed dumping paint into the storm sewer between manholes MC-6 and MC-7. Manhole MC-7 is the limit of tidal influence and no dry weather flow was observed upstream of that point. A partial blockage was found in the invert of manhole MC-2. Sediment varying in depth between 0.5 and 1.0 feet was noted between manholes LW-8 and MC-7.

(3) Euclid Avenue Sewer

The flow in the Euclid Avenue storm sewer, estimated at 0.02 mgd, was traced to the Reddaway Manufacturing Company's cooling water discharge at inlet E-104.

(4) Albert Avenue Sewer

Tidal flow was observed in the Albert Avenue storm sewer up to manhole A-3. A minor, intermittent flow of water and oil from Cellomer enters the Cornelia Street gutter and flows to the Albert Avenue storm sewer. However, no dry weather flow was actually observed upstream of manhole A-3.

(5) Lockwood Street Sewer

No dry weather flow was observed in the Lockwood Street storm sewer upstream of manhole LW-8. There is no indication of pollutant sources above that point. The cross-connections shown on the sewer plans were inspected and found to be sealed. A railroad drain on the south side of the Messinger Trucking and Warehouse Corporation building appeared to be connected to the Lockwood Street sanitary sewer. Major spillage of chemicals was observed at the Atlas Refinery Inc. railroad siding. The eastern portion of this siding drains into railroad drainage ditches that are connected to the Blanchard Street storm sewer system. The discharges from Newark Boxboard, the municipal swimming pool, and Reddaway Manufacturing produce a base discharge of approximately 0.25 mgd.

(6) Lister Avenue Tide Gate

There was no evidence of chemical attack or deterioration of the concrete chamber. Sediment in the invert of the chamber prevents the Lister Avenue tide gate from closing completely. The gate allows inflow during the rising tide. Assuming a five foot tidal range and an open tide gate, approximately 270,000 gallons of river water enters with each incoming tide, mixes with pollutants being discharged into the system and flows back into the river as the tide falls. A typical diurnal flow pattern at the tide gate is shown on Plate 9. If

the tide gates were to close completely, the discharge from the system of any polluted flow would be restricted to a relatively short period around low tide.

(7) Lockwood Street Outfall

An abandoned railroad drain was found connected to manhole LS-1. The last 25 feet of the 72-inch outfall was exposed and showed evidence of chemical attack. Portion of the crown had completely deteriorated. The headwall was not deteriorated and there was no evidence of chemical attack below the spring line of the pipe.

B. Dry Weather Flow Sampling and Flow Montoring

Sources of dry weather flow and limits of tidal influence were noted during the physical survey. Those sewers in which flow was observed were subdivided for sampling. The first set of samples was obtained on May 2, 1978. The second set was taken on June 14, 1978. The laboratory analysis of these samples is shown in Appendix A. Both sets of samples show high levels of pollution on Lockwood Street, Lister Avenue, Albert Avenue, and the easterly portion of the Morris Canal storm sewer. The samples in the Euclid Avenue sewer fell within water quality standards. Because of tidal action, it was not possible to confirm that all high pollutant readings were caused by discharges near the respective sampling points. A discharge of pollutants anywhere in the system within the tidal range could be mixed and carried to distant sampling points. Samples were obtained at the following locations.

LW-0	Lockwood Street Outfall at the Passaic River
LS-2	Lister Avenue upstream of the tide gate chamber
LS-4	Lister Avenue upstream of Lockwood Street
LS-7	Lister Avenue at Joseph Street
LW-1	Lockwood Street upstream of Lister Avenue
LW-4	Lockwood Street upstream of Albert Avenue
LW-7	Lockwood Street downstream of the Morris Canal
A-1	Albert Avenue at Lockwood Street
A-3	Albert Avenue at Joseph Street
E-1	Euclid Avenue at Lockwood Street
E-104	Euclid Avenue (cooling water connection at inlet)
MC-1	Morris Canal at Lockwood Street (west side)
MC-3	Morris Canal 500 ft. west of Lockwood Street
MC-7	Morris Canal 1400 ft. west of Lockwood Street
MC-100	Morris Canal at Lockwood Street (east side)
MC-104	Morris Canal 800 ft. east of Lockwood Street

Euclid Avenue was eliminated from further study because of sampling results. The cooling water discharged at Reddaway Manufacturing was sampled at inlet E-104. The Morris Canal storm sewer west of Lockwood Street (LW-8 to MC-11) was eliminated on the basis of physical inspection, lamping and sampling. The intermittent sources of pollution at the Sunoco Car Wash and Associated Auto Body have been identified. The high levels of pollutants detected at manhole MC-1 in the May 2 sampling is attributed to these sources. Sediment downstream caused flow to pool at manhole MC-7 and remain there as the tide went out. Pollutants from downstream appear to have been carried into that manhole by the tide causing the contamination detected in the MC-7 sample on June 14. The 72-inch Lockwood Street Outfall was not televised because there was no evidence of pollutant sources in the line. The Benjamin Moore Company is the only industry adjacent to the outfall. Maps provided by the City of Newark show the roof drains from one building connected to the outfall. The Benjamin Moore laboratory is located in that building but there are no chemical process facilities. The plant engineer indicates that all other surface and roof drainage is pumped directly into the Passaic River. All other storm sewers in which flow was observed were scheduled for television inspection.

C. Smoke Testing

The storm and sanitary sewers on Lockwood Street, Lister Avenue, Albert Avenue, and the easterly portion of the Morris Canal right-of-way were smoke tested. No problems were observed when the storm sewers were tested. The pipe connecting to manhole LS-1 was found to terminate in an embankment along the nearby railroad spur. This pipe may have functioned as a railroad drain before the track elevation was lowered; it serves no purpose now. The effectiveness of the smoke testing may have been reduced in the larger storm sewers. Blowers were used to force smoke into the pipes under pressure. The volume of the Lockwood Street storm sewer (66-inch) and the number of inlet openings reduced the pressure behind the smoke and may have prevented it from reaching remote connections.

Three inflow sources were detected when the sanitary sewer was smoke tested. All observed roof and area drains at Atlas Refinery Inc. were connected to the sanitary sewer. These drains are a major source of inflow and should be reconnected to the storm sewer. A cross connection was found at the intersection of Joseph Street and Lister Avenue. The storm inlet at the southwest corner of the intersection is connected to the adjacent sanitary manhole. The sanitary sewer elevation is lower than the inlet invert. Sanitary sewage could enter the storm sewer if a blockage occurred. Smoke also escaped from the site of a demolished building at the southwest corner of the Lockwood Street-Albert Avenue intersection. It appears that the building connection was not sealed. No smoke was observed escaping from plumbing vents. It is probable that all connections to the storm and sanitary sewer have line traps which would prevent the passage of smoke.

D. Television Inspection

The following lengths of storm sewer were inspected using closed circuit television.

Lister Avenue	LS-1 to LS-3
Lister Avenue	LS-4 to LS-11
Lockwood Street	LS-3 to LW-8
Albert Avenue	A-1 to A-3
Morris Canal	LW-8 to MC-104

The inspection of the Lister Avenue line revealed an oil separator at Atlas Refinery Inc. connected to the 66-inch storm sewer approximately 120 ft. upstream of manhole LS-2. This connection is believed to be a major source of pollutants. There is a railroad siding drainage system connected to this oil separator. Tank cars containing chemicals are unloaded at the siding daily and spills are frequent. Much of the spillage is believed to pass through the separator and enter the Lister Avenue storm sewer. No other sources of flow were found during the television inspection of Lister Avenue. Significant settlement was noted between LS-4 and LS-11. The television camera went under water frequently and came out at inlets and manholes. Most lengths of pipe had settled more than 15 inches. Based upon the portions of line that could be seen and the relatively recent date of construction (1970), no illegal connections are suspected. The pollution in the line results from spillage at B-Line Trucking and Cellomer, as well as pollutants washed in by the tide. The flow from the Atlas oil separator, immediately downstream, could cause high pollutant concentrations in the Lister Avenue storm sewer.

Several connections were found in the Lockwood Street storm sewer between manholes LW-4 and LW-3. Pipes were located 34 ft., 92 ft., 104 ft., 133 ft., 143 ft. and 200 ft. downstream of manhole

LW-4. The pipes at 92 ft. and 104 ft. are shown on old plans as connections to inlets at the intersection. These inlets were connected to the new Albert Avenue storm sewer in 1970. The pipes at 34 ft., 143 ft. and 200 ft. appear to be roof or floor drain connections to the Messinger Trucking and Warehouse Corporation building. There are no wastes eminating from this facility. The connection at 143 ft. may also be a concrete spall; the pipe could not be seen clearly. The connection at 133 ft. comes from the west side of the street in the vicinity of the Albert Avenue intersection. This pipe is not shown on the storm sewer plans, but it may be an abandoned inlet connection. These connections were not flowing when the pipe was televised.

A connection of unknown origin was observed in the Lockwood Avenue storm sewer 53 ft. downstream of manhole LW-3. Inlet connections were also observed 170 ft. and 183 ft. downstream of LW-3. The pipe at 53 ft. connected on the east side and may be from Atlas Refinery Inc. A pipe crossing broken into the crown of the 66-inch line and running perpendicular to it was noted at 201 ft. These pipes were not flowing when televised. A 2-inch $\pm$ connection located approximately 10 ft. upstream of manhole LW-2 has been observed by City personnel. This connection comes from the east side of the street and was discharging flow when observed. This connection appeared to originate at Atlas Refinery Inc.

Three connections were noted between manholes LW-2 and LW-1 in the Lockwood street storm sewer. Pipes were observed 149 ft., 159 ft. and 215 ft. downstream of manhole LW-2. The connection at 159 ft. is believed to be from an inlet that was removed during construction of a new building at Atlas Refinery Inc. The connection at 149 ft. appeared to be a large pipe 24-inch $\pm$ surrounded by roots. It could also be a connection crossing the 66-inch line. The connection at 215 ft. was from the westerly side of the street. It

could not be seen clearly and may be a concrete spall. No flow was observed from any of these pipes.

No improper connections were found in the Albert Avenue storm sewer or in the Morris Canal line between manholes LW-8 and MC-104. The pollutants detected in the Albert Avenue line appear to have been carried in by tidal action. Two sources of pollutants are suspected in the Morris Canal sewer east of Lockwood Street. The limit of tidal influence is downstream of manhole MC-104. Yet, pollutants were detected in the sample obtained at that manhole. Newark Boxboard discharges the flow sampled at MC-104 and that flow is polluted. However, the concentration of pollutants downstream, at manhole MC-100, is three times greater than at MC-104. Some pollutants may settle into the sediment during the high tide periods. Flow from Newark Boxboard may flush some of this material and carry it into the Lockwood Street storm sewer.

E. Conclusions and Recommendations

1. Several improvements are required at Atlas Refinery Inc. The firm should be required to connect its oil separator to the sanitary sewer rather than to the storm sewer. The spillage at the railroad siding should be cleaned up and procedures developed to prevent future spills. Roof and area drains should be connected to the storm sewer rather than to the sanitary sewer as at present. The plant has been expanded several times over the years and complete plans of the piping systems are not available. The Lockwood Street storm sewer is located under the sidewalk in front of the Atlas plant. Connections could have been made without excavation in the street. Connections of unknown origin between manholes LW-3 and LW-1 appear to lead to drains in the Atlas plant complex. Fiske Brothers Refining Company, the industry across the street, is a less likely point of origin since they would have had to excavate the street and cross the sanitary sewer to make connections to the storm sewer. Atlas should be required to evaluate its piping and identify connections to the storm sewer. Any sanitary facilities, chemical processes, or drains that accept polluted flow should be reconnected to the sanitary sewer. Authorized discharges to the storm sewer should be made through a manhole or chamber to allow monitoring by the City.

2. Fiske Brothers Refining Company should be required to cease discharging oil and water into Esther Street and to prevent spills at their railroad siding. Fiske Brothers should be required to identify existing connections to the storm sewer. Connections that accept pollutants should be reconnected to the sanitary sewer. Connections that carry

nonpolluted flow should be made through a chamber to facilitate monitoring by the City.

3. After Atlas and Fiske Brothers have evaluated their piping and reconnected lines as necessary, the remaining connections of unknown origin between LW-3 and LW-1 should be sealed as a precaution. Initially, temporary plugs should be installed. If the lines are active, a backup will be reported. If no problems occur after one month, the connections should be permanently sealed. The connections observed between LW-4 and LW-3 are believed to be roof drains from the Messinger Warehouse and abandoned inlet connections. They should not be sealed.

4. B-Line Trucking Company should be required to cease discharging black oily waste into Lister Avenue and Esther Street. The spillage that has already occurred should be cleaned up. This flow is believed to be the major source of black oil in the system.

5. Newark Boxboard Company should be required to evaluate its internal piping. Only nonpolluted flow should be discharged into the Morris Canal storm sewer. Polluted flow should be discharged into the Blanchard Street sanitary sewer after that line is cleaned. The City should monitor the flow at manhole MC-104 to assure compliance.

6. Associated Auto Body and Trucks, Inc. should be prohibited from dumping paint or other wastes into the Morris Canal storm sewer.

7. The car wash drains at the Sunoco Station should be reconnected to the sanitary sewer. Suitable grit removal and oil separation facilities should be provided.

8. Cellomer Corporation should be required to clean up the spillage on their property and cease discharging oil into Cornelia Street. It should be noted that Cellomer was informed of this problem and cleanup operations were underway.

9. Sources of inflow should be eliminated. The cross connection at the intersection of Joseph Street and Lister Avenue should be sealed. The railroad siding drain on the south side of the Messinger Warehouse should be disconnected from the sanitary sewer. The Atlas roof and area drains have already been discussed.

10. The Lister Avenue storm sewer, west of Lockwood Street should be cleaned of debris, sediment and oily wastes.

STREAM CONTAMINATION REPORT

District No.: 10 Report Date: 6/1/79 Inspector: Fiore/Colello

Company Name: ATLAS REFINERY

Address: 148 Lockwood St., Newark

Name and Title of Person Contacted: Mr. J. Cafasso, Plant Manager

Telephone No: 589-2002

Nature of Business: refinery

Sampled - yes [X] no [ ] Date: 5/24/79 Time: _____ Temp.: _____

Polluting - yes [X] no [ ] Nature of Pollution: _____

Discharge to Storm Sewer - yes [ ] no [ ] NDPES Permit - yes [ ] no [ ]

Violation: Date: _____ Time: _____ Description: _____

High COD , high TOC

Weather: rain Air Temp.: 59

Color: dark gray Odor: foul pH: 9 Test Paper

Turbidity: cloudy

Collection on Bank - Describe: none

Surface Scum, Foam or Oil: none

FJF000194

Distance Visible Downstream: Approximately _____ Ft.

Width across stream: Approximately _____ Ft.

REMARKS: water after rain enters oil separator and into Lockwood St. storm sewer

We inspect yard clean up of drums containing fats and oils, which most of them were carted away by Atlas Refinery waste man. We were informed by Mr. Cafasso that the rest of the drums and the yard should be cleaned up by next week. We also took another sample 5/30/79 from their oil separator which enter Lockwood St. storm sewer after a rain storm, and our lab analyzed it to be polluting of high COD, and TOC.

Our labs findings were so high of COD and TOC that the overflow from the oil separator is too high to put into a sanitary sewer.

We will wait for further instructions of what to due in this case.

Respectfully submitted,

Bill Fiore
River Inspector

Joe Cofello
River Inspector

FJF000195

STREAM CONTAMINATION REPORT

District No.: 10 Report Date: 6-1-99 Inspector: Fiore Colella

Company Name: Atlas Refinery

Address: 148 Lockwood St. Newark

Name and Title of Person Contacted: Mr. J. DaSasso, [illegible]

Telephone No: 589-2002

Nature of Business: Refinery

Sampled - yes [X] no [ ] Date: 5-21 Time: _____ Temp.: _____

Polluting - yes [X] no [ ] Nature of Pollution: _____

Discharge to Storm Sewer - yes [ ] no [ ] NDPES Permit - yes [ ] no [ ]

Violation: Date: _____ Time: _____ Description: _____

High C.O.D
High T.O.C.

Weather: Rain Air Temp.: 59°

Color: DK GRAY Odor: Foul PH: 9 Test Paper

Turbidity: Cloudy

Collection on Bank - Describe: None

Surface Scum, Foam or Oil: None FJF000196

Distance Visible Downstream: Approximately _____ Ft.

Width across stream: Approximately _____ Ft.

REMARKS: Water after rain enters oil seperator and into Lockwood St. Storm Sewer.

TIERRA-B-013286

Athas Refinery Inc.
38-142 Lockwood St.
Newark.

Mr. Joseph Cafasso Plant Mge.

Phone 589-2002

We inspect yard clean up of ~~f~~ drums containing fats and oils, which most of them were carted away by ~~their~~ Athas Refinery waste man. We were informed by Mr. Cafasso that the rest of the drums and the yard should be cleaned up by next week. We also took another sample 5-30-79 from the oil separator (after a rain storm), which enter Lockwood St. Storm Sewer and our lab ~~analized~~ analyzed it to be polluting of High C.O.D. & T.O.C. [illegible]

Pollution - No such [illegible]

~~[illegible]~~ Our lab's findings were so high of C.O.D. & T.O.C. that the overflow from the oil separator is too high to put into a sanitary sewer. We will wait for further instructions of what to do in this case.

FJF000197

Respectfully Submitted
Bill Fore & Joe Colello

TIERRA-B-013287

STREAM CONTAMINATION REPORT

ELIMINATION

District No.: 10 Report Date: 8/13/79 Inspector: Fiore/Colello

Company Name: ATLAS REFINERY

Address: 142 Lockwood St., Newark

Name and Title of Person Contacted: Joe Cafasso, Mgr.

Telephone No: 589-2002

Nature of Business: refinery

Sampled - yes [ ] no [x] Date: _____ Time: _____ Temp.: _____

Polluting - yes [ ] no [ ] Nature of Pollution: _____

Discharge to Storm Sewer - yes [ ] no [ ] NDPES Permit - yes [ ] no [ ]

Violation: Date: 5/1/79 Time: _____ Description: _____

Heavy rains carried from property fatty material into curb. Maintenance men clear area.

Weather: _____ Air Temp.: _____

Color: _____ Odor: _____ pH: _____ Test Paper

Turbidity:

Collection on Bank - Describe: _____

Surface Scum, Foam or Oil: _____

Distance Visible Downstream: Approximately _____ Ft.

Width across stream: Approximately _____ Ft.

REMARKS: area on Lockwood St.

On 8/13/79 at 11:30 a.m. while inspecting Atlas Refinery property, we found heavy rains carried some fatty materials with water into Lockwood St. curb. We notified Plant Mgr. and he had men clean area. Mr. Joe Cafasso, Plant Manager, said material had washed off some drums and down driveway in the heavy rain storm. Drums were removed.

This pollution eliminated.

Respectfully submitted,

Bill Fiore

Bill Fiore
River Inspector

Joe Colello

Joe Colello
River Inspector

FJF000209

STREAM CONTAMINATION REPORT

Elimination

District No.: 17 Report Date: _____ Inspector: Lieut Colello

Company Name: Atlas Refinery

Address: 142 Lockwood St Newark

Name and Title of Person Contacted: Joe Cafasso Mgr.

Telephone No: 589-2002

Nature of Business: Refinery

Sampled - yes [X] no [ ] Date: _____ Time: _____ Temp.: _____

Polluting - yes [ ] no [X] Nature of Pollution: _____

Discharge to Storm Sewer - yes [ ] no [ ] NDPES Permit - yes [ ] no [ ]

Violation: Date: _____ Time: _____ Description: _____

Henry Kuhns carried from property fatty material into curb. Maintenance men clear area.

Weather: _____ Air Temp.: _____

Color: _____ Odor: _____ PH: _____ Test Paper

Turbidity:

Collection on Bank - Describe: _____

Surface Scum, Foam or Oil: _____

Distance Visible Downstream: Approximately _____ Ft.

Width across stream: Approximately _____ Ft.

REMARKS: Area on Lockwood St.

FJF000210

TIERRA-B-013290

On 8-13-79 at 1130am while inspecting Witco Refinery property, we found Henry Krause carried some oily materials with water into Lockwood St. curb. We notified Mgr. Joe and he had men clean it up. Mr. Joe said material had washed off some drums and down driveway in the heavy Rain Storm. Drums were removed. This pollution eliminated.

Respectfully Submitted
Bill Foire
Joe Colello
River Inspectors

FJF000211

STREAM CONTAMINATION REPORT

District No.: 10 Report Date: 8/17/79 Inspector: Fiore/Colello

Company Name: ATLAS REFINERY

Address: 142 Lockwood St., Newark

Name and Title of Person Contacted: Joe Cafasso, Mgr.

Telephone No: 589-2002

Nature of Business: Refinery

Sampled - yes [X] no [ ] Date: 8/15/79 Time: _____ Temp.: _____

Polluting - yes [X] no [ ] Nature of Pollution: _____

Discharge to Storm Sewer - yes [ ] no [ ] NDPES Permit - yes [ ] no [ ]

Violation: Date: 5/2/79 Time: _____ Description: _____

Oil separator not working. Discharges into Lockwood Storm Sewer

Weather: _____ Air Temp.: _____

Color: _____ Odor: _____ pH: _____ Test Paper

Turbidity:

Collection on Bank - Describe: _____

FJF000212

Surface Scum, Foam or Oil: _____

Distance Visible Downstream: Approximately _____ Ft.

Width across stream: Approximately _____ Ft.

REMARKS: Oil separator must be corrected, or cleaned

On 8/15/79 we sampled oil separator on the property of Atlas Refinery 142 Lockwood St., Newark. This oil separator enters Lockwood St. storm sewer. It is malfunctioning and has to be corrected. Supt. Cuccinello, Insp. Colello and I called on the Plant Mgr. Mr. Cafasso, but he was out of the plant at this time.

On 8/17/79 we were notified by Mr. Goldber, Director of SAnitation Control, that he will meet with us to investigate and talk to Mr. Cafasso himself. At 1:45 p.m. we met with Mr. Cafasso, Supt. Cuccinello and Mr. Goldberg, checked oil separator, it seems oil separator is o.k. but needs to be maintained. Mr. Cafasso promised to clean oil separator and flush effluent water out, once a week or every time it rains heavy.

We will check and take samples until pollution is eliminated.

Respectfully submitted,

Bill Fiore

Joe Colello

Bill Fiore

Joe Colello

River Inspectors

FJF000213

STREAM CONTAMINATION REPORT

[redacted]

District No.: 10 Report Date: _____ Inspector: Mike Cole

Company Name: Atlas Refinery

Address: 142 Lockwood St Newark

Name and Title of Person Contacted: Joe Carasso Mgr.

Telephone No: 589-2002

Nature of Business: Refinery

Sampled - yes [X] no [ ] Date: 8-15-79 Time: _____ Temp.: _____

Polluting - yes [X] no [ ] Nature of Pollution: _____

Discharge to Storm Sewer - yes [ ] no [ ] NDPES Permit - yes [ ] no [ ]

Violation: Date: 5-28-79 Time: _____ Description: _____

Oil separator not working.
Discharges into Lockwood Storm
Sewer.

Weather: _____ Air Temp.: _____

Color: _____ Odor: _____ pH: _____ Test Paper

Turbidity:

Collection on Bank - Describe: _____

Surface Scum, Foam or Oil: _____

Distance Visible Downstream: Approximately _____ FJE000214

Width across stream: Approximately _____ Ft.

REMARKS: Oil separator must be corrected, or cleaned.

PASSAIC VALLEY SEWERAGE COMMISSIONERS
DEPARTMENT OF SANITATION CONTROL

LABORATORY REPORT

STANDARD METHODS OF ANALYSIS

RESULTS EXPRESSED IN MILLIGRAMS PER LITER (mg/l)

DATE OF SAMPLE August 31, 1979 TIME 9:05 AM SAMPLE No. H-433

SAMPLE OF Atlas Refinery, from oil separator to Lockwood St. Storm Sewer, 142 Lockwood St., Newark TAKEN BY W. Fiore

TOTAL SOLIDS			TURBIDITY (J. T. U.)	7120	er
TOTAL VOLATILE			pH	8.4	eb
TOTAL MINERAL			FLAMMABLE		
SUSPENDED SOLIDS	1172	jm	EXPLOSIMETER (PERCENT)		
SUSPENDED VOLATILE	840	jm	ORTHOPHOSPHATE (DISSOLVED)		
SUSPENDED MINERAL	332	jm	TOTAL PHOSPHATES		
DISSOLVED SOLIDS			TEMPERATURE °F	80°	
SETTLEABLE SOLIDS (ml/L)			COLIFORMS PER ml		
TOTAL NITROGEN			FECAL COLIFORMS PER 100 ml	-	er
AMMONIA NITROGEN			THRESHOLD ODOR NUMBER		
ORGANIC NITROGEN			GREASE AND OIL		
NITRATE NITROGEN			TOTAL ORGANIC CARBON	18400	eb
NITRITE NITROGEN					
CHLORIDES AS CHLORINE	-	er			
ALKALINITY AS $CaCO_3$					
CHEMICAL OXYGEN DEMAND	30720	er			
BIOCHEMICAL OXYGEN DEMAND	-	er			
CHLORINE DEMAND					
CHLORINE RESIDUAL					

DESCRIPTION:

Gray opaque liquid
Pungent industrial odor

REMARKS:

FJF000215

APPROVED
Director of Sanitation Control

TIERRA-B-013295

COMM. | C.C. | J.S. | G.A. | R.R. | CAM | D.C. | N.D | V.G. | Gotham

(13)

I-106

Newark

Kenneth A. Gibson
Mayor

4/21/81
TO: FRANK D'ASCENSIO - Please give me a report on th: Info covered in Bogert's rpt. for City of Nwk. 4/27/80. Would like by May 5, 1981.

Department of Engineering

920 Broad Street
Newark, New Jersey 07102
201 733-8520

Alvin L. Zach, P.E.; L.S.
Director

April 1, 1981

R.D.

RECEIVED
APR - 6 1981
PASSAIC VALLEY SEWERAGE COMMISSIONERS

Carmine Perrapato
Executive Director
Passaic Valley Sewerage Commissioners
600 Wilson Avenue
Newark, N.J. 07105

RE: Atlas Refinery, Lockwood Street

Dear Mr. Perrapato:

The Atlas Refinery on Lockwood Street is a known source of pollutants entering the Lockwood Street storm sewer. A history of poor housekeeping has left the railroad siding and other land adjacent to the Atlas plant contaminated with oil and other pollutants.

A perforated pipe drains the siding area to an oil/water separator. The water fraction is discharged from the separator to the Lockwood Street storm sewer. Despite some improvements in site management over the past few months the quality of the effluent entering the storm sewer has not noticeably improved. The pH is consistantly higher than 10 and the effluent is very turbid.

Without further improvements in housekeeping at Atlas and the removal of the contaminated balast and soil the pollution is sure to continue. Our experience with this site is not encouraging. We do not believe that housekeeping can be improved at this location to the degree necessary to abate the pollution.

In light of this we feel that the effluent from the oil/water separator should be directed to the sanitary sewer line and the connection to the storm sewer permanently closed.

It was the Passaic Valley Sewerage Commissioners that originally motivated our actions concerning Atlas and so we are soliciting your opinion on the matter prior to proceeding.

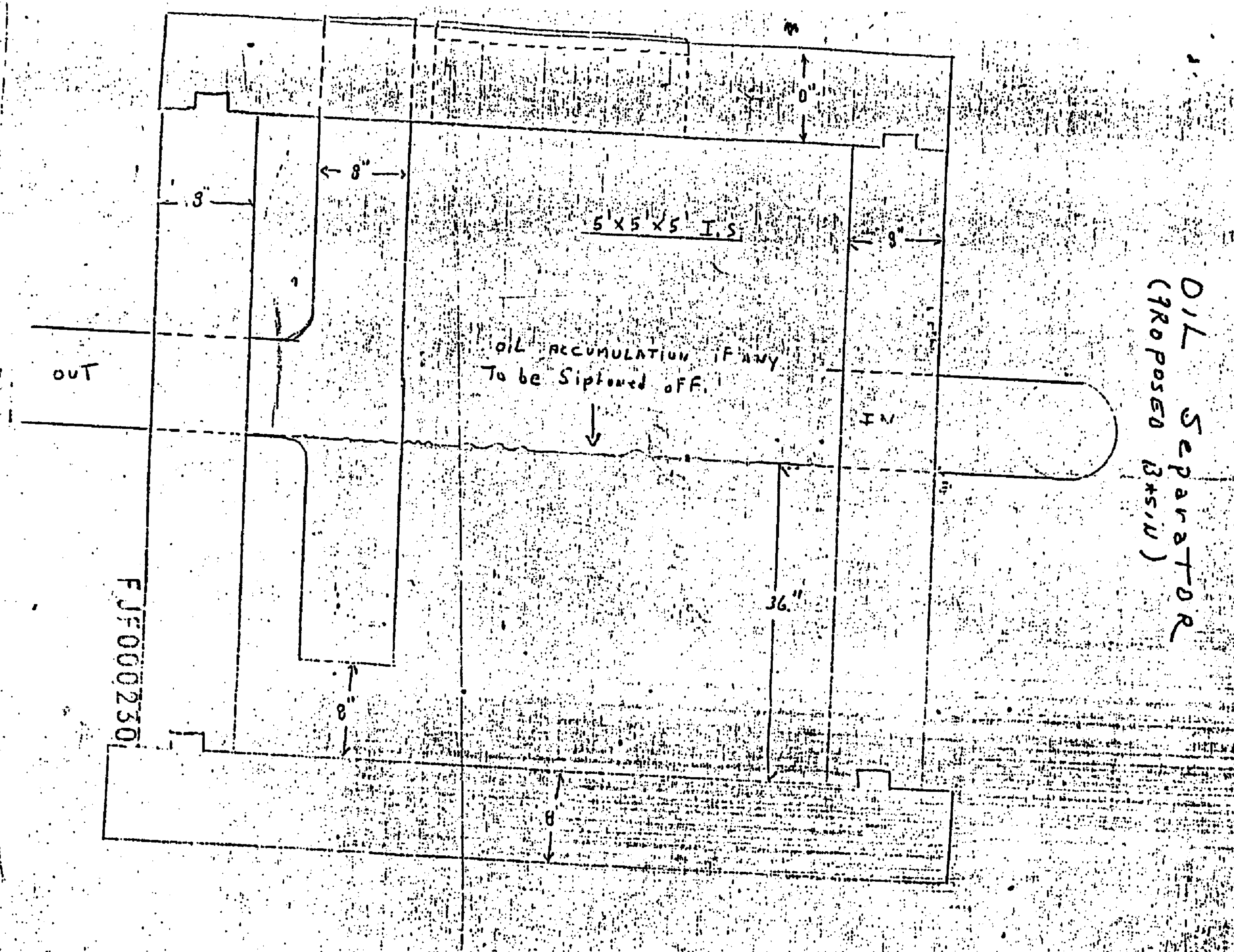
Very truly yours,

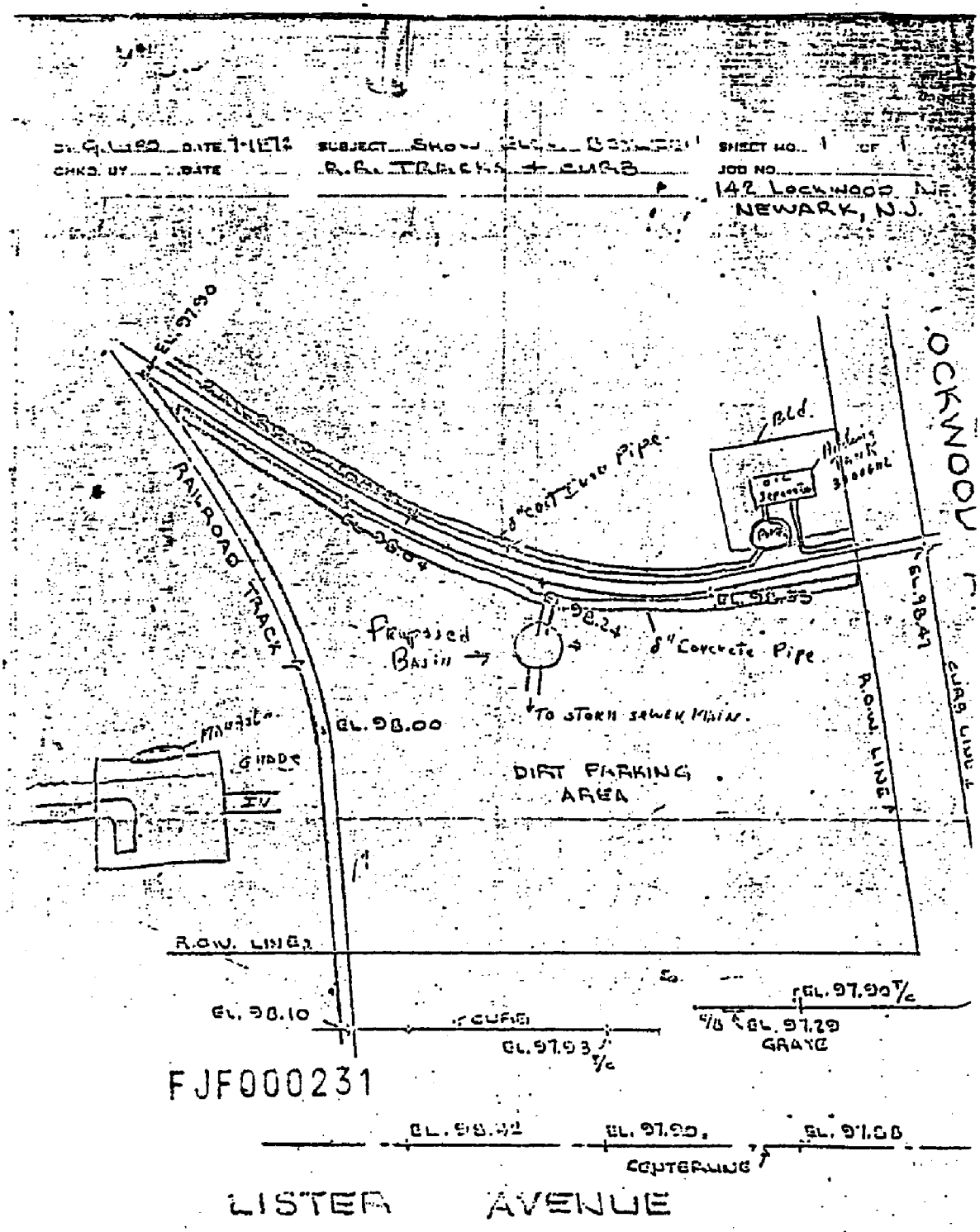
Alvin L. Zach, P.E., Director
DEPARTMENT OF ENGINEERING

ALZ:thb
encl.

FJF000229

4/16/81




SUBJECT SHOW
R.R. TRACKS + CURB
SHEET NO. 1 OF 1
JOB NO.
142 Lockwood, Inc.
NEWARK, N.J.
EL. 97.90
RAILROAD TRACK
Bld.
Building
Proposed Basin
8" Concrete Pipe
TO STORM SEWER MAIN.
EL. 98.00
DIRT PARKING AREA
R.O.W. LINE
EL. 98.10
EL. 97.93 T/C
EL. 97.90 T/C
EL. 97.29 GRATE
FJF000231
EL. 98.42
EL. 97.90
EL. 97.88
CENTERLINE
LISTER AVENUE
RICHLAND & LUPO
SURVEYORS
470 ROSEVILLE AVE
NEWARK, N.J.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

FEB 14 2006

GENERAL NOTICE LETTER
URGENT LEGAL MATTER
PROMPT REPLY NECESSARY
CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Steven Schroeder, President
Atlas Refining, Inc.
142 Lockwood Street
Newark, NJ 07105

RE: Diamond Alkali Superfund Site
Notice of Potential Liability for
Response Actions in the Lower Passaic River Study Area, New Jersey

Dear Mr. Schroeder:

The United States Environmental Protection Agency ("EPA") is charged with responding to the release and/or threatened release of hazardous substances, pollutants, and contaminants into the environment and with enforcement responsibilities under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended ("CERCLA"), 42 U.S.C. §9601 et seq. Accordingly, EPA is seeking your cooperation in an innovative approach to environmental remediation and restoration activities for the Lower Passaic River.

EPA has documented the release or threatened release of hazardous substances, pollutants and contaminants into the six-mile stretch of the river, known as the Passaic River Study Area, which is part of the Diamond Alkali Superfund Site ("Site") located in Newark, New Jersey. Based on the results of previous CERCLA remedial investigation activities and other environmental studies, including a reconnaissance study of the Passaic River conducted by the United States Army Corps of Engineers ("USACE"), EPA has further determined that contaminated sediments and other potential sources of hazardous substances exist along the entire 17-mile tidal reach of the Lower Passaic River. Thus, EPA has decided to expand the area of study to include the entire Lower Passaic River and its tributaries from Dundee Dam to Newark Bay ("Lower Passaic River Study Area").

By this letter, EPA is notifying Atlas Refining, Inc. of its potential liability relating to the Site pursuant to Section 107(a) of CERCLA, 42 U.S.C. §9607(a). Under CERCLA, potentially responsible parties ("PRPs") include current and past owners and operators of a facility, as well as persons who arranged for the disposal or treatment of hazardous substances at the Site, or the transport of hazardous substances to the Site.

In recognition of our complementary roles, EPA has formed a partnership with USACE and the New Jersey Department of Transportation-Office of Maritime Resources ("OMR") ["the governmental partnership"] to identify and to address water quality improvement, remediation, and restoration opportunities in the 17-mile Lower Passaic River. This governmental partnership is consistent with a national Memorandum of Understanding ("MOU") executed on July 2, 2002 between EPA and USACE. This MOU calls for the two agencies to cooperate, where appropriate, on environmental remediation and restoration of degraded urban rivers and related resources. In agreeing to implement the MOU, the EPA and USACE will use their existing statutory and regulatory authorities in a coordinated manner. These authorities for EPA include CERCLA, the Clean Water Act, and the Resource Conservation and Recovery Act. The USACE's authority stems from the Water Resources Development Act ("WRDA"). WRDA allows for the use of some federal funds to pay for a portion of the USACE's approved projects related to ecosystem restoration.

For the first phase of the Lower Passaic River Restoration Project, the governmental partners are proceeding with an integrated five- to seven-year study to determine an appropriate remediation and restoration plan for the river. The study will involve investigation of environmental impacts and pollution sources, as well as evaluation of alternative actions, leading to recommendations of environmental remediation and restoration activities. The study is being conducted pursuant to CERCLA and WRDA.

Based on information that EPA evaluated during the course of its investigation of the Site, EPA believes that hazardous substances were released from Atlas Refining's facility located at 142 Lockwood Street in Newark, New Jersey, into the Lower Passaic River Study Area. Hazardous substances, pollutants and contaminants released from the facility into the river present a risk to the environment and the humans who may ingest contaminated fish and shellfish. Therefore, Atlas Refining, Inc. may be potentially liable for response costs which the government may incur relating to the study of the Lower Passaic River. In addition, responsible parties may be required to pay damages for injury to, destruction of, or loss of natural resources, including the cost of assessing such damages.

EPA is aware that the financial ability of some PRPs to contribute toward the payment of response costs at the Site may be substantially limited. If you believe, and can document, that you fall within that category, please inform Ms. Reddy and Mr. Hyatt in writing at the addresses identified in this letter. You will be asked to submit financial records including federal income tax returns as well as audited financial statements to substantiate such a claim.

Please note that, because EPA has a potential claim against you, you must include EPA as a creditor if you file for bankruptcy. You are also requested to preserve and retain any documents now in your Company's or its agents' possession or control, that relate in any manner to your facility or the Site or to the liability of any person under CERCLA for response actions or response costs at or in connection with the facility or the Site, regardless of any corporate document retention policy to the contrary.

Enclosed is a list of the other PRPs who have received Notice letters. This list represents EPA's findings on the identities of PRPs to date. We are continuing efforts to locate additional PRPs who have released hazardous substances, directly or indirectly, into the Lower Passaic River Study Area. Exclusion from the list does not constitute a final determination by EPA concerning the liability of any party for the release or threat of release of hazardous substances at the Site. Be advised that notice of your potential liability at the Site may be forwarded to all parties on this list as well as to the Natural Resource Trustees.

We request that you become a "cooperating party" for the Lower Passaic River Restoration Project. As a cooperating party, you, along with many other such parties, will be expected to fund the CERCLA study. Upon completion of the study, it is expected that CERCLA and WRDA processes will be used to identify the required remediation and restoration programs, as well as the assignment of remediation and restoration costs. At this time, the commitments of the cooperating parties will apply only to the study. For those who choose not to cooperate, EPA may apply the CERCLA enforcement process, pursuant to Sections 106(a) and 107(a) of CERCLA, 42 U.S.C. §9606(a) and §9607(a) and other laws.

You may become a cooperating party by participating in the Cooperating Parties Group ("Group") that has already formed to fund the CERCLA study portion of the Lower Passaic River Restoration Project.

We strongly encourage you to contact the Group to discuss your participation. You may do so by contacting:

William H. Hyatt, Esq.
Common Counsel for the Lower Passaic River Study Area Cooperating Parties Group
Kirkpatrick & Lockhart LLP
One Newark Center, 10th Floor
Newark, New Jersey 07102
(973) 848-4045
whyatt@kl.com

Written notification should be provided to EPA and Mr. Hyatt documenting your intention to join the Group and settle with EPA no later than 30 calendar days from your receipt of this letter. The result of any agreement between EPA and your Company as part of the Group will need to be memorialized in an Administrative Order on Consent. EPA's written notification should be mailed to:

Kedari Reddy, Assistant Regional Counsel
Office of Regional Counsel
U.S. Environmental Protection Agency
290 Broadway - 17th Floor
New York, New York 10007-1866

Pursuant to CERCLA Section 113(k), EPA must establish an administrative record that contains documents that form the basis of EPA's decision on the selection of a response action for a site. The administrative record files along with the Site file are located at EPA's Region 2 office located at 290 Broadway, New York, NY on the 18th floor. You may call the Records Center at (212) 637-4308 to make an appointment to view the administrative record and/or the Site file for the Diamond Alkali Site, Passaic River.

As you may be aware, the Superfund Small Business Liability Relief and Brownfields Revitalization Act became effective on January 11, 2002. This Act contains several exemptions and defenses to CERCLA liability, which we suggest that all parties evaluate. You may obtain a copy of the law via the Internet at http://www.epa.gov/swerosps/bf/sblrbra.htm and review EPA guidances regarding these exemptions at http://www.epa.gov/compliance/resources/policies/cleanup/superfund.

Inquiries by counsel or inquiries of a legal nature should be directed to Ms. Reddy at (212) 637-3106. Questions of a technical nature should be directed to Elizabeth Butler, Remedial Project Manager, at (212) 637-4396.

Sincerely yours,

Ray Basso, Strategic Integration Manager
Emergency and Remedial Response Division

Enclosure